ANALYTICAL REPORT

February 09, 2024

Revised Report

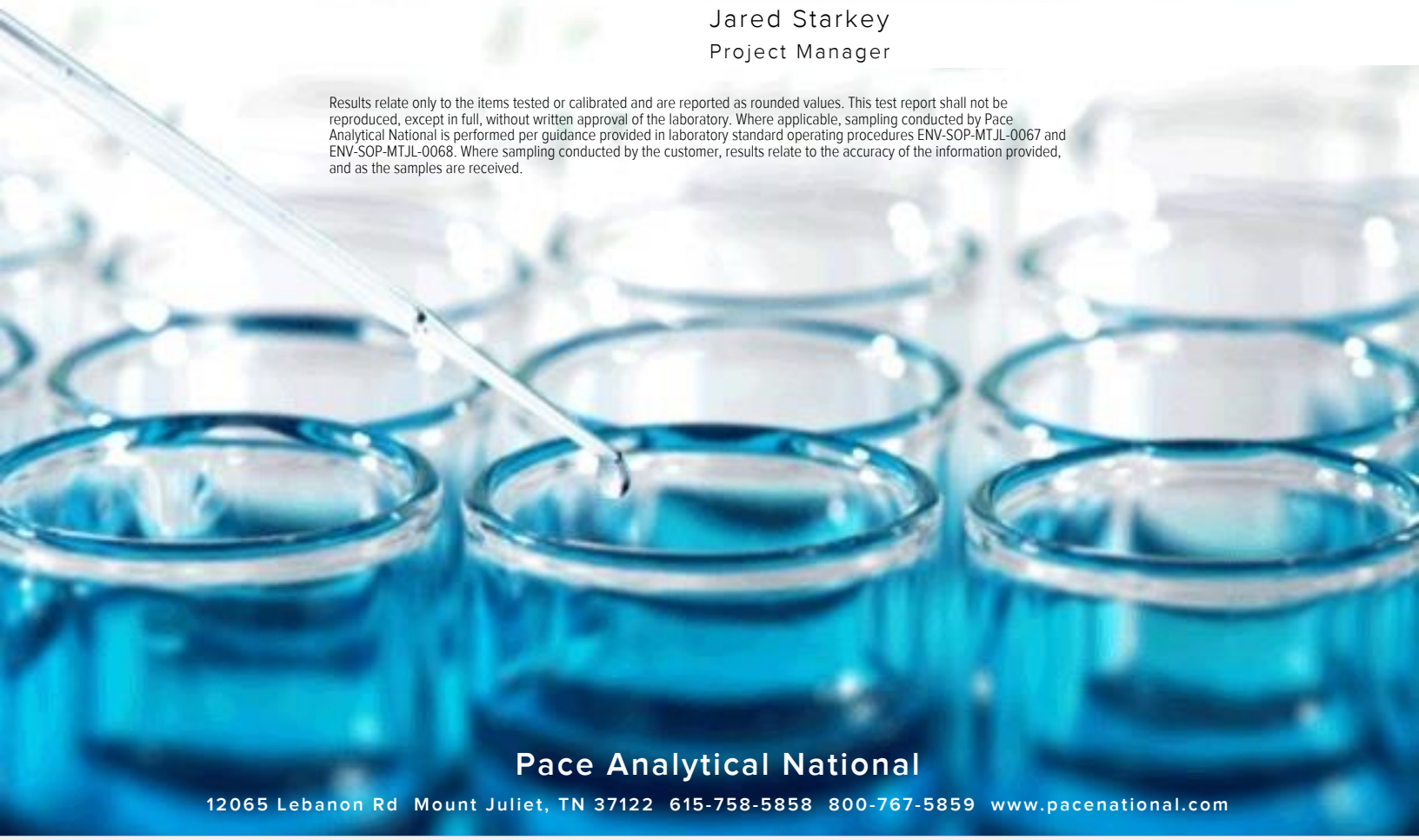
PES Environmental, Inc.- WA

Sample Delivery Group:	L1672476
Samples Received:	11/01/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

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MW-138-103123 L1672476-01 GW

Collected by | Collected date/time 10/31/23 10:53 | Received date/time 11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 01:20	11/05/23 01:20	JAH	Mt. Juliet, TN

MW-304-103123 L1672476-02 GW

Collected by | Collected date/time 10/31/23 11:55 | Received date/time 11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 01:40	11/05/23 01:40	JAH	Mt. Juliet, TN

BB-8-103123 L1672476-03 GW

Collected by | Collected date/time 10/31/23 13:05 | Received date/time 11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2164812	1	11/07/23 12:12	11/07/23 12:12	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2162421	1	11/02/23 04:10	11/02/23 04:10	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2170716	1	11/15/23 12:35	11/15/23 12:35	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2162563	1	11/02/23 14:56	11/04/23 19:02	SJM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2162563	50	11/02/23 14:56	11/06/23 01:40	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 09:25	11/07/23 09:25	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:20	11/07/23 14:20	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	10	11/05/23 04:51	11/05/23 04:51	JAH	Mt. Juliet, TN

MW125-103123 L1672476-04 GW

Collected by | Collected date/time 10/31/23 14:36 | Received date/time 11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 01:59	11/05/23 01:59	JAH	Mt. Juliet, TN

MW-302-103123 L1672476-05 GW

Collected by | Collected date/time 10/31/23 11:10 | Received date/time 11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 02:18	11/05/23 02:18	JAH	Mt. Juliet, TN

R-MW5-103123 L1672476-06 GW

Collected by | Collected date/time 10/31/23 11:58 | Received date/time 11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2164812	1	11/07/23 12:20	11/07/23 12:20	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2162421	1	11/02/23 04:23	11/02/23 04:23	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2170716	1	11/15/23 12:56	11/15/23 12:56	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2162563	10	11/02/23 14:56	11/06/23 01:43	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 09:31	11/07/23 09:31	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 02:37	11/05/23 02:37	JAH	Mt. Juliet, TN

MW105-103123 L1672476-07 GW

Collected by	Collected date/time	Received date/time
	10/31/23 13:15	11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 02:56	11/05/23 02:56	JAH	Mt. Juliet, TN

MW-330-103123 L1672476-08 GW

Collected by	Collected date/time	Received date/time
	10/31/23 14:34	11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 03:15	11/05/23 03:15	JAH	Mt. Juliet, TN

MW-303-103123 L1672476-09 GW

Collected by	Collected date/time	Received date/time
	10/31/23 12:31	11/01/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164648	1	11/05/23 03:34	11/05/23 03:34	JAH	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/16/23 09:42

Project Narrative

ID Corrections

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/05/2023 01:20	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 01:20	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 01:20	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 01:20	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 01:20	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 01:20	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 01:20	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 01:20	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 01:20	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 01:20	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 01:20	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 01:20	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 01:20	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 01:20	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 01:20	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 01:20	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 01:20	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 01:20	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 01:20	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 01:20	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 01:20	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 01:20	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 01:20	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 01:20	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 01:20	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 01:20	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 01:20	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 01:20	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 01:20	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 01:20	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 01:20	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 01:20	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 01:20	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 01:20	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 01:20	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 01:20	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 01:20	WG2164648
Ethylbenzene	0.0750	J	0.0212	0.100	1	11/05/2023 01:20	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 01:20	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 01:20	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 01:20	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 01:20	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 01:20	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 01:20	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 01:20	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 01:20	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 01:20	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 01:20	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 01:20	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 01:20	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 01:20	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 01:20	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 01:20	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 01:20	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 01:20	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 01:20	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 01:20	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 01:20	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 01:20	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 01:20	WG2164648
1,2,4-Trimethylbenzene	0.0710	J	0.0464	0.200	1	11/05/2023 01:20	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 01:20	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 01:20	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 01:20	WG2164648
Xylenes, Total	0.287		0.191	0.260	1	11/05/2023 01:20	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 01:20	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 01:20	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 01:20	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 01:20	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 01:20	WG2164648
(S) Toluene-d8	*97.8*			*75.0-131*		*11/05/2023 01:20*	WG2164648
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*11/05/2023 01:20*	WG2164648
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*11/05/2023 01:20*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.61		0.548	1.00	1	11/05/2023 01:40	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 01:40	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 01:40	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 01:40	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 01:40	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 01:40	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 01:40	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 01:40	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 01:40	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 01:40	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 01:40	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 01:40	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 01:40	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 01:40	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 01:40	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 01:40	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 01:40	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 01:40	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 01:40	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 01:40	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 01:40	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 01:40	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 01:40	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 01:40	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 01:40	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 01:40	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 01:40	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 01:40	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 01:40	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 01:40	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 01:40	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 01:40	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 01:40	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 01:40	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 01:40	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 01:40	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 01:40	WG2164648
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 01:40	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 01:40	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 01:40	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 01:40	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 01:40	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 01:40	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 01:40	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 01:40	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 01:40	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 01:40	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 01:40	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 01:40	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 01:40	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 01:40	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 01:40	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 01:40	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 01:40	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 01:40	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 01:40	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 01:40	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 01:40	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 01:40	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 01:40	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 01:40	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 01:40	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 01:40	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 01:40	WG2164648
Xylenes, Total	U		0.191	0.260	1	11/05/2023 01:40	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 01:40	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 01:40	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 01:40	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 01:40	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 01:40	WG2164648
(S) Toluene-d8	*103*			*75.0-131*		*11/05/2023 01:40*	WG2164648
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*11/05/2023 01:40*	WG2164648
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*11/05/2023 01:40*	WG2164648

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	274000		8450	20000	1	11/07/2023 12:12	WG2164812

Sample Narrative:
L1672476-03 WG2164812: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31200		379	1000	1	11/02/2023 04:10	WG2162421
Nitrate	72.9	B J	48.0	100	1	11/02/2023 04:10	WG2162421
Sulfate	67800		594	5000	1	11/02/2023 04:10	WG2162421

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2940		102	1000	1	11/15/2023 12:35	WG2170716

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1200		28.1	100	1	11/04/2023 19:02	WG2162563
Manganese	6710		35.2	250	50	11/06/2023 01:40	WG2162563

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22800		2.87	6.78	10	11/07/2023 14:20	WG2166209
Ethane	1.93		0.296	1.29	1	11/07/2023 09:25	WG2165206
Ethene	U		0.422	1.27	1	11/07/2023 09:25	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	20.2		5.48	10.0	10	11/05/2023 04:51	WG2164648
Acrylonitrile	U		0.760	5.00	10	11/05/2023 04:51	WG2164648
Benzene	U		0.160	0.400	10	11/05/2023 04:51	WG2164648
Bromobenzene	U		0.420	5.00	10	11/05/2023 04:51	WG2164648
Bromodichloromethane	U		0.315	1.00	10	11/05/2023 04:51	WG2164648
Bromoform	U		2.39	10.0	10	11/05/2023 04:51	WG2164648
Bromomethane	U		1.48	5.00	10	11/05/2023 04:51	WG2164648
n-Butylbenzene	U		1.53	5.00	10	11/05/2023 04:51	WG2164648
sec-Butylbenzene	U		1.01	5.00	10	11/05/2023 04:51	WG2164648
tert-Butylbenzene	U		0.620	2.00	10	11/05/2023 04:51	WG2164648
Carbon tetrachloride	U		0.432	2.00	10	11/05/2023 04:51	WG2164648
Chlorobenzene	U		0.229	1.00	10	11/05/2023 04:51	WG2164648
Chlorodibromomethane	U		0.180	1.00	10	11/05/2023 04:51	WG2164648
Chloroethane	U		0.432	2.00	10	11/05/2023 04:51	WG2164648
Chloroform	U		0.166	1.00	10	11/05/2023 04:51	WG2164648
Chloromethane	U	C3	0.556	5.00	10	11/05/2023 04:51	WG2164648
2-Chlorotoluene	U		0.368	1.00	10	11/05/2023 04:51	WG2164648
4-Chlorotoluene	U		0.452	2.00	10	11/05/2023 04:51	WG2164648
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/05/2023 04:51	WG2164648
1,2-Dibromoethane	U		0.210	1.00	10	11/05/2023 04:51	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.400	2.00	10	11/05/2023 04:51	WG2164648
1,2-Dichlorobenzene	U		0.580	2.00	10	11/05/2023 04:51	WG2164648
1,3-Dichlorobenzene	U		0.680	2.00	10	11/05/2023 04:51	WG2164648
1,4-Dichlorobenzene	U		0.788	2.00	10	11/05/2023 04:51	WG2164648
Dichlorodifluoromethane	U		0.327	1.00	10	11/05/2023 04:51	WG2164648
1,1-Dichloroethane	U		0.230	1.00	10	11/05/2023 04:51	WG2164648
1,2-Dichloroethane	U		0.190	1.00	10	11/05/2023 04:51	WG2164648
1,1-Dichloroethene	U		0.200	1.00	10	11/05/2023 04:51	WG2164648
cis-1,2-Dichloroethene	26.6		0.276	1.00	10	11/05/2023 04:51	WG2164648
trans-1,2-Dichloroethene	U		0.572	2.00	10	11/05/2023 04:51	WG2164648
1,2-Dichloropropane	U		0.508	2.00	10	11/05/2023 04:51	WG2164648
1,1-Dichloropropene	U		0.280	1.00	10	11/05/2023 04:51	WG2164648
1,3-Dichloropropane	U		0.700	2.00	10	11/05/2023 04:51	WG2164648
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/05/2023 04:51	WG2164648
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/05/2023 04:51	WG2164648
2,2-Dichloropropane	U		0.317	1.00	10	11/05/2023 04:51	WG2164648
Di-isopropyl ether	U		0.140	0.400	10	11/05/2023 04:51	WG2164648
Ethylbenzene	U		0.212	1.00	10	11/05/2023 04:51	WG2164648
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/05/2023 04:51	WG2164648
Isopropylbenzene	U		0.345	1.00	10	11/05/2023 04:51	WG2164648
p-Isopropyltoluene	U		0.932	2.00	10	11/05/2023 04:51	WG2164648
2-Butanone (MEK)	U		5.00	10.0	10	11/05/2023 04:51	WG2164648
Methylene Chloride	3.22	J	2.65	10.0	10	11/05/2023 04:51	WG2164648
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/05/2023 04:51	WG2164648
Methyl tert-butyl ether	U		0.118	0.400	10	11/05/2023 04:51	WG2164648
Naphthalene	U	C3	1.24	5.00	10	11/05/2023 04:51	WG2164648
n-Propylbenzene	U		0.472	2.00	10	11/05/2023 04:51	WG2164648
Styrene	U		1.09	5.00	10	11/05/2023 04:51	WG2164648
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/05/2023 04:51	WG2164648
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/05/2023 04:51	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/05/2023 04:51	WG2164648
Tetrachloroethene	139		0.280	1.00	10	11/05/2023 04:51	WG2164648
Toluene	U		0.500	2.00	10	11/05/2023 04:51	WG2164648
1,2,3-Trichlorobenzene	U		0.250	5.00	10	11/05/2023 04:51	WG2164648
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/05/2023 04:51	WG2164648
1,1,1-Trichloroethane	U		0.110	1.00	10	11/05/2023 04:51	WG2164648
1,1,2-Trichloroethane	U		0.353	1.00	10	11/05/2023 04:51	WG2164648
Trichloroethene	45.8		0.160	0.400	10	11/05/2023 04:51	WG2164648
Trichlorofluoromethane	U		0.200	1.00	10	11/05/2023 04:51	WG2164648
1,2,3-Trichloropropane	U		2.04	5.00	10	11/05/2023 04:51	WG2164648
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/05/2023 04:51	WG2164648
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/05/2023 04:51	WG2164648
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/05/2023 04:51	WG2164648
Vinyl chloride	U		0.273	1.00	10	11/05/2023 04:51	WG2164648
Xylenes, Total	U		1.91	2.60	10	11/05/2023 04:51	WG2164648
Ethyl Ether	U		0.170	1.00	10	11/05/2023 04:51	WG2164648
Tetrahydrofuran	U		0.900	5.00	10	11/05/2023 04:51	WG2164648
Iodomethane	U		2.42	5.00	10	11/05/2023 04:51	WG2164648
Allyl chloride	U		5.80	10.0	10	11/05/2023 04:51	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.560	2.00	10	11/05/2023 04:51	WG2164648
(S) Toluene-d8	*98.8*			*75.0-131*		*11/05/2023 04:51*	WG2164648
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*11/05/2023 04:51*	WG2164648
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/05/2023 04:51*	WG2164648

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.43		0.548	1.00	1	11/05/2023 01:59	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 01:59	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 01:59	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 01:59	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 01:59	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 01:59	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 01:59	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 01:59	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 01:59	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 01:59	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 01:59	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 01:59	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 01:59	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 01:59	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 01:59	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 01:59	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 01:59	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 01:59	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 01:59	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 01:59	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 01:59	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 01:59	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 01:59	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 01:59	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 01:59	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 01:59	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 01:59	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 01:59	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 01:59	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 01:59	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 01:59	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 01:59	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 01:59	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 01:59	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 01:59	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 01:59	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 01:59	WG2164648
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 01:59	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 01:59	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 01:59	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 01:59	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 01:59	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 01:59	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 01:59	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 01:59	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 01:59	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 01:59	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 01:59	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 01:59	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 01:59	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 01:59	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 01:59	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 01:59	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 01:59	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 01:59	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 01:59	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 01:59	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 01:59	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 01:59	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 01:59	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 01:59	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 01:59	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 01:59	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 01:59	WG2164648
Xylenes, Total	U		0.191	0.260	1	11/05/2023 01:59	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 01:59	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 01:59	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 01:59	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 01:59	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 01:59	WG2164648
(S) Toluene-d8	*102*			*75.0-131*		*11/05/2023 01:59*	WG2164648
(S) 4-Bromofluorobenzene	*94.1*			*67.0-138*		*11/05/2023 01:59*	WG2164648
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/05/2023 01:59*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.89		0.548	1.00	1	11/05/2023 02:18	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 02:18	WG2164648
Benzene	0.0460		0.0160	0.0400	1	11/05/2023 02:18	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 02:18	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 02:18	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 02:18	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 02:18	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 02:18	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 02:18	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 02:18	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 02:18	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 02:18	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 02:18	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 02:18	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 02:18	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 02:18	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 02:18	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 02:18	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 02:18	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 02:18	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 02:18	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 02:18	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 02:18	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 02:18	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 02:18	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 02:18	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 02:18	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 02:18	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 02:18	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 02:18	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 02:18	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 02:18	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 02:18	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 02:18	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 02:18	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 02:18	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 02:18	WG2164648
Ethylbenzene	0.181		0.0212	0.100	1	11/05/2023 02:18	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 02:18	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 02:18	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 02:18	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 02:18	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 02:18	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 02:18	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 02:18	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 02:18	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 02:18	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 02:18	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 02:18	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 02:18	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 02:18	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 02:18	WG2164648
Toluene	0.745		0.0500	0.200	1	11/05/2023 02:18	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 02:18	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 02:18	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 02:18	WG2164648

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 02:18	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 02:18	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 02:18	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 02:18	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 02:18	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 02:18	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 02:18	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 02:18	WG2164648
Xylenes, Total	1.12		0.191	0.260	1	11/05/2023 02:18	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 02:18	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 02:18	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 02:18	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 02:18	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 02:18	WG2164648
(S) Toluene-d8	*96.5*			*75.0-131*		*11/05/2023 02:18*	WG2164648
(S) 4-Bromofluorobenzene	*92.1*			*67.0-138*		*11/05/2023 02:18*	WG2164648
(S) 1,2-Dichloroethane-d4	*95.9*			*70.0-130*		*11/05/2023 02:18*	WG2164648

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	144000		8450	20000	1	11/07/2023 12:20	WG2164812

Sample Narrative:

L1672476-06 WG2164812: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	29000		379	1000	1	11/02/2023 04:23	WG2162421
Nitrate	54.8	B J	48.0	100	1	11/02/2023 04:23	WG2162421
Sulfate	8940		594	5000	1	11/02/2023 04:23	WG2162421

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4810		102	1000	1	11/15/2023 12:56	WG2170716

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10700		281	1000	10	11/06/2023 01:43	WG2162563
Manganese	1860		7.04	50.0	10	11/06/2023 01:43	WG2162563

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	183		0.287	0.678	1	11/07/2023 09:31	WG2165206
Ethane	U		0.296	1.29	1	11/07/2023 09:31	WG2165206
Ethene	U		0.422	1.27	1	11/07/2023 09:31	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.05		0.548	1.00	1	11/05/2023 02:37	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 02:37	WG2164648
Benzene	0.0380	J	0.0160	0.0400	1	11/05/2023 02:37	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 02:37	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 02:37	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 02:37	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 02:37	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 02:37	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 02:37	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 02:37	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 02:37	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 02:37	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 02:37	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 02:37	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 02:37	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 02:37	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 02:37	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 02:37	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 02:37	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 02:37	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 02:37	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 02:37	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 02:37	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 02:37	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 02:37	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 02:37	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 02:37	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 02:37	WG2164648
cis-1,2-Dichloroethene	0.237		0.0276	0.100	1	11/05/2023 02:37	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 02:37	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 02:37	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 02:37	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 02:37	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 02:37	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 02:37	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 02:37	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 02:37	WG2164648
Ethylbenzene	0.124		0.0212	0.100	1	11/05/2023 02:37	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 02:37	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 02:37	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 02:37	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 02:37	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 02:37	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 02:37	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 02:37	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 02:37	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 02:37	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 02:37	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 02:37	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 02:37	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 02:37	WG2164648
Tetrachloroethene	0.208		0.0280	0.100	1	11/05/2023 02:37	WG2164648
Toluene	0.411		0.0500	0.200	1	11/05/2023 02:37	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 02:37	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 02:37	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 02:37	WG2164648
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 02:37	WG2164648
Trichloroethene	0.132		0.0160	0.0400	1	11/05/2023 02:37	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 02:37	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 02:37	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 02:37	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 02:37	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 02:37	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 02:37	WG2164648
Xylenes, Total	0.731		0.191	0.260	1	11/05/2023 02:37	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 02:37	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 02:37	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 02:37	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 02:37	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 02:37	WG2164648
(S) Toluene-d8	*101*			*75.0-131*		*11/05/2023 02:37*	WG2164648
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*11/05/2023 02:37*	WG2164648
(S) 1,2-Dichloroethane-d4	*92.0*			*70.0-130*		*11/05/2023 02:37*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.85		0.548	1.00	1	11/05/2023 02:56	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 02:56	WG2164648
Benzene	0.0380	J	0.0160	0.0400	1	11/05/2023 02:56	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 02:56	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 02:56	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 02:56	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 02:56	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 02:56	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 02:56	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 02:56	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 02:56	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 02:56	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 02:56	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 02:56	WG2164648
Chloroform	0.0660	J	0.0166	0.100	1	11/05/2023 02:56	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 02:56	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 02:56	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 02:56	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 02:56	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 02:56	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 02:56	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 02:56	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 02:56	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 02:56	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 02:56	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 02:56	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 02:56	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 02:56	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 02:56	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 02:56	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 02:56	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 02:56	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 02:56	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 02:56	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 02:56	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 02:56	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 02:56	WG2164648
Ethylbenzene	0.240		0.0212	0.100	1	11/05/2023 02:56	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 02:56	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 02:56	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 02:56	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 02:56	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 02:56	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 02:56	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 02:56	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 02:56	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 02:56	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 02:56	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 02:56	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 02:56	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 02:56	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 02:56	WG2164648
Toluene	0.0870	J	0.0500	0.200	1	11/05/2023 02:56	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 02:56	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 02:56	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 02:56	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 02:56	WG2164648
Trichloroethene	0.0380	J	0.0160	0.0400	1	11/05/2023 02:56	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 02:56	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 02:56	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 02:56	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 02:56	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 02:56	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 02:56	WG2164648
Xylenes, Total	0.893		0.191	0.260	1	11/05/2023 02:56	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 02:56	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 02:56	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 02:56	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 02:56	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 02:56	WG2164648
(S) Toluene-d8	*99.4*			*75.0-131*		*11/05/2023 02:56*	WG2164648
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*11/05/2023 02:56*	WG2164648
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*11/05/2023 02:56*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.44		0.548	1.00	1	11/05/2023 03:15	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 03:15	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 03:15	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 03:15	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 03:15	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 03:15	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 03:15	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 03:15	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 03:15	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 03:15	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 03:15	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 03:15	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 03:15	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 03:15	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 03:15	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 03:15	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 03:15	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 03:15	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 03:15	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 03:15	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 03:15	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 03:15	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 03:15	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 03:15	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 03:15	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 03:15	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 03:15	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 03:15	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 03:15	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 03:15	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 03:15	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 03:15	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 03:15	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 03:15	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 03:15	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 03:15	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 03:15	WG2164648
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 03:15	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 03:15	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 03:15	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 03:15	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 03:15	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 03:15	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 03:15	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 03:15	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 03:15	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 03:15	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 03:15	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 03:15	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 03:15	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 03:15	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 03:15	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 03:15	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 03:15	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 03:15	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 03:15	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 03:15	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 03:15	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 03:15	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 03:15	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 03:15	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 03:15	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 03:15	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 03:15	WG2164648
Xylenes, Total	U		0.191	0.260	1	11/05/2023 03:15	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 03:15	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 03:15	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 03:15	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 03:15	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 03:15	WG2164648
(S) Toluene-d8	*97.6*			*75.0-131*		*11/05/2023 03:15*	WG2164648
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*11/05/2023 03:15*	WG2164648
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*11/05/2023 03:15*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/05/2023 03:34	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 03:34	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 03:34	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 03:34	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 03:34	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 03:34	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 03:34	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 03:34	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 03:34	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 03:34	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 03:34	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 03:34	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 03:34	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 03:34	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 03:34	WG2164648
Chloromethane	U	C3	0.0556	0.500	1	11/05/2023 03:34	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 03:34	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 03:34	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 03:34	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 03:34	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 03:34	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 03:34	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 03:34	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 03:34	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 03:34	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 03:34	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 03:34	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 03:34	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 03:34	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 03:34	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 03:34	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 03:34	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 03:34	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 03:34	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 03:34	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 03:34	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 03:34	WG2164648
Ethylbenzene	0.0430	J	0.0212	0.100	1	11/05/2023 03:34	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 03:34	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 03:34	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 03:34	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 03:34	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 03:34	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 03:34	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 03:34	WG2164648
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 03:34	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 03:34	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 03:34	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 03:34	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 03:34	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 03:34	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 03:34	WG2164648
Toluene	0.290		0.0500	0.200	1	11/05/2023 03:34	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 03:34	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 03:34	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 03:34	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 03:34	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 03:34	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 03:34	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 03:34	WG2164648
1,2,4-Trimethylbenzene	0.0820	J	0.0464	0.200	1	11/05/2023 03:34	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 03:34	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 03:34	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 03:34	WG2164648
Xylenes, Total	0.331		0.191	0.260	1	11/05/2023 03:34	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 03:34	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 03:34	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 03:34	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 03:34	WG2164648
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 03:34	WG2164648
(S) Toluene-d8	*98.7*			*75.0-131*		*11/05/2023 03:34*	WG2164648
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*		*11/05/2023 03:34*	WG2164648
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 03:34*	WG2164648

Method Blank (MB)

(MB) R3996656-2 11/07/23 09:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1672444-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672444-01 11/07/23 10:15 • (DUP) R3996656-3 11/07/23 10:23

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	69300	69600	1	0.413		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1672510-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672510-01 11/07/23 12:43 • (DUP) R3996656-4 11/07/23 12:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	186000	187000	1	0.825		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3996656-1 11/07/23 09:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	105000	105	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3996698-1 11/02/23 01:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	51.1	J	48.0	100
Sulfate	U		594	5000

L1672464-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672464-01 11/02/23 02:15 • (DUP) R3996698-3 11/02/23 05:14

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	4800	4600	1	4.23		15
Nitrate	733	726	1	0.946		15
Sulfate	7480	7400	1	1.14		15

Laboratory Control Sample (LCS)

(LCS) R3996698-2 11/02/23 01:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39400	98.5	80.0-120	
Nitrate	8000	7580	94.7	80.0-120	
Sulfate	40000	39000	97.5	80.0-120	

L1672464-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672464-01 11/02/23 02:15 • (MS) R3996698-4 11/02/23 05:26 • (MSD) R3996698-5 11/02/23 05:39

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	4800	44900	44400	100	99.0	1	80.0-120			1.02	15
Nitrate	8000	733	8630	8720	98.8	99.8	1	80.0-120			0.960	15
Sulfate	40000	7480	46500	46100	97.7	96.7	1	80.0-120			0.852	15

QUALITY CONTROL SUMMARY

L1672476-03,06

Method Blank (MB)

(MB) R4000440-2 11/15/23 08:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	126	J	102	1000

L1672346-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1672346-02 11/15/23 08:52 • (DUP) R4000440-3 11/15/23 09:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	351	360	1	2.45	J	20

L1672493-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672493-01 11/15/23 13:18 • (DUP) R4000440-6 11/15/23 13:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	14600	14900	1	1.76		20

Laboratory Control Sample (LCS)

(LCS) R4000440-1 11/15/23 03:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23800	95.2	85.0-115	

L1672397-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672397-01 11/15/23 10:01 • (MS) R4000440-4 11/15/23 10:24 • (MSD) R4000440-5 11/15/23 10:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	2000	26000	25900	96.1	95.5	1	85.0-115			0.539	20

L1672510-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672510-01 11/15/23 14:00 • (MS) R4000440-7 11/15/23 14:23 • (MSD) R4000440-8 11/15/23 14:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	4200	27900	28300	94.9	96.4	1	85.0-115			1.32	20

Method Blank (MB)

(MB) R3995537-1 11/04/23 18:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3995537-2 11/04/23 18:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	987	98.7	80.0-120	
Manganese	50.0	50.4	101	80.0-120	

L1672510-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672510-01 11/04/23 18:28 • (MS) R3995537-4 11/04/23 18:35 • (MSD) R3995537-5 11/04/23 18:38

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	3970	4810	4620	83.3	64.3	1	75.0-125		J6	4.02	20
Manganese	50.0	5590	5540	5420	0.000	0.000	1	75.0-125	V	V	2.28	20

Method Blank (MB)

(MB) R3996455-2 11/07/23 09:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673102-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673102-01 11/07/23 10:31 • (DUP) R3996455-3 11/07/23 10:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1673351-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1673351-05 11/07/23 11:20 • (DUP) R3996455-4 11/07/23 12:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3996455-1 11/07/23 09:18 • (LCSD) R3996455-5 11/07/23 12:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	61.3	65.0	90.4	95.9	85.0-115			5.86	20
Ethane	129	113	112	87.6	86.8	85.0-115			0.889	20
Ethene	127	113	112	89.0	88.2	85.0-115			0.889	20

Method Blank (MB)

(MB) R3996599-2 11/07/23 14:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1672476-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1672476-03 11/07/23 14:20 • (DUP) R3996599-3 11/07/23 15:08

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	22800	22600	10	0.881		20

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

(LCS) R3996599-1 11/07/23 14:12 • (LCSD) R3996599-4 11/07/23 15:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.7	61.4	95.4	90.6	85.0-115			5.23	20

Method Blank (MB)

(MB) R3995875-3 11/04/23 23:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3995875-3 11/04/23 23:28

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*98.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*98.2*			*70.0-130*

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

(LCS) R3995875-1 11/04/23 21:52 • (LCSD) R3995875-2 11/04/23 22:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	29.5	31.9	118	128	10.0-160			7.82	31
Acrylonitrile	25.0	23.2	24.1	92.8	96.4	45.0-153			3.81	22
Benzene	5.00	4.99	5.24	99.8	105	70.0-123			4.89	20
Bromobenzene	5.00	5.22	5.35	104	107	73.0-121			2.46	20
Bromodichloromethane	5.00	4.96	5.23	99.2	105	73.0-121			5.30	20
Bromoform	5.00	4.80	4.98	96.0	99.6	64.0-132			3.68	20
Bromomethane	5.00	5.36	5.77	107	115	56.0-147			7.37	20
n-Butylbenzene	5.00	4.03	4.22	80.6	84.4	68.0-135			4.61	20
sec-Butylbenzene	5.00	4.48	4.58	89.6	91.6	74.0-130			2.21	20
tert-Butylbenzene	5.00	4.33	4.56	86.6	91.2	75.0-127			5.17	20
Carbon tetrachloride	5.00	5.40	5.77	108	115	66.0-128			6.62	20
Chlorobenzene	5.00	4.94	4.90	98.8	98.0	76.0-128			0.813	20
Chlorodibromomethane	5.00	4.82	5.00	96.4	100	74.0-127			3.67	20
Chloroethane	5.00	4.76	5.02	95.2	100	61.0-134			5.32	20
Chloroform	5.00	5.41	5.74	108	115	72.0-123			5.92	20
Chloromethane	5.00	3.98	4.48	79.6	89.6	51.0-138			11.8	20
2-Chlorotoluene	5.00	5.05	5.25	101	105	75.0-124			3.88	20
4-Chlorotoluene	5.00	4.60	4.94	92.0	98.8	75.0-124			7.13	20
1,2-Dibromo-3-Chloropropane	5.00	4.46	4.59	89.2	91.8	59.0-130			2.87	20
1,2-Dibromoethane	5.00	4.89	4.88	97.8	97.6	74.0-128			0.205	20
Dibromomethane	5.00	5.23	5.36	105	107	75.0-122			2.46	20
1,2-Dichlorobenzene	5.00	4.56	4.80	91.2	96.0	76.0-124			5.13	20
1,3-Dichlorobenzene	5.00	4.86	5.04	97.2	101	76.0-125			3.64	20
1,4-Dichlorobenzene	5.00	4.70	4.82	94.0	96.4	77.0-121			2.52	20
Dichlorodifluoromethane	5.00	4.63	5.44	92.6	109	43.0-156			16.1	20
1,1-Dichloroethane	5.00	4.58	4.86	91.6	97.2	70.0-127			5.93	20
1,2-Dichloroethane	5.00	4.53	4.73	90.6	94.6	65.0-131			4.32	20
1,1-Dichloroethene	5.00	4.45	4.73	89.0	94.6	65.0-131			6.10	20
cis-1,2-Dichloroethene	5.00	5.17	5.47	103	109	73.0-125			5.64	20
trans-1,2-Dichloroethene	5.00	5.30	5.70	106	114	71.0-125			7.27	20
1,2-Dichloropropane	5.00	4.45	4.66	89.0	93.2	74.0-125			4.61	20
1,1-Dichloropropene	5.00	5.02	5.14	100	103	73.0-125			2.36	20
1,3-Dichloropropane	5.00	4.81	4.94	96.2	98.8	80.0-125			2.67	20
cis-1,3-Dichloropropene	5.00	4.92	5.10	98.4	102	76.0-127			3.59	20
trans-1,3-Dichloropropene	5.00	4.91	4.91	98.2	98.2	73.0-127			0.000	20
2,2-Dichloropropane	5.00	5.03	5.39	101	108	59.0-135			6.91	20
Di-isopropyl ether	5.00	4.28	4.46	85.6	89.2	60.0-136			4.12	20
Ethylbenzene	5.00	4.73	4.87	94.6	97.4	74.0-126			2.92	20
Hexachloro-1,3-butadiene	5.00	5.16	5.56	103	111	57.0-150			7.46	20
Isopropylbenzene	5.00	4.51	4.68	90.2	93.6	72.0-127			3.70	20

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

(LCS) R3995875-1 11/04/23 21:52 • (LCSD) R3995875-2 11/04/23 22:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.40	4.49	88.0	89.8	72.0-133			2.02	20
2-Butanone (MEK)	25.0	27.9	29.5	112	118	30.0-160			5.57	24
Methylene Chloride	5.00	5.06	5.40	101	108	68.0-123			6.50	20
4-Methyl-2-pentanone (MIBK)	25.0	21.7	21.5	86.8	86.0	56.0-143			0.926	20
Methyl tert-butyl ether	5.00	5.39	5.86	108	117	66.0-132			8.36	20
Naphthalene	5.00	3.49	3.79	69.8	75.8	59.0-130			8.24	20
n-Propylbenzene	5.00	4.72	4.93	94.4	98.6	74.0-126			4.35	20
Styrene	5.00	4.15	4.15	83.0	83.0	72.0-127			0.000	20
1,1,1,2-Tetrachloroethane	5.00	4.89	5.09	97.8	102	74.0-129			4.01	20
1,1,2,2-Tetrachloroethane	5.00	4.78	4.79	95.6	95.8	68.0-128			0.209	20
1,1,2-Trichlorotrifluoroethane	5.00	4.66	5.55	93.2	111	61.0-139			17.4	20
Tetrachloroethene	5.00	5.19	5.29	104	106	70.0-136			1.91	20
Toluene	5.00	4.76	4.89	95.2	97.8	75.0-121			2.69	20
1,2,3-Trichlorobenzene	5.00	4.21	4.46	84.2	89.2	59.0-139			5.77	20
1,2,4-Trichlorobenzene	5.00	4.21	4.41	84.2	88.2	62.0-137			4.64	20
1,1,1-Trichloroethane	5.00	5.18	5.38	104	108	69.0-126			3.79	20
1,1,2-Trichloroethane	5.00	5.02	5.12	100	102	78.0-123			1.97	20
Trichloroethene	5.00	5.18	5.76	104	115	76.0-126			10.6	20
Trichlorofluoromethane	5.00	5.00	5.27	100	105	61.0-142			5.26	20
1,2,3-Trichloropropane	5.00	5.30	5.67	106	113	67.0-129			6.75	20
1,2,4-Trimethylbenzene	5.00	4.49	4.74	89.8	94.8	70.0-126			5.42	20
1,2,3-Trimethylbenzene	5.00	4.55	4.73	91.0	94.6	74.0-124			3.88	20
1,3,5-Trimethylbenzene	5.00	4.68	4.75	93.6	95.0	73.0-127			1.48	20
Vinyl chloride	5.00	4.00	4.49	80.0	89.8	63.0-134			11.5	20
Xylenes, Total	15.0	13.2	14.1	88.0	94.0	72.0-127			6.59	20
Ethyl Ether	5.00	4.54	4.81	90.8	96.2	64.0-137			5.78	20
Tetrahydrofuran	5.00	4.68	4.93	93.6	98.6	37.0-146			5.20	24
Iodomethane	25.0	27.9	28.5	112	114	74.0-134			2.13	20
Allyl chloride	25.0	26.2	27.9	105	112	70.0-131			6.28	20
Trans-1,4-Dichloro-2-butene	5.00	3.90	3.66	78.0	73.2	45.0-143			6.35	20
(S) Toluene-d8				*98.3*	*96.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*93.5*	*93.0*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*95.5*	*98.6*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address: **PES Environmental, Inc.- WA** 2101 Fourth Ave., Suite 1310 Seattle, WA 98121	Billing Information: Attn: Accounts Payable 2101 4th Avenue, Suite 1310 Seattle, WA 98121
Report to: Bill Haldeman	Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co
Project Description: American Linen	City/State Collected:
Please Circle: PT MT CT ET	Pres Chk
Phone: 206-529-3980	Client Project # 443022-1413001.10.70
Lab Project # PESENVSWA-ALP	Site/Facility ID #
Collected by (print):	P.O. # 443018-1413001.05.601
Collected by (signature):	Quote #
Immediately Packed on Ice N ___ Y ✓	Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day
Date Results Needed: STD	

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace® PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1672476
A217
Table
Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 cam
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl (Hold)	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-138-103123	Grab	GW	—	10/31/23	1053	3							X		-01
MW-304-103123	↓	GW	—	10/31/23	1155	3							X		-02
BB-8-103123		GW	—	10/31/23	1305	10	X	X	X	X	X	X	X		-03
MW125-103123		GW	—	10/31/23	1436	3							X		-04
MW-302-103123		GW	—	10/31/23	1110	3							X		-05
R-MW5-103123		GW	—	10/31/23	1158	10	X	X	X	X	X	X	X		-06
MW105-103123		GW	—	10/31/23	1315	10 3							X		-07
MW-330-103123	↓	GW	—	10/31/23	1434	3							X		-08
MW-303-103123	↓	GW	—	↓	1231	3							X		-09
		GW													

* 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 # 6337 2246 8422

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Natalie Wisdom	10/31/23	1623		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: DPA 8°C 3.7±0=3.7 Bottles Received: 48
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Hayley Kotula	Date: 11/1/23 Time: 0900

If preservation: PH-10BDH4321 TRC-2352362 CR6-20221V PH-10BDH4321 TRC-2352362 CR6-20221V

Hold:

Condition: NCF / OK

11/1-NCF-L1672476 PESENVSWA

R5

Time estimate: oh **Time spent:** oh

Members

Hailey Melson (responsible) JS Jared Starkey

Due on *4 November 2023 8:00 AM* for target *Done*

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

Comments

Hailey Melson *1 November 2023 2:21 PM*

For ID: MW-105-103123 we received 10 containers, but the client only asks for V8260ULLC. Currently only logged for VOCs but all containers are labeled like the other 2 sets of 10 containers listed on the COC.

Jared Starkey *1 November 2023 3:21 PM*

Log only VOCs and hold the other containers for 40 days.

Hailey Melson *1 November 2023 4:18 PM*

Done

ANALYTICAL REPORT

November 17, 2023

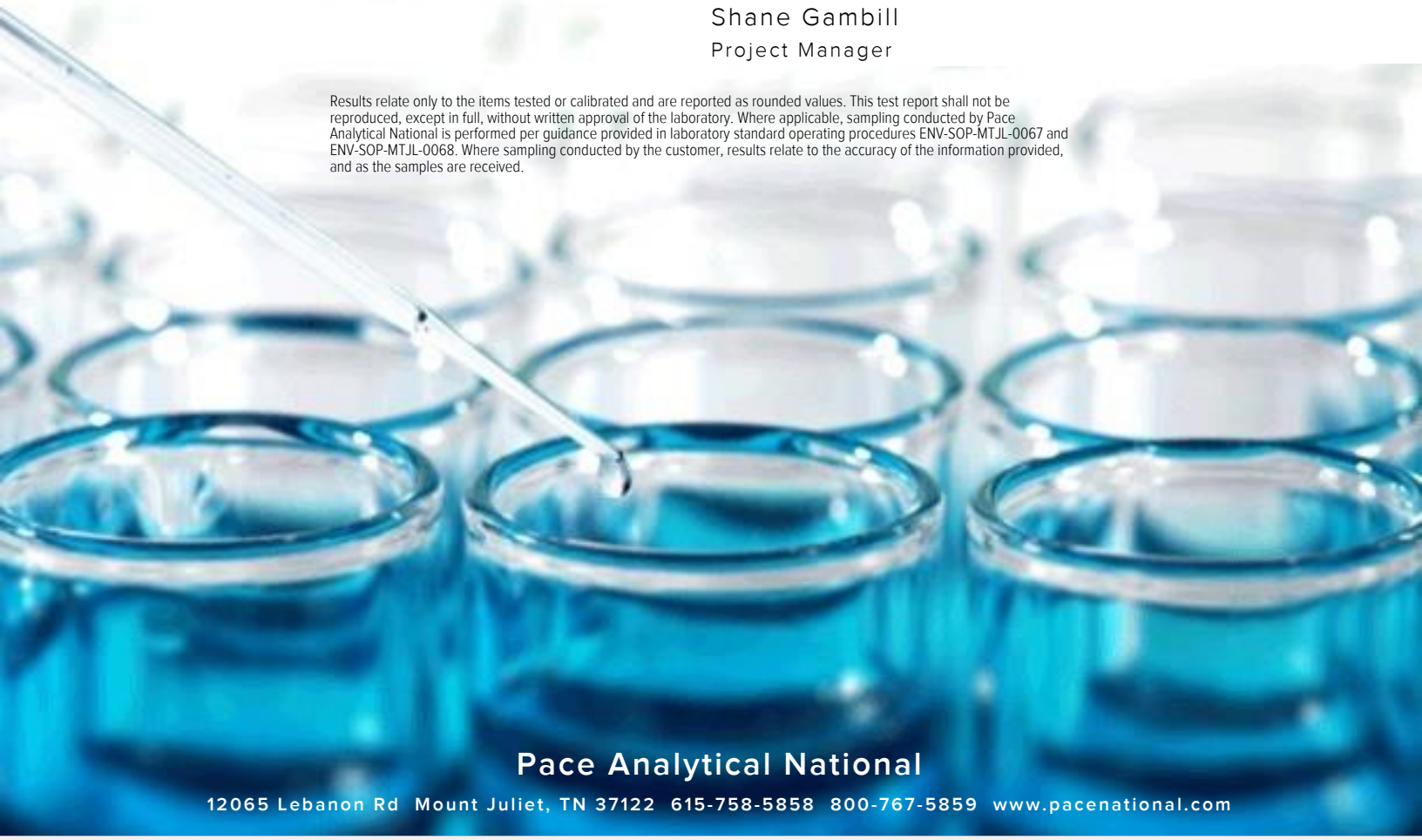
PES Environmental, Inc.- WA

Sample Delivery Group:	L1672953
Samples Received:	11/02/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Shane Gambill
Project Manager



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

TABLE OF CONTENTS

MW-179-110123 L1672953-01 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 09:59 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2165877	1	11/07/23 11:17	11/07/23 11:17	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2163525	1	11/03/23 01:30	11/03/23 01:30	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2163525	5	11/03/23 04:04	11/03/23 04:04	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171403	1	11/16/23 03:04	11/16/23 03:04	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2165351	1	11/09/23 03:55	11/09/23 11:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 09:37	11/07/23 09:37	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:25	11/07/23 14:25	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	50	11/05/23 13:55	11/05/23 13:55	ACG	Mt. Juliet, TN

MW-177-110123 L1672953-02 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 11:16 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2165877	1	11/07/23 11:21	11/07/23 11:21	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2163540	1	11/03/23 02:29	11/03/23 02:29	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171403	1	11/16/23 03:25	11/16/23 03:25	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2165351	1	11/09/23 03:55	11/09/23 11:22	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 09:49	11/07/23 09:49	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:29	11/07/23 14:29	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	200	11/05/23 14:14	11/05/23 14:14	ACG	Mt. Juliet, TN

MW-167-110123 L1672953-03 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 13:05 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2165877	1	11/07/23 11:28	11/07/23 11:28	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2163540	1	11/03/23 02:42	11/03/23 02:42	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171403	1	11/16/23 03:47	11/16/23 03:47	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2165351	1	11/09/23 03:55	11/09/23 11:25	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 09:56	11/07/23 09:56	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:36	11/07/23 14:36	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	1	11/05/23 11:41	11/05/23 11:41	ACG	Mt. Juliet, TN

MW-183-110123 L1672953-04 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 13:08 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2165877	1	11/07/23 11:34	11/07/23 11:34	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2163540	1	11/03/23 02:55	11/03/23 02:55	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171403	1	11/16/23 04:08	11/16/23 04:08	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2165351	1	11/09/23 03:55	11/09/23 11:29	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 10:03	11/07/23 10:03	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:43	11/07/23 14:43	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	100	11/05/23 14:33	11/05/23 14:33	ACG	Mt. Juliet, TN

MW-180-110123 L1672953-05 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 10:58 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2165877	1	11/07/23 12:03	11/07/23 12:03	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2163525	1	11/03/23 01:43	11/03/23 01:43	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171403	1	11/16/23 05:11	11/16/23 05:11	ASH	Mt. Juliet, TN

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

MW-180-110123 L1672953-05 GW

Collected by: Osmin Monroy
Collected date/time: 11/01/23 10:58
Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2165351	1	11/09/23 03:55	11/09/23 11:32	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 10:24	11/07/23 10:24	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:50	11/07/23 14:50	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	25	11/05/23 14:52	11/05/23 14:52	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168000	250	11/10/23 03:23	11/10/23 03:23	AV	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.

Shane Gambill
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	983000		8450	20000	1	11/07/2023 11:17	WG2165877

Sample Narrative:

L1672953-01 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	213000		1900	5000	5	11/03/2023 04:04	WG2163525
Nitrate	84.6	J	48.0	100	1	11/03/2023 01:30	WG2163525
Sulfate	U		594	5000	1	11/03/2023 01:30	WG2163525

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15600		102	1000	1	11/16/2023 03:04	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	20000		28.1	100	1	11/09/2023 11:19	WG2165351
Manganese	2930		0.704	5.00	1	11/09/2023 11:19	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16500		2.87	6.78	10	11/07/2023 14:25	WG2166209
Ethane	21.1		0.296	1.29	1	11/07/2023 09:37	WG2165206
Ethene	233		0.422	1.27	1	11/07/2023 09:37	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		27.4	50.0	50	11/05/2023 13:55	WG2164649
Acrylonitrile	U		3.80	25.0	50	11/05/2023 13:55	WG2164649
Benzene	U		0.800	2.00	50	11/05/2023 13:55	WG2164649
Bromobenzene	U		2.10	25.0	50	11/05/2023 13:55	WG2164649
Bromodichloromethane	U		1.58	5.00	50	11/05/2023 13:55	WG2164649
Bromoform	U		12.0	50.0	50	11/05/2023 13:55	WG2164649
Bromomethane	U		7.40	25.0	50	11/05/2023 13:55	WG2164649
n-Butylbenzene	U		7.65	25.0	50	11/05/2023 13:55	WG2164649
sec-Butylbenzene	U		5.05	25.0	50	11/05/2023 13:55	WG2164649
tert-Butylbenzene	U		3.10	10.0	50	11/05/2023 13:55	WG2164649
Carbon tetrachloride	U		2.16	10.0	50	11/05/2023 13:55	WG2164649
Chlorobenzene	U		1.15	5.00	50	11/05/2023 13:55	WG2164649
Chlorodibromomethane	U		0.900	5.00	50	11/05/2023 13:55	WG2164649
Chloroethane	23.6		2.16	10.0	50	11/05/2023 13:55	WG2164649
Chloroform	U		0.830	5.00	50	11/05/2023 13:55	WG2164649
Chloromethane	U		2.78	25.0	50	11/05/2023 13:55	WG2164649
2-Chlorotoluene	U		1.84	5.00	50	11/05/2023 13:55	WG2164649
4-Chlorotoluene	U		2.26	10.0	50	11/05/2023 13:55	WG2164649
1,2-Dibromo-3-Chloropropane	U		10.2	50.0	50	11/05/2023 13:55	WG2164649
1,2-Dibromoethane	U		1.05	5.00	50	11/05/2023 13:55	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		2.00	10.0	50	11/05/2023 13:55	WG2164649
1,2-Dichlorobenzene	U		2.90	10.0	50	11/05/2023 13:55	WG2164649
1,3-Dichlorobenzene	U		3.40	10.0	50	11/05/2023 13:55	WG2164649
1,4-Dichlorobenzene	U		3.94	10.0	50	11/05/2023 13:55	WG2164649
Dichlorodifluoromethane	U		1.64	5.00	50	11/05/2023 13:55	WG2164649
1,1-Dichloroethane	U		1.15	5.00	50	11/05/2023 13:55	WG2164649
1,2-Dichloroethane	U		0.950	5.00	50	11/05/2023 13:55	WG2164649
1,1-Dichloroethene	6.65		1.00	5.00	50	11/05/2023 13:55	WG2164649
cis-1,2-Dichloroethene	1570		1.38	5.00	50	11/05/2023 13:55	WG2164649
trans-1,2-Dichloroethene	6.10	J	2.86	10.0	50	11/05/2023 13:55	WG2164649
1,2-Dichloropropane	U		2.54	10.0	50	11/05/2023 13:55	WG2164649
1,1-Dichloropropene	U		1.40	5.00	50	11/05/2023 13:55	WG2164649
1,3-Dichloropropane	U		3.50	10.0	50	11/05/2023 13:55	WG2164649
cis-1,3-Dichloropropene	U		1.36	5.00	50	11/05/2023 13:55	WG2164649
trans-1,3-Dichloropropene	U		3.06	10.0	50	11/05/2023 13:55	WG2164649
2,2-Dichloropropane	U		1.59	5.00	50	11/05/2023 13:55	WG2164649
Di-isopropyl ether	U		0.700	2.00	50	11/05/2023 13:55	WG2164649
Ethylbenzene	U		1.06	5.00	50	11/05/2023 13:55	WG2164649
Hexachloro-1,3-butadiene	U		25.4	50.0	50	11/05/2023 13:55	WG2164649
Isopropylbenzene	U		1.73	5.00	50	11/05/2023 13:55	WG2164649
p-Isopropyltoluene	U		4.66	10.0	50	11/05/2023 13:55	WG2164649
2-Butanone (MEK)	U		25.0	50.0	50	11/05/2023 13:55	WG2164649
Methylene Chloride	U		13.3	50.0	50	11/05/2023 13:55	WG2164649
4-Methyl-2-pentanone (MIBK)	U		20.0	50.0	50	11/05/2023 13:55	WG2164649
Methyl tert-butyl ether	U		0.590	2.00	50	11/05/2023 13:55	WG2164649
Naphthalene	U	C3	6.20	25.0	50	11/05/2023 13:55	WG2164649
n-Propylbenzene	U		2.36	10.0	50	11/05/2023 13:55	WG2164649
Styrene	U		5.45	25.0	50	11/05/2023 13:55	WG2164649
1,1,1,2-Tetrachloroethane	U		1.00	5.00	50	11/05/2023 13:55	WG2164649
1,1,2,2-Tetrachloroethane	U		0.780	5.00	50	11/05/2023 13:55	WG2164649
1,1,2-Trichlorotrifluoroethane	U		1.35	5.00	50	11/05/2023 13:55	WG2164649
Tetrachloroethene	3.85	J	1.40	5.00	50	11/05/2023 13:55	WG2164649
Toluene	U		2.50	10.0	50	11/05/2023 13:55	WG2164649
1,2,3-Trichlorobenzene	U		1.25	25.0	50	11/05/2023 13:55	WG2164649
1,2,4-Trichlorobenzene	U		9.65	25.0	50	11/05/2023 13:55	WG2164649
1,1,1-Trichloroethane	U		0.550	5.00	50	11/05/2023 13:55	WG2164649
1,1,2-Trichloroethane	U		1.77	5.00	50	11/05/2023 13:55	WG2164649
Trichloroethene	2.05		0.800	2.00	50	11/05/2023 13:55	WG2164649
Trichlorofluoromethane	U		1.00	5.00	50	11/05/2023 13:55	WG2164649
1,2,3-Trichloropropane	U		10.2	25.0	50	11/05/2023 13:55	WG2164649
1,2,4-Trimethylbenzene	U		2.32	10.0	50	11/05/2023 13:55	WG2164649
1,2,3-Trimethylbenzene	U		2.30	10.0	50	11/05/2023 13:55	WG2164649
1,3,5-Trimethylbenzene	U		2.16	10.0	50	11/05/2023 13:55	WG2164649
Vinyl chloride	1770		1.36	5.00	50	11/05/2023 13:55	WG2164649
Xylenes, Total	U		9.55	13.0	50	11/05/2023 13:55	WG2164649
Ethyl Ether	U		0.850	5.00	50	11/05/2023 13:55	WG2164649
Tetrahydrofuran	U		4.50	25.0	50	11/05/2023 13:55	WG2164649
Iodomethane	U		12.1	25.0	50	11/05/2023 13:55	WG2164649
Allyl chloride	U		29.0	50.0	50	11/05/2023 13:55	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	2.80	10.0	50	11/05/2023 13:55	WG2164649
(S) Toluene-d8	*99.3*			*75.0-131*		*11/05/2023 13:55*	WG2164649
(S) 4-Bromofluorobenzene	*88.2*			*67.0-138*		*11/05/2023 13:55*	WG2164649
(S) 1,2-Dichloroethane-d4	*98.9*			*70.0-130*		*11/05/2023 13:55*	WG2164649

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	441000		8450	20000	1	11/07/2023 11:21	WG2165877

Sample Narrative:

L1672953-02 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	78600		379	1000	1	11/03/2023 02:29	WG2163540
Nitrate	119		48.0	100	1	11/03/2023 02:29	WG2163540
Sulfate	U		594	5000	1	11/03/2023 02:29	WG2163540

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10100		102	1000	1	11/16/2023 03:25	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6790		28.1	100	1	11/09/2023 11:22	WG2165351
Manganese	764		0.704	5.00	1	11/09/2023 11:22	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27400		2.87	6.78	10	11/07/2023 14:29	WG2166209
Ethane	661		0.296	1.29	1	11/07/2023 09:49	WG2165206
Ethene	1430		0.422	1.27	1	11/07/2023 09:49	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	163	J	110	200	200	11/05/2023 14:14	WG2164649
Acrylonitrile	U		15.2	100	200	11/05/2023 14:14	WG2164649
Benzene	U		3.20	8.00	200	11/05/2023 14:14	WG2164649
Bromobenzene	U		8.40	100	200	11/05/2023 14:14	WG2164649
Bromodichloromethane	U		6.30	20.0	200	11/05/2023 14:14	WG2164649
Bromoform	U		47.8	200	200	11/05/2023 14:14	WG2164649
Bromomethane	U		29.6	100	200	11/05/2023 14:14	WG2164649
n-Butylbenzene	U		30.6	100	200	11/05/2023 14:14	WG2164649
sec-Butylbenzene	U		20.2	100	200	11/05/2023 14:14	WG2164649
tert-Butylbenzene	U		12.4	40.0	200	11/05/2023 14:14	WG2164649
Carbon tetrachloride	U		8.64	40.0	200	11/05/2023 14:14	WG2164649
Chlorobenzene	U		4.58	20.0	200	11/05/2023 14:14	WG2164649
Chlorodibromomethane	U		3.60	20.0	200	11/05/2023 14:14	WG2164649
Chloroethane	U		8.64	40.0	200	11/05/2023 14:14	WG2164649
Chloroform	U		3.32	20.0	200	11/05/2023 14:14	WG2164649
Chloromethane	U		11.1	100	200	11/05/2023 14:14	WG2164649
2-Chlorotoluene	U		7.36	20.0	200	11/05/2023 14:14	WG2164649
4-Chlorotoluene	U		9.04	40.0	200	11/05/2023 14:14	WG2164649
1,2-Dibromo-3-Chloropropane	U		40.8	200	200	11/05/2023 14:14	WG2164649
1,2-Dibromoethane	U		4.20	20.0	200	11/05/2023 14:14	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		8.00	40.0	200	11/05/2023 14:14	WG2164649
1,2-Dichlorobenzene	U		11.6	40.0	200	11/05/2023 14:14	WG2164649
1,3-Dichlorobenzene	U		13.6	40.0	200	11/05/2023 14:14	WG2164649
1,4-Dichlorobenzene	U		15.8	40.0	200	11/05/2023 14:14	WG2164649
Dichlorodifluoromethane	U		6.54	20.0	200	11/05/2023 14:14	WG2164649
1,1-Dichloroethane	U		4.60	20.0	200	11/05/2023 14:14	WG2164649
1,2-Dichloroethane	U		3.80	20.0	200	11/05/2023 14:14	WG2164649
1,1-Dichloroethene	5.60	J	4.00	20.0	200	11/05/2023 14:14	WG2164649
cis-1,2-Dichloroethene	2610		5.52	20.0	200	11/05/2023 14:14	WG2164649
trans-1,2-Dichloroethene	12.8	J	11.4	40.0	200	11/05/2023 14:14	WG2164649
1,2-Dichloropropane	U		10.2	40.0	200	11/05/2023 14:14	WG2164649
1,1-Dichloropropene	U		5.60	20.0	200	11/05/2023 14:14	WG2164649
1,3-Dichloropropane	U		14.0	40.0	200	11/05/2023 14:14	WG2164649
cis-1,3-Dichloropropene	U		5.42	20.0	200	11/05/2023 14:14	WG2164649
trans-1,3-Dichloropropene	U		12.2	40.0	200	11/05/2023 14:14	WG2164649
2,2-Dichloropropane	U		6.34	20.0	200	11/05/2023 14:14	WG2164649
Di-isopropyl ether	U		2.80	8.00	200	11/05/2023 14:14	WG2164649
Ethylbenzene	U		4.24	20.0	200	11/05/2023 14:14	WG2164649
Hexachloro-1,3-butadiene	U		102	200	200	11/05/2023 14:14	WG2164649
Isopropylbenzene	U		6.90	20.0	200	11/05/2023 14:14	WG2164649
p-Isopropyltoluene	U		18.6	40.0	200	11/05/2023 14:14	WG2164649
2-Butanone (MEK)	U		100	200	200	11/05/2023 14:14	WG2164649
Methylene Chloride	U		53.0	200	200	11/05/2023 14:14	WG2164649
4-Methyl-2-pentanone (MIBK)	U		80.0	200	200	11/05/2023 14:14	WG2164649
Methyl tert-butyl ether	U		2.36	8.00	200	11/05/2023 14:14	WG2164649
Naphthalene	U	C3	24.8	100	200	11/05/2023 14:14	WG2164649
n-Propylbenzene	U		9.44	40.0	200	11/05/2023 14:14	WG2164649
Styrene	U		21.8	100	200	11/05/2023 14:14	WG2164649
1,1,1,2-Tetrachloroethane	U		4.00	20.0	200	11/05/2023 14:14	WG2164649
1,1,2,2-Tetrachloroethane	U		3.12	20.0	200	11/05/2023 14:14	WG2164649
1,1,2-Trichlorotrifluoroethane	U		5.40	20.0	200	11/05/2023 14:14	WG2164649
Tetrachloroethene	418		5.60	20.0	200	11/05/2023 14:14	WG2164649
Toluene	U		10.0	40.0	200	11/05/2023 14:14	WG2164649
1,2,3-Trichlorobenzene	U		5.00	100	200	11/05/2023 14:14	WG2164649
1,2,4-Trichlorobenzene	U		38.6	100	200	11/05/2023 14:14	WG2164649
1,1,1-Trichloroethane	U		2.20	20.0	200	11/05/2023 14:14	WG2164649
1,1,2-Trichloroethane	U		7.06	20.0	200	11/05/2023 14:14	WG2164649
Trichloroethene	61.8		3.20	8.00	200	11/05/2023 14:14	WG2164649
Trichlorofluoromethane	U		4.00	20.0	200	11/05/2023 14:14	WG2164649
1,2,3-Trichloropropane	U		40.8	100	200	11/05/2023 14:14	WG2164649
1,2,4-Trimethylbenzene	U		9.28	40.0	200	11/05/2023 14:14	WG2164649
1,2,3-Trimethylbenzene	U		9.20	40.0	200	11/05/2023 14:14	WG2164649
1,3,5-Trimethylbenzene	U		8.64	40.0	200	11/05/2023 14:14	WG2164649
Vinyl chloride	1170		5.46	20.0	200	11/05/2023 14:14	WG2164649
Xylenes, Total	U		38.2	52.0	200	11/05/2023 14:14	WG2164649
Ethyl Ether	U		3.40	20.0	200	11/05/2023 14:14	WG2164649
Tetrahydrofuran	U		18.0	100	200	11/05/2023 14:14	WG2164649
Iodomethane	U		48.4	100	200	11/05/2023 14:14	WG2164649
Allyl chloride	U		116	200	200	11/05/2023 14:14	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	11.2	40.0	200	11/05/2023 14:14	WG2164649
(S) Toluene-d8	*98.3*			*75.0-131*		*11/05/2023 14:14*	WG2164649
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*		*11/05/2023 14:14*	WG2164649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 14:14*	WG2164649

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	441000		8450	20000	1	11/07/2023 11:28	WG2165877

Sample Narrative:

L1672953-03 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	37100		379	1000	1	11/03/2023 02:42	WG2163540
Nitrate	86.4	J	48.0	100	1	11/03/2023 02:42	WG2163540
Sulfate	5130		594	5000	1	11/03/2023 02:42	WG2163540

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10100		102	1000	1	11/16/2023 03:47	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2550		28.1	100	1	11/09/2023 11:25	WG2165351
Manganese	743		0.704	5.00	1	11/09/2023 11:25	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	9510		2.87	6.78	10	11/07/2023 14:36	WG2166209
Ethane	156		0.296	1.29	1	11/07/2023 09:56	WG2165206
Ethene	5.45		0.422	1.27	1	11/07/2023 09:56	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.96	C5	0.548	1.00	1	11/05/2023 11:41	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 11:41	WG2164649
Benzene	U		0.0160	0.0400	1	11/05/2023 11:41	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 11:41	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 11:41	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 11:41	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 11:41	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 11:41	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 11:41	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 11:41	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 11:41	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 11:41	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 11:41	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 11:41	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 11:41	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 11:41	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 11:41	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 11:41	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 11:41	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 11:41	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 11:41	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 11:41	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 11:41	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 11:41	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 11:41	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 11:41	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 11:41	WG2164649
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 11:41	WG2164649
cis-1,2-Dichloroethene	0.223		0.0276	0.100	1	11/05/2023 11:41	WG2164649
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 11:41	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 11:41	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 11:41	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 11:41	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 11:41	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 11:41	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 11:41	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 11:41	WG2164649
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 11:41	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 11:41	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 11:41	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 11:41	WG2164649
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 11:41	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 11:41	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 11:41	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 11:41	WG2164649
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 11:41	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 11:41	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 11:41	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 11:41	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 11:41	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 11:41	WG2164649
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 11:41	WG2164649
Toluene	U		0.0500	0.200	1	11/05/2023 11:41	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 11:41	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 11:41	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 11:41	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 11:41	WG2164649
Trichloroethene	0.0190	J	0.0160	0.0400	1	11/05/2023 11:41	WG2164649
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 11:41	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 11:41	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 11:41	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 11:41	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 11:41	WG2164649
Vinyl chloride	0.260		0.0273	0.100	1	11/05/2023 11:41	WG2164649
Xylenes, Total	U		0.191	0.260	1	11/05/2023 11:41	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 11:41	WG2164649
Tetrahydrofuran	0.274	J	0.0900	0.500	1	11/05/2023 11:41	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 11:41	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 11:41	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 11:41	WG2164649
(S) Toluene-d8	*98.8*			*75.0-131*		*11/05/2023 11:41*	WG2164649
(S) 4-Bromofluorobenzene	*89.7*			*67.0-138*		*11/05/2023 11:41*	WG2164649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 11:41*	WG2164649

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	585000		8450	20000	1	11/07/2023 11:34	WG2165877

Sample Narrative:

L1672953-04 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	75500		379	1000	1	11/03/2023 02:55	WG2163540
Nitrate	89.0	J	48.0	100	1	11/03/2023 02:55	WG2163540
Sulfate	16200		594	5000	1	11/03/2023 02:55	WG2163540

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10500		102	1000	1	11/16/2023 04:08	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2510		28.1	100	1	11/09/2023 11:29	WG2165351
Manganese	1550		0.704	5.00	1	11/09/2023 11:29	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	32600		2.87	6.78	10	11/07/2023 14:43	WG2166209
Ethane	4.79		0.296	1.29	1	11/07/2023 10:03	WG2165206
Ethene	437		0.422	1.27	1	11/07/2023 10:03	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		54.8	100	100	11/05/2023 14:33	WG2164649
Acrylonitrile	U		7.60	50.0	100	11/05/2023 14:33	WG2164649
Benzene	U		1.60	4.00	100	11/05/2023 14:33	WG2164649
Bromobenzene	U		4.20	50.0	100	11/05/2023 14:33	WG2164649
Bromodichloromethane	U		3.15	10.0	100	11/05/2023 14:33	WG2164649
Bromoform	U		23.9	100	100	11/05/2023 14:33	WG2164649
Bromomethane	U		14.8	50.0	100	11/05/2023 14:33	WG2164649
n-Butylbenzene	U		15.3	50.0	100	11/05/2023 14:33	WG2164649
sec-Butylbenzene	U		10.1	50.0	100	11/05/2023 14:33	WG2164649
tert-Butylbenzene	U		6.20	20.0	100	11/05/2023 14:33	WG2164649
Carbon tetrachloride	U		4.32	20.0	100	11/05/2023 14:33	WG2164649
Chlorobenzene	U		2.29	10.0	100	11/05/2023 14:33	WG2164649
Chlorodibromomethane	U		1.80	10.0	100	11/05/2023 14:33	WG2164649
Chloroethane	U		4.32	20.0	100	11/05/2023 14:33	WG2164649
Chloroform	U		1.66	10.0	100	11/05/2023 14:33	WG2164649
Chloromethane	U		5.56	50.0	100	11/05/2023 14:33	WG2164649
2-Chlorotoluene	U		3.68	10.0	100	11/05/2023 14:33	WG2164649
4-Chlorotoluene	U		4.52	20.0	100	11/05/2023 14:33	WG2164649
1,2-Dibromo-3-Chloropropane	U		20.4	100	100	11/05/2023 14:33	WG2164649
1,2-Dibromoethane	U		2.10	10.0	100	11/05/2023 14:33	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		4.00	20.0	100	11/05/2023 14:33	WG2164649
1,2-Dichlorobenzene	U		5.80	20.0	100	11/05/2023 14:33	WG2164649
1,3-Dichlorobenzene	U		6.80	20.0	100	11/05/2023 14:33	WG2164649
1,4-Dichlorobenzene	U		7.88	20.0	100	11/05/2023 14:33	WG2164649
Dichlorodifluoromethane	U		3.27	10.0	100	11/05/2023 14:33	WG2164649
1,1-Dichloroethane	U		2.30	10.0	100	11/05/2023 14:33	WG2164649
1,2-Dichloroethane	U		1.90	10.0	100	11/05/2023 14:33	WG2164649
1,1-Dichloroethene	U		2.00	10.0	100	11/05/2023 14:33	WG2164649
cis-1,2-Dichloroethene	193		2.76	10.0	100	11/05/2023 14:33	WG2164649
trans-1,2-Dichloroethene	U		5.72	20.0	100	11/05/2023 14:33	WG2164649
1,2-Dichloropropane	U		5.08	20.0	100	11/05/2023 14:33	WG2164649
1,1-Dichloropropene	U		2.80	10.0	100	11/05/2023 14:33	WG2164649
1,3-Dichloropropane	U		7.00	20.0	100	11/05/2023 14:33	WG2164649
cis-1,3-Dichloropropene	U		2.71	10.0	100	11/05/2023 14:33	WG2164649
trans-1,3-Dichloropropene	U		6.12	20.0	100	11/05/2023 14:33	WG2164649
2,2-Dichloropropane	U		3.17	10.0	100	11/05/2023 14:33	WG2164649
Di-isopropyl ether	U		1.40	4.00	100	11/05/2023 14:33	WG2164649
Ethylbenzene	U		2.12	10.0	100	11/05/2023 14:33	WG2164649
Hexachloro-1,3-butadiene	U		50.8	100	100	11/05/2023 14:33	WG2164649
Isopropylbenzene	U		3.45	10.0	100	11/05/2023 14:33	WG2164649
p-Isopropyltoluene	U		9.32	20.0	100	11/05/2023 14:33	WG2164649
2-Butanone (MEK)	U		50.0	100	100	11/05/2023 14:33	WG2164649
Methylene Chloride	U		26.5	100	100	11/05/2023 14:33	WG2164649
4-Methyl-2-pentanone (MIBK)	U		40.0	100	100	11/05/2023 14:33	WG2164649
Methyl tert-butyl ether	U		1.18	4.00	100	11/05/2023 14:33	WG2164649
Naphthalene	U	C3	12.4	50.0	100	11/05/2023 14:33	WG2164649
n-Propylbenzene	U		4.72	20.0	100	11/05/2023 14:33	WG2164649
Styrene	U		10.9	50.0	100	11/05/2023 14:33	WG2164649
1,1,1,2-Tetrachloroethane	U		2.00	10.0	100	11/05/2023 14:33	WG2164649
1,1,2,2-Tetrachloroethane	U		1.56	10.0	100	11/05/2023 14:33	WG2164649
1,1,2-Trichlorotrifluoroethane	U		2.70	10.0	100	11/05/2023 14:33	WG2164649
Tetrachloroethene	U		2.80	10.0	100	11/05/2023 14:33	WG2164649
Toluene	U		5.00	20.0	100	11/05/2023 14:33	WG2164649
1,2,3-Trichlorobenzene	U		2.50	50.0	100	11/05/2023 14:33	WG2164649
1,2,4-Trichlorobenzene	U		19.3	50.0	100	11/05/2023 14:33	WG2164649
1,1,1-Trichloroethane	U		1.10	10.0	100	11/05/2023 14:33	WG2164649
1,1,2-Trichloroethane	U		3.53	10.0	100	11/05/2023 14:33	WG2164649
Trichloroethene	U		1.60	4.00	100	11/05/2023 14:33	WG2164649
Trichlorofluoromethane	U		2.00	10.0	100	11/05/2023 14:33	WG2164649
1,2,3-Trichloropropane	U		20.4	50.0	100	11/05/2023 14:33	WG2164649
1,2,4-Trimethylbenzene	U		4.64	20.0	100	11/05/2023 14:33	WG2164649
1,2,3-Trimethylbenzene	U		4.60	20.0	100	11/05/2023 14:33	WG2164649
1,3,5-Trimethylbenzene	U		4.32	20.0	100	11/05/2023 14:33	WG2164649
Vinyl chloride	1050		2.73	10.0	100	11/05/2023 14:33	WG2164649
Xylenes, Total	U		19.1	26.0	100	11/05/2023 14:33	WG2164649
Ethyl Ether	U		1.70	10.0	100	11/05/2023 14:33	WG2164649
Tetrahydrofuran	U		9.00	50.0	100	11/05/2023 14:33	WG2164649
Iodomethane	U		24.2	50.0	100	11/05/2023 14:33	WG2164649
Allyl chloride	U		58.0	100	100	11/05/2023 14:33	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	5.60	20.0	100	11/05/2023 14:33	WG2164649
(S) Toluene-d8	*99.1*			*75.0-131*		*11/05/2023 14:33*	WG2164649
(S) 4-Bromofluorobenzene	*87.4*			*67.0-138*		*11/05/2023 14:33*	WG2164649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 14:33*	WG2164649

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1340000		8450	20000	1	11/07/2023 12:03	WG2165877

Sample Narrative:

L1672953-05 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	167000		379	1000	1	11/03/2023 01:43	WG2163525
Nitrate	65.9	J	48.0	100	1	11/03/2023 01:43	WG2163525
Sulfate	27000		594	5000	1	11/03/2023 01:43	WG2163525

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	29700		102	1000	1	11/16/2023 05:11	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	26500		28.1	100	1	11/09/2023 11:32	WG2165351
Manganese	7810		0.704	5.00	1	11/09/2023 11:32	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	24500		2.87	6.78	10	11/07/2023 14:50	WG2166209
Ethane	159		0.296	1.29	1	11/07/2023 10:24	WG2165206
Ethene	109		0.422	1.27	1	11/07/2023 10:24	WG2165206

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		13.7	25.0	25	11/05/2023 14:52	WG2164649
Acrylonitrile	U		1.90	12.5	25	11/05/2023 14:52	WG2164649
Benzene	U		0.400	1.00	25	11/05/2023 14:52	WG2164649
Bromobenzene	U		1.05	12.5	25	11/05/2023 14:52	WG2164649
Bromodichloromethane	U		0.788	2.50	25	11/05/2023 14:52	WG2164649
Bromoform	U		5.98	25.0	25	11/05/2023 14:52	WG2164649
Bromomethane	U		3.70	12.5	25	11/05/2023 14:52	WG2164649
n-Butylbenzene	U		3.83	12.5	25	11/05/2023 14:52	WG2164649
sec-Butylbenzene	U		2.53	12.5	25	11/05/2023 14:52	WG2164649
tert-Butylbenzene	U		1.55	5.00	25	11/05/2023 14:52	WG2164649
Carbon tetrachloride	U		1.08	5.00	25	11/05/2023 14:52	WG2164649
Chlorobenzene	U		0.573	2.50	25	11/05/2023 14:52	WG2164649
Chlorodibromomethane	U		0.450	2.50	25	11/05/2023 14:52	WG2164649
Chloroethane	U		1.08	5.00	25	11/05/2023 14:52	WG2164649
Chloroform	U		0.415	2.50	25	11/05/2023 14:52	WG2164649
Chloromethane	U		1.39	12.5	25	11/05/2023 14:52	WG2164649
2-Chlorotoluene	U		0.920	2.50	25	11/05/2023 14:52	WG2164649
4-Chlorotoluene	U		1.13	5.00	25	11/05/2023 14:52	WG2164649
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	11/05/2023 14:52	WG2164649
1,2-Dibromoethane	U		0.525	2.50	25	11/05/2023 14:52	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		1.00	5.00	25	11/05/2023 14:52	WG2164649
1,2-Dichlorobenzene	U		1.45	5.00	25	11/05/2023 14:52	WG2164649
1,3-Dichlorobenzene	U		1.70	5.00	25	11/05/2023 14:52	WG2164649
1,4-Dichlorobenzene	U		1.97	5.00	25	11/05/2023 14:52	WG2164649
Dichlorodifluoromethane	U		0.818	2.50	25	11/05/2023 14:52	WG2164649
1,1-Dichloroethane	U		0.575	2.50	25	11/05/2023 14:52	WG2164649
1,2-Dichloroethane	U		0.475	2.50	25	11/05/2023 14:52	WG2164649
1,1-Dichloroethene	7.15		0.500	2.50	25	11/05/2023 14:52	WG2164649
cis-1,2-Dichloroethene	4400		6.90	25.0	250	11/10/2023 03:23	WG2168000
trans-1,2-Dichloroethene	12.9		1.43	5.00	25	11/05/2023 14:52	WG2164649
1,2-Dichloropropane	U		1.27	5.00	25	11/05/2023 14:52	WG2164649
1,1-Dichloropropene	U		0.700	2.50	25	11/05/2023 14:52	WG2164649
1,3-Dichloropropane	U		1.75	5.00	25	11/05/2023 14:52	WG2164649
cis-1,3-Dichloropropene	U		0.678	2.50	25	11/05/2023 14:52	WG2164649
trans-1,3-Dichloropropene	U		1.53	5.00	25	11/05/2023 14:52	WG2164649
2,2-Dichloropropane	U		0.793	2.50	25	11/05/2023 14:52	WG2164649
Di-isopropyl ether	U		0.350	1.00	25	11/05/2023 14:52	WG2164649
Ethylbenzene	U		0.530	2.50	25	11/05/2023 14:52	WG2164649
Hexachloro-1,3-butadiene	U		12.7	25.0	25	11/05/2023 14:52	WG2164649
Isopropylbenzene	U		0.863	2.50	25	11/05/2023 14:52	WG2164649
p-Isopropyltoluene	U		2.33	5.00	25	11/05/2023 14:52	WG2164649
2-Butanone (MEK)	U		12.5	25.0	25	11/05/2023 14:52	WG2164649
Methylene Chloride	U		6.63	25.0	25	11/05/2023 14:52	WG2164649
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0	25	11/05/2023 14:52	WG2164649
Methyl tert-butyl ether	U		0.295	1.00	25	11/05/2023 14:52	WG2164649
Naphthalene	U	C3	3.10	12.5	25	11/05/2023 14:52	WG2164649
n-Propylbenzene	U		1.18	5.00	25	11/05/2023 14:52	WG2164649
Styrene	U		2.73	12.5	25	11/05/2023 14:52	WG2164649
1,1,1,2-Tetrachloroethane	U		0.500	2.50	25	11/05/2023 14:52	WG2164649
1,1,2,2-Tetrachloroethane	U		0.390	2.50	25	11/05/2023 14:52	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50	25	11/05/2023 14:52	WG2164649
Tetrachloroethene	46.3		0.700	2.50	25	11/05/2023 14:52	WG2164649
Toluene	U		1.25	5.00	25	11/05/2023 14:52	WG2164649
1,2,3-Trichlorobenzene	U		0.625	12.5	25	11/05/2023 14:52	WG2164649
1,2,4-Trichlorobenzene	U		4.83	12.5	25	11/05/2023 14:52	WG2164649
1,1,1-Trichloroethane	U		0.275	2.50	25	11/05/2023 14:52	WG2164649
1,1,2-Trichloroethane	U		0.883	2.50	25	11/05/2023 14:52	WG2164649
Trichloroethene	116		0.400	1.00	25	11/05/2023 14:52	WG2164649
Trichlorofluoromethane	U		0.500	2.50	25	11/05/2023 14:52	WG2164649
1,2,3-Trichloropropane	U		5.10	12.5	25	11/05/2023 14:52	WG2164649
1,2,4-Trimethylbenzene	U		1.16	5.00	25	11/05/2023 14:52	WG2164649
1,2,3-Trimethylbenzene	U		1.15	5.00	25	11/05/2023 14:52	WG2164649
1,3,5-Trimethylbenzene	U		1.08	5.00	25	11/05/2023 14:52	WG2164649
Vinyl chloride	575		0.682	2.50	25	11/05/2023 14:52	WG2164649
Xylenes, Total	U		4.78	6.50	25	11/05/2023 14:52	WG2164649
Ethyl Ether	U		0.425	2.50	25	11/05/2023 14:52	WG2164649
Tetrahydrofuran	U		2.25	12.5	25	11/05/2023 14:52	WG2164649
Iodomethane	U		6.05	12.5	25	11/05/2023 14:52	WG2164649
Allyl chloride	U		14.5	25.0	25	11/05/2023 14:52	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	1.40	5.00	25	11/05/2023 14:52	WG2164649
(S) Toluene-d8	*101*			*75.0-131*		*11/05/2023 14:52*	WG2164649
(S) Toluene-d8	*94.9*			*75.0-131*		*11/10/2023 03:23*	WG2168000
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*11/05/2023 14:52*	WG2164649
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*11/10/2023 03:23*	WG2168000
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/05/2023 14:52*	WG2164649
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/10/2023 03:23*	WG2168000

Method Blank (MB)

(MB) R3996649-2 11/07/23 09:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1672068-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672068-01 11/07/23 10:02 • (DUP) R3996649-3 11/07/23 10:06

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	54100	56200	1	3.78		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1672131-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1672131-02 11/07/23 11:53 • (DUP) R3996649-4 11/07/23 11:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	1380000	1380000	1	0.105		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3996649-1 11/07/23 09:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	103000	103	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997209-1 11/02/23 09:10

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1672902-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672902-01 11/02/23 22:57 • (DUP) R3997209-3 11/03/23 03:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	75400	76300	1	1.23		15
Sulfate	53900	53900	1	0.0122		15

L1672968-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672968-01 11/02/23 18:01 • (DUP) R3997209-5 11/03/23 04:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	86000	85100	1	1.04		15
Nitrate	11700	11500	1	1.30		15
Sulfate	373000	373000	1	0.175	E	15

Laboratory Control Sample (LCS)

(LCS) R3997209-2 11/02/23 16:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39200	97.9	80.0-120	
Nitrate	8000	7480	93.5	80.0-120	
Sulfate	40000	39500	98.8	80.0-120	

L1672902-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1672902-01 11/02/23 22:57 • (MS) R3997209-4 11/03/23 03:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	75400	101000	63.6	1	80.0-120	J6
Sulfate	40000	53900	83300	73.6	1	80.0-120	J6

L1673043-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673043-01 11/03/23 02:35 • (MS) R3997209-6 11/03/23 04:56 • (MSD) R3997209-7 11/03/23 05:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	11300	49300	49900	95.0	96.5	1	80.0-120			1.23	15
Nitrate	8000	1820	9200	9950	92.3	102	1	80.0-120			7.86	15
Sulfate	40000	175000	184000	185000	20.3	23.4	1	80.0-120	V	V	0.677	15

Method Blank (MB)

(MB) R3997068-1 11/02/23 17:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1672944-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1672944-06 11/03/23 01:38 • (DUP) R3997068-3 11/03/23 05:54

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	34600	36000	1	3.79		15
Nitrate	105	102	1	3.19		15
Sulfate	3230	3600	1	10.8	J	15

L1672944-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1672944-11 11/03/23 01:51 • (DUP) R3997068-6 11/03/23 06:33

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	862000	849000	1	1.53	E	15
Nitrate	98.8	89.9	1	9.43	J	15
Sulfate	724	U	1	200	P1	15

Laboratory Control Sample (LCS)

(LCS) R3997068-2 11/02/23 17:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39200	98.0	80.0-120	
Nitrate	8000	7180	89.8	80.0-120	
Sulfate	40000	39000	97.4	80.0-120	

L1672944-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672944-06 11/03/23 01:38 • (MS) R3997068-4 11/03/23 06:07 • (MSD) R3997068-5 11/03/23 06:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	34600	68500	68500	84.5	84.7	1	80.0-120			0.0828	15
Nitrate	8000	105	7380	7430	91.0	91.6	1	80.0-120			0.687	15
Sulfate	40000	3230	41300	41400	95.2	95.4	1	80.0-120			0.251	15

L1672944-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672944-11 11/03/23 01:51 • (MS) R3997068-7 11/03/23 06:46 • (MSD) R3997068-8 11/03/23 06:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	862000	706000	713000	0.000	0.000	1	80.0-120	E V	E V	0.994	15
Nitrate	8000	98.8	7470	7560	92.1	93.2	1	80.0-120			1.18	15
Sulfate	40000	724	38100	38700	93.5	95.0	1	80.0-120			1.55	15

Method Blank (MB)

(MB) R4001182-2 11/16/23 01:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		102	1000

L1672912-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1672912-10 11/16/23 02:25 • (DUP) R4001182-5 11/16/23 02:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	226	130	1	53.8	J P1	20

L1672953-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1672953-05 11/16/23 05:11 • (DUP) R4001182-6 11/16/23 05:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	29700	29300	1	1.36		20

Laboratory Control Sample (LCS)

(LCS) R4001182-1 11/16/23 00:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23000	92.0	85.0-115	

L1672912-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672912-08 11/16/23 01:22 • (MS) R4001182-3 11/16/23 01:45 • (MSD) R4001182-4 11/16/23 02:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	370	23500	23500	92.4	92.5	1	85.0-115			0.0426	20

L1673043-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673043-01 11/16/23 08:10 • (MS) R4001182-7 11/16/23 08:34 • (MSD) R4001182-8 11/16/23 09:40

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	4230	28000	27400	95.2	92.8	1	85.0-115			2.16	20

Method Blank (MB)

(MB) R3997624-1 11/09/23 10:22

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3997624-2 11/09/23 10:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1120	112	80.0-120	
Manganese	50.0	55.0	110	80.0-120	

L1673043-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673043-01 11/09/23 10:28 • (MS) R3997624-4 11/09/23 10:35 • (MSD) R3997624-5 11/09/23 10:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	860	1860	1840	100	98.4	1	75.0-125			1.06	20
Manganese	50.0	440	467	469	53.3	57.7	1	75.0-125	V	V	0.463	20

Method Blank (MB)

(MB) R3996455-2 11/07/23 09:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673102-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673102-01 11/07/23 10:31 • (DUP) R3996455-3 11/07/23 10:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1673351-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1673351-05 11/07/23 11:20 • (DUP) R3996455-4 11/07/23 12:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3996455-1 11/07/23 09:18 • (LCSD) R3996455-5 11/07/23 12:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Ethane	129	113	112	87.6	86.8	85.0-115			0.889	20
Ethene	127	113	112	89.0	88.2	85.0-115			0.889	20

Method Blank (MB)

(MB) R3996599-2 11/07/23 14:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678

L1672476-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1672476-03 11/07/23 14:20 • (DUP) R3996599-3 11/07/23 15:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	22800	22600	10	0.881		20

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

(LCS) R3996599-1 11/07/23 14:12 • (LCSD) R3996599-4 11/07/23 15:12

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.7	61.4	95.4	90.6	85.0-115			5.23	20

Method Blank (MB)

(MB) R3997642-3 11/05/23 07:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3997642-3 11/05/23 07:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*98.6*			*75.0-131*
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*

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

(LCS) R3997642-1 11/05/23 05:29 • (LCSD) R3997642-2 11/05/23 05:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	39.7	35.1	159	140	10.0-160			12.3	31
Acrylonitrile	25.0	25.1	24.3	100	97.2	45.0-153			3.24	22
Benzene	5.00	5.26	5.30	105	106	70.0-123			0.758	20
Bromobenzene	5.00	5.09	5.15	102	103	73.0-121			1.17	20
Bromodichloromethane	5.00	5.45	5.25	109	105	73.0-121			3.74	20
Bromoform	5.00	4.73	4.83	94.6	96.6	64.0-132			2.09	20
Bromomethane	5.00	4.88	4.96	97.6	99.2	56.0-147			1.63	20
n-Butylbenzene	5.00	4.11	4.12	82.2	82.4	68.0-135			0.243	20
sec-Butylbenzene	5.00	4.31	4.11	86.2	82.2	74.0-130			4.75	20
tert-Butylbenzene	5.00	4.27	4.26	85.4	85.2	75.0-127			0.234	20
Carbon tetrachloride	5.00	5.74	5.53	115	111	66.0-128			3.73	20
Chlorobenzene	5.00	4.98	4.98	99.6	99.6	76.0-128			0.000	20
Chlorodibromomethane	5.00	4.95	4.97	99.0	99.4	74.0-127			0.403	20
Chloroethane	5.00	4.97	4.58	99.4	91.6	61.0-134			8.17	20
Chloroform	5.00	5.78	5.52	116	110	72.0-123			4.60	20
Chloromethane	5.00	4.52	4.10	90.4	82.0	51.0-138			9.74	20
2-Chlorotoluene	5.00	5.27	4.92	105	98.4	75.0-124			6.87	20
4-Chlorotoluene	5.00	4.80	4.78	96.0	95.6	75.0-124			0.418	20
1,2-Dibromo-3-Chloropropane	5.00	4.36	4.49	87.2	89.8	59.0-130			2.94	20
1,2-Dibromoethane	5.00	4.97	5.16	99.4	103	74.0-128			3.75	20
Dibromomethane	5.00	5.73	5.03	115	101	75.0-122			13.0	20
1,2-Dichlorobenzene	5.00	4.65	4.60	93.0	92.0	76.0-124			1.08	20
1,3-Dichlorobenzene	5.00	4.73	5.02	94.6	100	76.0-125			5.95	20
1,4-Dichlorobenzene	5.00	4.87	4.60	97.4	92.0	77.0-121			5.70	20
Dichlorodifluoromethane	5.00	4.65	4.70	93.0	94.0	43.0-156			1.07	20
1,1-Dichloroethane	5.00	4.82	4.70	96.4	94.0	70.0-127			2.52	20
1,2-Dichloroethane	5.00	4.89	4.91	97.8	98.2	65.0-131			0.408	20
1,1-Dichloroethene	5.00	4.71	4.37	94.2	87.4	65.0-131			7.49	20
cis-1,2-Dichloroethene	5.00	5.39	5.38	108	108	73.0-125			0.186	20
trans-1,2-Dichloroethene	5.00	5.60	5.60	112	112	71.0-125			0.000	20
1,2-Dichloropropane	5.00	4.68	4.76	93.6	95.2	74.0-125			1.69	20
1,1-Dichloropropene	5.00	5.18	4.93	104	98.6	73.0-125			4.95	20
1,3-Dichloropropane	5.00	5.06	5.02	101	100	80.0-125			0.794	20
cis-1,3-Dichloropropene	5.00	5.24	5.20	105	104	76.0-127			0.766	20
trans-1,3-Dichloropropene	5.00	5.00	5.01	100	100	73.0-127			0.200	20
2,2-Dichloropropane	5.00	4.52	4.19	90.4	83.8	59.0-135			7.58	20
Di-isopropyl ether	5.00	4.55	4.30	91.0	86.0	60.0-136			5.65	20
Ethylbenzene	5.00	4.79	4.71	95.8	94.2	74.0-126			1.68	20
Hexachloro-1,3-butadiene	5.00	4.80	4.98	96.0	99.6	57.0-150			3.68	20
Isopropylbenzene	5.00	4.31	4.26	86.2	85.2	72.0-127			1.17	20

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

(LCS) R3997642-1 11/05/23 05:29 • (LCSD) R3997642-2 11/05/23 05:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.28	4.10	85.6	82.0	72.0-133			4.30	20
2-Butanone (MEK)	25.0	23.3	21.6	93.2	86.4	30.0-160			7.57	24
Methylene Chloride	5.00	5.23	5.43	105	109	68.0-123			3.75	20
4-Methyl-2-pentanone (MIBK)	25.0	22.5	22.6	90.0	90.4	56.0-143			0.443	20
Methyl tert-butyl ether	5.00	5.59	5.12	112	102	66.0-132			8.78	20
Naphthalene	5.00	3.50	3.67	70.0	73.4	59.0-130			4.74	20
n-Propylbenzene	5.00	4.78	4.74	95.6	94.8	74.0-126			0.840	20
Styrene	5.00	4.06	4.10	81.2	82.0	72.0-127			0.980	20
1,1,1,2-Tetrachloroethane	5.00	4.62	4.79	92.4	95.8	74.0-129			3.61	20
1,1,2,2-Tetrachloroethane	5.00	4.81	4.76	96.2	95.2	68.0-128			1.04	20
1,1,2-Trichlorotrifluoroethane	5.00	4.85	4.53	97.0	90.6	61.0-139			6.82	20
Tetrachloroethene	5.00	5.31	5.34	106	107	70.0-136			0.563	20
Toluene	5.00	5.12	5.01	102	100	75.0-121			2.17	20
1,2,3-Trichlorobenzene	5.00	4.08	4.44	81.6	88.8	59.0-139			8.45	20
1,2,4-Trichlorobenzene	5.00	4.05	4.30	81.0	86.0	62.0-137			5.99	20
1,1,1-Trichloroethane	5.00	5.60	5.17	112	103	69.0-126			7.99	20
1,1,2-Trichloroethane	5.00	5.28	5.28	106	106	78.0-123			0.000	20
Trichloroethene	5.00	5.49	5.63	110	113	76.0-126			2.52	20
Trichlorofluoromethane	5.00	5.29	4.88	106	97.6	61.0-142			8.06	20
1,2,3-Trichloropropane	5.00	5.46	5.30	109	106	67.0-129			2.97	20
1,2,4-Trimethylbenzene	5.00	4.39	4.43	87.8	88.6	70.0-126			0.907	20
1,2,3-Trimethylbenzene	5.00	4.48	4.42	89.6	88.4	74.0-124			1.35	20
1,3,5-Trimethylbenzene	5.00	4.59	4.38	91.8	87.6	73.0-127			4.68	20
Vinyl chloride	5.00	4.31	3.90	86.2	78.0	63.0-134			9.99	20
Xylenes, Total	15.0	13.6	13.9	90.7	92.7	72.0-127			2.18	20
Ethyl Ether	5.00	5.13	4.56	103	91.2	64.0-137			11.8	20
Tetrahydrofuran	5.00	5.26	4.63	105	92.6	37.0-146			12.7	24
Iodomethane	25.0	28.8	28.1	115	112	74.0-134			2.46	20
Allyl chloride	25.0	27.7	26.5	111	106	70.0-131			4.43	20
Trans-1,4-Dichloro-2-butene	5.00	3.33	3.32	66.6	66.4	45.0-143			0.301	20
(S) Toluene-d8				*99.7*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*89.9*	*90.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*99.3*	*98.3*	*70.0-130*				

L1673600-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673600-02 11/05/23 13:35 • (MS) R3997642-4 11/05/23 15:11 • (MSD) R3997642-5 11/05/23 15:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	5.52	134	151	103	116	1	10.0-160			11.9	40
Acrylonitrile	125	U	109	106	87.2	84.8	1	10.0-160			2.79	40
Benzene	25.0	0.259	20.7	22.0	81.8	87.0	1	10.0-149			6.09	37
Bromobenzene	25.0	U	21.4	21.5	85.6	86.0	1	10.0-156			0.466	38
Bromodichloromethane	25.0	U	22.4	23.2	89.6	92.8	1	10.0-143			3.51	37
Bromoform	25.0	U	21.1	20.2	84.4	80.8	1	10.0-146			4.36	36
Bromomethane	25.0	U	19.1	22.1	76.4	88.4	1	10.0-149			14.6	38
n-Butylbenzene	25.0	U	18.0	18.7	72.0	74.8	1	10.0-160			3.81	40
sec-Butylbenzene	25.0	U	19.5	20.8	78.0	83.2	1	10.0-159			6.45	39
tert-Butylbenzene	25.0	U	18.6	20.3	74.4	81.2	1	10.0-156			8.74	39
Carbon tetrachloride	25.0	U	22.7	25.7	90.8	103	1	10.0-145			12.4	37
Chlorobenzene	25.0	U	19.2	20.3	76.8	81.2	1	10.0-152			5.57	39
Chlorodibromomethane	25.0	U	20.4	20.9	81.6	83.6	1	10.0-146			2.42	37
Chloroethane	25.0	U	17.0	21.6	68.0	86.4	1	10.0-146			23.8	40
Chloroform	25.0	U	22.6	23.9	90.4	95.6	1	10.0-146			5.59	37
Chloromethane	25.0	U	15.1	18.9	60.4	75.6	1	10.0-159			22.4	37
2-Chlorotoluene	25.0	U	20.5	21.8	82.0	87.2	1	10.0-159			6.15	38
4-Chlorotoluene	25.0	U	20.0	21.4	80.0	85.6	1	10.0-155			6.76	39
1,2-Dibromo-3-Chloropropane	25.0	U	20.8	20.4	83.2	81.6	1	10.0-151			1.94	39
1,2-Dibromoethane	25.0	U	20.1	20.6	80.4	82.4	1	10.0-148			2.46	34
Dibromomethane	25.0	U	22.8	22.8	91.2	91.2	1	10.0-147			0.000	35
1,2-Dichlorobenzene	25.0	U	19.4	20.0	77.6	80.0	1	10.0-155			3.05	37
1,3-Dichlorobenzene	25.0	U	20.0	21.1	80.0	84.4	1	10.0-153			5.35	38
1,4-Dichlorobenzene	25.0	U	19.7	20.4	78.8	81.6	1	10.0-151			3.49	38
Dichlorodifluoromethane	25.0	U	19.1	22.7	76.4	90.8	1	10.0-160			17.2	35
1,1-Dichloroethane	25.0	U	18.8	20.3	75.2	81.2	1	10.0-147			7.67	37
1,2-Dichloroethane	25.0	U	20.2	19.6	80.8	78.4	1	10.0-148			3.02	35
1,1-Dichloroethene	25.0	U	18.3	20.8	73.2	83.2	1	10.0-155			12.8	37
cis-1,2-Dichloroethene	25.0	U	21.1	22.2	84.4	88.8	1	10.0-149			5.08	37
trans-1,2-Dichloroethene	25.0	U	21.3	22.7	85.2	90.8	1	10.0-150			6.36	37
1,2-Dichloropropane	25.0	U	19.1	19.7	76.4	78.8	1	10.0-148			3.09	37
1,1-Dichloropropene	25.0	U	19.9	22.5	79.6	90.0	1	10.0-153			12.3	35
1,3-Dichloropropane	25.0	U	20.2	20.7	80.8	82.8	1	10.0-154			2.44	35
cis-1,3-Dichloropropene	25.0	U	20.4	21.4	81.6	85.6	1	10.0-151			4.78	37
trans-1,3-Dichloropropene	25.0	U	20.2	20.5	80.8	82.0	1	10.0-148			1.47	37
2,2-Dichloropropane	25.0	0.0370	16.9	18.3	67.5	73.1	1	10.0-138			7.95	36
Di-isopropyl ether	25.0	U	18.9	19.4	75.6	77.6	1	10.0-147			2.61	36
Ethylbenzene	25.0	U	18.9	20.0	75.6	80.0	1	10.0-160			5.66	38
Hexachloro-1,3-butadiene	25.0	U	20.8	23.0	83.2	92.0	1	10.0-160			10.0	40
Isopropylbenzene	25.0	U	18.5	19.9	74.0	79.6	1	10.0-155			7.29	38

L1673600-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673600-02 11/05/23 13:35 • (MS) R3997642-4 11/05/23 15:11 • (MSD) R3997642-5 11/05/23 15:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	25.0	U	19.1	19.9	76.4	79.6	1	10.0-160			4.10	40
2-Butanone (MEK)	125	U	84.1	115	67.3	92.0	1	10.0-160			31.0	40
Methylene Chloride	25.0	U	21.5	21.4	86.0	85.6	1	10.0-141			0.466	37
4-Methyl-2-pentanone (MIBK)	125	U	97.6	95.3	78.1	76.2	1	10.0-160			2.38	35
Methyl tert-butyl ether	25.0	U	24.5	24.0	98.0	96.0	1	11.0-147			2.06	35
Naphthalene	25.0	U	17.7	19.1	70.8	76.4	1	10.0-160			7.61	36
n-Propylbenzene	25.0	U	20.2	21.9	80.8	87.6	1	10.0-158			8.08	38
Styrene	25.0	U	16.3	17.4	65.2	69.6	1	10.0-160			6.53	40
1,1,1,2-Tetrachloroethane	25.0	U	19.3	20.7	77.2	82.8	1	10.0-149			7.00	39
1,1,2,2-Tetrachloroethane	25.0	U	22.7	22.6	90.8	90.4	1	10.0-160			0.442	35
1,1,2-Trichlorotrifluoroethane	25.0	U	19.9	23.1	79.6	92.4	1	10.0-160			14.9	36
Tetrachloroethene	25.0	U	19.2	21.5	76.8	86.0	1	10.0-156			11.3	39
Toluene	25.0	U	18.4	20.5	73.6	82.0	1	10.0-156			10.8	38
1,2,3-Trichlorobenzene	25.0	U	18.4	19.9	73.6	79.6	1	10.0-160			7.83	40
1,2,4-Trichlorobenzene	25.0	U	17.3	18.7	69.2	74.8	1	10.0-160			7.78	40
1,1,1-Trichloroethane	25.0	U	21.3	24.2	85.2	96.8	1	10.0-144			12.7	35
1,1,2-Trichloroethane	25.0	U	20.7	21.3	82.8	85.2	1	10.0-160			2.86	35
Trichloroethene	25.0	U	19.9	22.3	79.6	89.2	1	10.0-156			11.4	38
Trichlorofluoromethane	25.0	U	17.7	27.9	70.8	112	1	10.0-160		J3	44.7	40
1,2,3-Trichloropropane	25.0	U	22.7	22.3	90.8	89.2	1	10.0-156			1.78	35
1,2,4-Trimethylbenzene	25.0	U	19.8	20.8	79.2	83.2	1	10.0-160			4.93	36
1,2,3-Trimethylbenzene	25.0	U	19.5	20.2	78.0	80.8	1	10.0-160			3.53	36
1,3,5-Trimethylbenzene	25.0	U	19.4	20.6	77.6	82.4	1	10.0-160			6.00	38
Vinyl chloride	25.0	U	15.0	18.3	60.0	73.2	1	10.0-160			19.8	37
Xylenes, Total	75.0	U	53.1	59.1	70.8	78.8	1	10.0-160			10.7	38
Ethyl Ether	25.0	U	20.2	20.2	80.8	80.8	1	10.0-160			0.000	31
Tetrahydrofuran	25.0	0.177	23.0	23.1	91.3	91.7	1	10.0-158			0.434	33
Iodomethane	125	U	111	119	88.8	95.2	1	10.0-160			6.96	38
Allyl chloride	125	U	106	114	84.8	91.2	1	10.0-160			7.27	30
Trans-1,4-Dichloro-2-butene	25.0	U	15.8	15.8	63.2	63.2	1	10.0-152			0.000	36
(S) Toluene-d8					*94.1*	*94.4*		*75.0-131*				
(S) 4-Bromofluorobenzene					*89.3*	*88.2*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*107*	*105*		*70.0-130*				

Method Blank (MB)

(MB) R3998421-3 11/09/23 18:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0276	0.100
(S) Toluene-d8	*94.7*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

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

(LCS) R3998421-1 11/09/23 16:50 • (LCSD) R3998421-2 11/09/23 17:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	5.00	5.30	5.40	106	108	73.0-125			1.87	20
(S) Toluene-d8				*94.5*	*94.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.3*	*94.8*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*109*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to:
~~Bill Haldeman~~ Erik Hedberg

Email To:
jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description:
American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project #
443022-1413001.10.70

Lab Project #
PESENVSWA-ALP

Collected by (print):
Osmin Munoz

Site/Facility ID #

P.O. # ei.701
443018-1413001.~~05.601~~

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed

No. of Cntrs

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-179-110123	Grab	GW	—	11/1/23	959	10	X	X	X	X	X	X	X		-01
MW-177-110123	↓	GW	↓	↓	1116	↓	X	X	X	X	X	X	X		-02
MW-167-110123		GW			1305		X	X	X	X	X	X	X		-03
MW-183-110123		GW			1308		X	X	X	X	X	X	X		-04
MW-180-110123	↓	GW	↓	↓	1058	↓	X	X	X	X	X	X	X		-05
		GW													
		GW													
		GW													
		GW													
		GW													

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1172953

J034

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 cam
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 # 6727 1895 1425

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: (Yes) / No (HCL) MeoH TBR	If preservation required by Login: Date/Time
	11/1/23	1700		1	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received: DPA8 3.4+0=3.4	
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-2-23 Time: 0900	Hold: Condition: NCF / OK

ANALYTICAL REPORT

November 21, 2023

PES Environmental, Inc.- WA

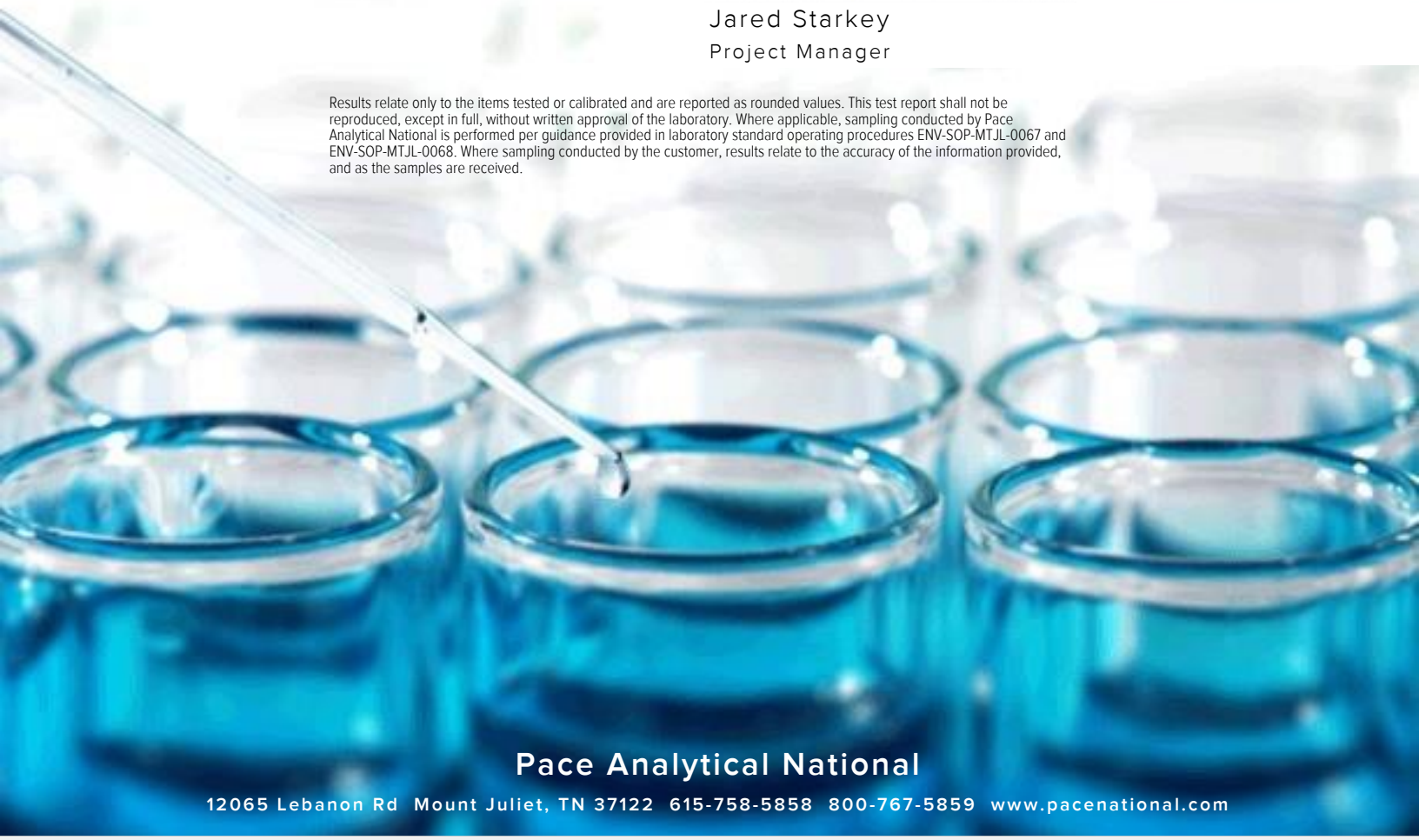
Sample Delivery Group:	L1673440
Samples Received:	11/03/2023
Project Number:	
Description:	American Linen - 443022-1413001.10.701

Report To:

Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

MW-170-110223 L1673440-01 GW

Collected by: Osmin Monroy
Collected date/time: 11/02/23 11:42
Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166450	1	11/08/23 15:57	11/08/23 15:57	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/03/23 21:57	11/03/23 21:57	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 02:34	11/21/23 02:34	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 18:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 09:34	11/09/23 09:34	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 15:21	11/09/23 15:21	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 12:04	11/09/23 12:04	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168846	200	11/11/23 06:31	11/11/23 06:31	JAH	Mt. Juliet, TN

MW-172-110223 L1673440-02 GW

Collected by: Osmin Monroy
Collected date/time: 11/02/23 12:24
Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166450	1	11/08/23 16:01	11/08/23 16:01	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	1	11/04/23 13:31	11/04/23 13:31	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/03/23 22:22	11/03/23 22:22	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 02:55	11/21/23 02:55	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:01	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 12:24	11/09/23 12:24	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 15:27	11/09/23 15:27	CCM	Mt. Juliet, TN

MW-176-110223 L1673440-03 GW

Collected by: Osmin Monroy
Collected date/time: 11/02/23 15:16
Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166450	1	11/08/23 16:22	11/08/23 16:22	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	20	11/04/23 13:31	11/04/23 13:31	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164210	1	11/04/23 04:07	11/04/23 04:07	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 03:18	11/21/23 03:18	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:05	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 09:58	11/09/23 09:58	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 15:33	11/09/23 15:33	CCM	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.

Jared Starkey
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	611000		8450	20000	1	11/08/2023 15:57	WG2166450

Sample Narrative:

L1673440-01 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	175000		379	1000	1	11/03/2023 21:57	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 21:57	WG2164204
Sulfate	4540	J	594	5000	1	11/03/2023 21:57	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15500		102	1000	1	11/21/2023 02:34	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3170		28.1	100	1	11/10/2023 18:48	WG2166496
Manganese	1390		0.704	5.00	1	11/10/2023 18:48	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27500		2.87	6.78	10	11/09/2023 15:21	WG2168088
Ethane	39.0		0.296	1.29	1	11/09/2023 09:34	WG2165856
Ethene	870		0.422	1.27	1	11/09/2023 09:34	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 12:04	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 12:04	WG2167871
Benzene	0.186		0.0160	0.0400	1	11/09/2023 12:04	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 12:04	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 12:04	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 12:04	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 12:04	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 12:04	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 12:04	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 12:04	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 12:04	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 12:04	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 12:04	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 12:04	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 12:04	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 12:04	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 12:04	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 12:04	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 12:04	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 12:04	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 12:04	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 12:04	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 12:04	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 12:04	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 12:04	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 12:04	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 12:04	WG2167871
1,1-Dichloroethene	22.8		4.00	20.0	200	11/11/2023 06:31	WG2168846
cis-1,2-Dichloroethene	5760		5.52	20.0	200	11/11/2023 06:31	WG2168846
trans-1,2-Dichloroethene	179		11.4	40.0	200	11/11/2023 06:31	WG2168846
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 12:04	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 12:04	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 12:04	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 12:04	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 12:04	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 12:04	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 12:04	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 12:04	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 12:04	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 12:04	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 12:04	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 12:04	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 12:04	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 12:04	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 12:04	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 12:04	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 12:04	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 12:04	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 12:04	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 12:04	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 12:04	WG2167871
Tetrachloroethene	81.8		0.0280	0.100	1	11/09/2023 12:04	WG2167871
Toluene	0.134	J	0.0500	0.200	1	11/09/2023 12:04	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 12:04	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 12:04	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 12:04	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 12:04	WG2167871
Trichloroethene	40.5		0.0160	0.0400	1	11/09/2023 12:04	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 12:04	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 12:04	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 12:04	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 12:04	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 12:04	WG2167871
Vinyl chloride	11700		5.46	20.0	200	11/11/2023 06:31	WG2168846
Xylenes, Total	U		0.191	0.260	1	11/09/2023 12:04	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 12:04	WG2167871
Tetrahydrofuran	0.496	J	0.0900	0.500	1	11/09/2023 12:04	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 12:04	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 12:04	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 12:04	WG2167871
(S) Toluene-d8	*98.8*			*75.0-131*		*11/09/2023 12:04*	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/11/2023 06:31*	WG2168846
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/09/2023 12:04*	WG2167871
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*11/11/2023 06:31*	WG2168846
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*11/09/2023 12:04*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/11/2023 06:31*	WG2168846

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	407000		8450	20000	1	11/08/2023 16:01	WG2166450

Sample Narrative:

L1673440-02 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	296	T8	15.0	50.0	1	11/04/2023 13:31	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26900		379	1000	1	11/03/2023 22:22	WG2164204
Nitrate	59.4	B J	48.0	100	1	11/03/2023 22:22	WG2164204
Sulfate	28200		594	5000	1	11/03/2023 22:22	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12800		102	1000	1	11/21/2023 02:55	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1140		28.1	100	1	11/10/2023 19:01	WG2166496
Manganese	4620		0.704	5.00	1	11/10/2023 19:01	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8800		2.87	6.78	10	11/09/2023 15:27	WG2168088
Ethane	17.9		0.296	1.29	1	11/09/2023 12:24	WG2165856
Ethene	0.860	J	0.422	1.27	1	11/09/2023 12:24	WG2165856

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	919000		8450	20000	1	11/08/2023 16:22	WG2166450

Sample Narrative:

L1673440-03 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	11400	T8	300	1000	20	11/04/2023 13:31	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	76600		379	1000	1	11/04/2023 04:07	WG2164210
Nitrate	51.4	B J P1	48.0	100	1	11/04/2023 04:07	WG2164210
Sulfate	657	J	594	5000	1	11/04/2023 04:07	WG2164210

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	17600		102	1000	1	11/21/2023 03:18	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	14200		28.1	100	1	11/10/2023 19:05	WG2166496
Manganese	2620		0.704	5.00	1	11/10/2023 19:05	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	32900		2.87	6.78	10	11/09/2023 15:33	WG2168088
Ethane	489		0.296	1.29	1	11/09/2023 09:58	WG2165856
Ethene	6.67		0.422	1.27	1	11/09/2023 09:58	WG2165856

Method Blank (MB)

(MB) R3997521-2 11/08/23 14:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673368-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673368-01 11/08/23 14:48 • (DUP) R3997521-3 11/08/23 14:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	752000	754000	1	0.235		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673384-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1673384-02 11/08/23 16:16 • (DUP) R3997521-4 11/08/23 16:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	100000	100000	1	0.0870		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997521-1 11/08/23 14:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	104000	104	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3995436-1 11/04/23 13:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ferrous Iron	U		15.0	50.0

L1673473-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673473-03 11/04/23 13:33 • (DUP) R3995436-5 11/04/23 13:33

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ferrous Iron	2830	2720	1	4.00		20

Laboratory Control Sample (LCS)

(LCS) R3995436-2 11/04/23 13:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ferrous Iron	1000	999	99.9	85.0-115	

L1673440-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-03 11/04/23 13:31 • (MS) R3995436-3 11/04/23 13:32 • (MSD) R3995436-4 11/04/23 13:32

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ferrous Iron	20000	11400	30700	30500	96.5	95.4	20	80.0-120			0.660	20

Method Blank (MB)

(MB) R3997288-1 11/03/23 19:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	610	J	379	1000
Nitrate	49.7	J	48.0	100
Sulfate	U		594	5000

L1673438-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673438-01 11/03/23 20:28 • (DUP) R3997288-3 11/03/23 20:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	11400	11500	1	0.414		15
Nitrate	188	178	1	5.42		15
Sulfate	7000	6960	1	0.538		15

L1673464-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673464-01 11/03/23 23:52 • (DUP) R3997288-6 11/04/23 00:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2790	2680	1	4.00		15
Nitrate	972	973	1	0.134		15
Sulfate	27700	27600	1	0.371		15

Laboratory Control Sample (LCS)

(LCS) R3997288-2 11/03/23 19:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40900	102	80.0-120	
Nitrate	8000	7560	94.5	80.0-120	
Sulfate	40000	39100	97.7	80.0-120	

L1673438-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673438-01 11/03/23 20:28 • (MS) R3997288-4 11/03/23 20:53 • (MSD) R3997288-5 11/03/23 21:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	11400	50400	48600	97.4	92.9	1	80.0-120			3.67	15
Nitrate	8000	188	7990	7860	97.6	96.0	1	80.0-120			1.64	15
Sulfate	40000	7000	46200	44800	98.1	94.6	1	80.0-120			3.08	15

L1673464-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1673464-01 11/03/23 23:52 • (MS) R3997288-7 11/04/23 00:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	2790	43800	103	1	80.0-120	
Nitrate	8000	972	8640	95.8	1	80.0-120	
Sulfate	40000	27700	62200	86.2	1	80.0-120	

Method Blank (MB)

(MB) R3997293-1 11/04/23 02:50

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	49.9	J	48.0	100
Sulfate	U		594	5000

L1673440-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-03 11/04/23 04:07 • (DUP) R3997293-5 11/04/23 04:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	76600	77800	1	1.65		15
Nitrate	51.4	U	1	200	P1	15
Sulfate	657	638	1	2.84	J	15

Laboratory Control Sample (LCS)

(LCS) R3997293-2 11/04/23 03:03

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39800	99.6	80.0-120	
Nitrate	8000	7590	94.9	80.0-120	
Sulfate	40000	39000	97.6	80.0-120	

L1673402-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673402-14 11/04/23 03:16 • (MS) R3997293-3 11/04/23 03:28 • (MSD) R3997293-4 11/04/23 03:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	131000	146000	145000	35.3	34.5	1	80.0-120	J6	J6	0.200	15
Nitrate	8000	U	7800	7910	97.5	98.9	1	80.0-120			1.42	15
Sulfate	40000	102000	122000	122000	50.6	50.7	1	80.0-120	J6	J6	0.0259	15

Method Blank (MB)

(MB) R4002870-2 11/21/23 01:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	141	J	102	1000

L1673438-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673438-08 11/21/23 01:48 • (DUP) R4002870-3 11/21/23 02:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	6500	6570	1	1.15		20

L1673459-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673459-01 11/21/23 06:52 • (DUP) R4002870-6 11/21/23 07:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2050	2210	1	7.52		20

Laboratory Control Sample (LCS)

(LCS) R4002870-1 11/21/23 01:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23600	94.2	85.0-115	

L1673441-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673441-02 11/21/23 04:04 • (MS) R4002870-4 11/21/23 04:27 • (MSD) R4002870-5 11/21/23 04:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	14600	38700	38800	96.1	96.6	1	85.0-115			0.310	20

L1673473-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673473-02 11/21/23 07:56 • (MS) R4002870-7 11/21/23 08:18 • (MSD) R4002870-8 11/21/23 08:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	11700	35200	35700	94.2	96.2	1	85.0-115			1.41	20

Method Blank (MB)

(MB) R3998485-1 11/10/23 18:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3998485-2 11/10/23 18:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1150	115	80.0-120	
Manganese	50.0	55.7	111	80.0-120	

L1673440-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-01 11/10/23 18:48 • (MS) R3998485-4 11/10/23 18:55 • (MSD) R3998485-5 11/10/23 18:58

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	3170	4270	4330	109	115	1	75.0-125			1.43	20
Manganese	50.0	1390	1390	1480	7.51	181	1	75.0-125	V	V	6.05	20

Method Blank (MB)

(MB) R3997673-2 11/09/23 09:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-01 11/09/23 09:52 • (DUP) R3997673-3 11/09/23 11:48

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethane	6.25	6.19	1	0.965		20
Ethene	U	U	1	0.000		20

L1673511-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-04 11/09/23 12:42 • (DUP) R3997673-4 11/09/23 13:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3997673-1 11/09/23 09:12 • (LCSD) R3997673-5 11/09/23 13:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethane	129	110	112	85.3	86.8	85.0-115			1.80	20
Ethene	127	111	112	87.4	88.2	85.0-115			0.897	20

Method Blank (MB)

(MB) R3997931-2 11/09/23 15:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1673440-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-01 11/09/23 15:21 • (DUP) R3997931-3 11/09/23 16:45

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	27500	26900	10	2.21		20

L1673511-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-08 11/09/23 17:15 • (DUP) R3997931-4 11/09/23 17:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	7520	7510	10	0.133		20

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

(LCS) R3997931-1 11/09/23 15:08 • (LCSD) R3997931-5 11/09/23 17:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.0	60.9	94.4	89.8	85.0-115			4.96	20

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	36.3	145	10.0-160	
Acrylonitrile	25.0	30.0	120	45.0-153	
Benzene	5.00	5.83	117	70.0-123	
Bromobenzene	5.00	5.61	112	73.0-121	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromodichloromethane	5.00	5.37	107	73.0-121	
Bromoform	5.00	5.37	107	64.0-132	
Bromomethane	5.00	4.47	89.4	56.0-147	
n-Butylbenzene	5.00	4.49	89.8	68.0-135	
sec-Butylbenzene	5.00	6.03	121	74.0-130	
tert-Butylbenzene	5.00	5.48	110	75.0-127	
Carbon tetrachloride	5.00	5.36	107	66.0-128	
Chlorobenzene	5.00	5.61	112	76.0-128	
Chlorodibromomethane	5.00	5.73	115	74.0-127	
Chloroethane	5.00	6.04	121	61.0-134	
Chloroform	5.00	5.62	112	72.0-123	
Chloromethane	5.00	5.10	102	51.0-138	
2-Chlorotoluene	5.00	5.11	102	75.0-124	
4-Chlorotoluene	5.00	5.76	115	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	5.26	105	59.0-130	
1,2-Dibromoethane	5.00	5.56	111	74.0-128	
Dibromomethane	5.00	5.20	104	75.0-122	
1,2-Dichlorobenzene	5.00	5.54	111	76.0-124	
1,3-Dichlorobenzene	5.00	5.47	109	76.0-125	
1,4-Dichlorobenzene	5.00	5.34	107	77.0-121	
Dichlorodifluoromethane	5.00	5.02	100	43.0-156	
1,1-Dichloroethane	5.00	5.55	111	70.0-127	
1,2-Dichloroethane	5.00	5.14	103	65.0-131	
1,2-Dichloropropane	5.00	5.74	115	74.0-125	
1,1-Dichloropropene	5.00	5.67	113	73.0-125	
1,3-Dichloropropane	5.00	5.67	113	80.0-125	
cis-1,3-Dichloropropene	5.00	5.77	115	76.0-127	
trans-1,3-Dichloropropene	5.00	5.45	109	73.0-127	
2,2-Dichloropropane	5.00	6.47	129	59.0-135	
Di-isopropyl ether	5.00	5.79	116	60.0-136	
Ethylbenzene	5.00	5.78	116	74.0-126	
Hexachloro-1,3-butadiene	5.00	6.51	130	57.0-150	
Isopropylbenzene	5.00	5.50	110	72.0-127	
p-Isopropyltoluene	5.00	5.15	103	72.0-133	
2-Butanone (MEK)	25.0	33.4	134	30.0-160	
Methylene Chloride	5.00	5.50	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	30.0	120	56.0-143	
Methyl tert-butyl ether	5.00	5.73	115	66.0-132	
Naphthalene	5.00	4.99	99.8	59.0-130	
n-Propylbenzene	5.00	5.48	110	74.0-126	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Styrene	5.00	5.50	110	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.50	110	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.25	105	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	5.68	114	61.0-139	
Tetrachloroethene	5.00	5.85	117	70.0-136	
Toluene	5.00	5.76	115	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.72	94.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.96	99.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.98	120	69.0-126	
1,1,2-Trichloroethane	5.00	5.48	110	78.0-123	
Trichloroethene	5.00	5.68	114	76.0-126	
Trichlorofluoromethane	5.00	4.99	99.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.10	102	67.0-129	
1,2,4-Trimethylbenzene	5.00	5.71	114	70.0-126	
1,2,3-Trimethylbenzene	5.00	5.42	108	74.0-124	
1,3,5-Trimethylbenzene	5.00	5.95	119	73.0-127	
Xylenes, Total	15.0	16.8	112	72.0-127	
Ethyl Ether	5.00	5.72	114	64.0-137	
Tetrahydrofuran	5.00	4.98	99.6	37.0-146	
Iodomethane	25.0	27.3	109	74.0-134	
Allyl chloride	25.0	29.0	116	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	5.93	119	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

Method Blank (MB)

(MB) R3998697-3 11/10/23 23:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
Vinyl chloride	U		0.0273	0.100
(S) Toluene-d8	*99.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*

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

(LCS) R3998697-1 11/10/23 21:40 • (LCSD) R3998697-2 11/10/23 22:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	5.00	5.38	5.18	108	104	65.0-131			3.79	20
cis-1,2-Dichloroethene	5.00	5.28	5.27	106	105	73.0-125			0.190	20
trans-1,2-Dichloroethene	5.00	5.23	5.06	105	101	71.0-125			3.30	20
Vinyl chloride	5.00	5.40	5.05	108	101	63.0-134			6.70	20
(S) Toluene-d8				*102*	*99.1*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.0*	*95.0*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: **American Linen**

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project # **443022-1413001.10.70**

Lab Project # **PESENVSWA-ALP**

Collected by (print): Asmin Monray

Site/Facility ID #

P.O. # ~~01.701~~ 443018-1413001.~~05.631~~ 10.701

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-170-110223	Grab	GW	—	11/2/23	1142	10	X	X		X	X	X	X		-01
MW-172-110223	↓	GW	—	↓	1224	10	X	X		X	X	X	X		-02
MW-176-110223	↓	GW	—	↓	1516	10	X	X		X	X	X	X		-03
		GW													
		GW													
		GW													
		GW													
		GW													
		GW													
		GW													

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1673440

E216

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1033818**
PM: **546 - Jared Starkey**
PB: 10/26/23 CWM
Shipped Via:

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

Remarks: Tier 2 lab QA/QC (batch QC ok)

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6642 7431 7387

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	11/2/23	1700		—	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 2.6°C	Bottles Received: 30
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-3-23	Time: 0900

If pres ime

PH-10BDH4321 TRC-2362362
CR6-20221V

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

November 21, 2023

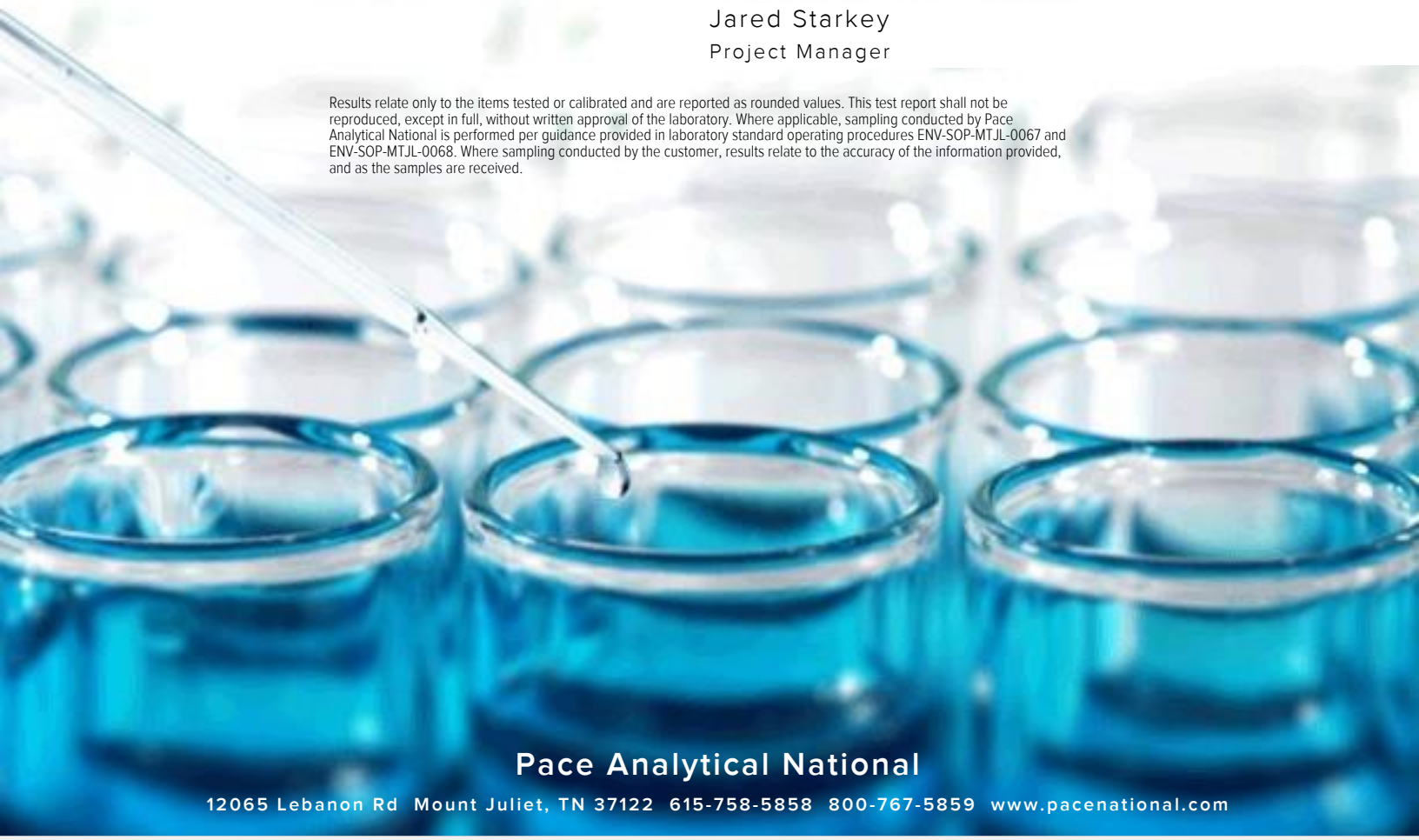
PES Environmental, Inc.- WA

Sample Delivery Group:	L1673441
Samples Received:	11/03/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-182-110223 L1673441-01 GW

Collected by	Collected date/time	Received date/time
	11/02/23 09:08	11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166450	1	11/08/23 16:26	11/08/23 16:26	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/03/23 22:35	11/03/23 22:35	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	10	11/03/23 22:48	11/03/23 22:48	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 03:42	11/21/23 03:42	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:08	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 10:06	11/09/23 10:06	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 15:41	11/09/23 15:41	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	10	11/09/23 16:23	11/09/23 16:23	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168846	1000	11/11/23 06:51	11/11/23 06:51	JAH	Mt. Juliet, TN

MW-184-110223 L1673441-02 GW

Collected by	Collected date/time	Received date/time
	11/02/23 11:34	11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166450	1	11/08/23 16:30	11/08/23 16:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/03/23 23:01	11/03/23 23:01	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 04:04	11/21/23 04:04	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:11	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 10:14	11/09/23 10:14	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	1	11/05/23 12:00	11/05/23 12:00	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168000	20	11/10/23 03:42	11/10/23 03:42	AV	Mt. Juliet, TN

MW-185-110223 L1673441-03 GW

Collected by	Collected date/time	Received date/time
	11/02/23 13:48	11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166111	1	11/08/23 14:10	11/08/23 14:10	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/03/23 23:13	11/03/23 23:13	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 05:52	11/21/23 05:52	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:21	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 10:45	11/09/23 10:45	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 15:45	11/09/23 15:45	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	1	11/05/23 12:19	11/05/23 12:19	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168000	1	11/10/23 02:06	11/10/23 02:06	AV	Mt. Juliet, TN

MW-186-110223 L1673441-04 GW

Collected by	Collected date/time	Received date/time
	11/02/23 13:07	11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 09:29	11/09/23 09:29	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/03/23 23:26	11/03/23 23:26	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 06:13	11/21/23 06:13	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:24	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 10:53	11/09/23 10:53	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 15:53	11/09/23 15:53	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	1	11/05/23 12:38	11/05/23 12:38	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168000	1	11/10/23 02:26	11/10/23 02:26	AV	Mt. Juliet, TN

SAMPLE SUMMARY

MW-187-110223 L1673441-05 GW

Collected by	Collected date/time	Received date/time
	11/02/23 14:43	11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 09:35	11/09/23 09:35	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164210	1	11/04/23 04:32	11/04/23 04:32	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 06:33	11/21/23 06:33	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:27	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 11:00	11/09/23 11:00	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 16:01	11/09/23 16:01	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2164649	1	11/05/23 12:57	11/05/23 12:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168000	1	11/10/23 02:44	11/10/23 02:44	AV	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.

Jared Starkey
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1673441-01	MW-182-110223	8260D

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	692000		8450	20000	1	11/08/2023 16:26	WG2166450

Sample Narrative:

L1673441-01 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	412000		3790	10000	10	11/03/2023 22:48	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 22:35	WG2164204
Sulfate	1010	J	594	5000	1	11/03/2023 22:35	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	33000		102	1000	1	11/21/2023 03:42	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	22700		28.1	100	1	11/10/2023 19:08	WG2166496
Manganese	3130		0.704	5.00	1	11/10/2023 19:08	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	30900		2.87	6.78	10	11/09/2023 15:41	WG2168088
Ethane	293		0.296	1.29	1	11/09/2023 10:06	WG2165856
Ethene	3530		0.422	1.27	1	11/09/2023 10:06	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	11/09/2023 16:23	WG2167871
Acrylonitrile	U		0.760	5.00	10	11/09/2023 16:23	WG2167871
Benzene	U		0.160	0.400	10	11/09/2023 16:23	WG2167871
Bromobenzene	U		0.420	5.00	10	11/09/2023 16:23	WG2167871
Bromodichloromethane	U		0.315	1.00	10	11/09/2023 16:23	WG2167871
Bromoform	U		2.39	10.0	10	11/09/2023 16:23	WG2167871
Bromomethane	U		1.48	5.00	10	11/09/2023 16:23	WG2167871
n-Butylbenzene	U		1.53	5.00	10	11/09/2023 16:23	WG2167871
sec-Butylbenzene	U		1.01	5.00	10	11/09/2023 16:23	WG2167871
tert-Butylbenzene	U		0.620	2.00	10	11/09/2023 16:23	WG2167871
Carbon tetrachloride	U		0.432	2.00	10	11/09/2023 16:23	WG2167871
Chlorobenzene	U		0.229	1.00	10	11/09/2023 16:23	WG2167871
Chlorodibromomethane	U		0.180	1.00	10	11/09/2023 16:23	WG2167871
Chloroethane	U		0.432	2.00	10	11/09/2023 16:23	WG2167871
Chloroform	U		0.166	1.00	10	11/09/2023 16:23	WG2167871
Chloromethane	U		0.556	5.00	10	11/09/2023 16:23	WG2167871
2-Chlorotoluene	U		0.368	1.00	10	11/09/2023 16:23	WG2167871
4-Chlorotoluene	U		0.452	2.00	10	11/09/2023 16:23	WG2167871
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/09/2023 16:23	WG2167871
1,2-Dibromoethane	U		0.210	1.00	10	11/09/2023 16:23	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.400	2.00	10	11/09/2023 16:23	WG2167871
1,2-Dichlorobenzene	U		0.580	2.00	10	11/09/2023 16:23	WG2167871
1,3-Dichlorobenzene	U		0.680	2.00	10	11/09/2023 16:23	WG2167871
1,4-Dichlorobenzene	U		0.788	2.00	10	11/09/2023 16:23	WG2167871
Dichlorodifluoromethane	U		0.327	1.00	10	11/09/2023 16:23	WG2167871
1,1-Dichloroethane	U		0.230	1.00	10	11/09/2023 16:23	WG2167871
1,2-Dichloroethane	U		0.190	1.00	10	11/09/2023 16:23	WG2167871
1,1-Dichloroethene	29.0	J	20.0	100	1000	11/11/2023 06:51	WG2168846
cis-1,2-Dichloroethene	32100		27.6	100	1000	11/11/2023 06:51	WG2168846
trans-1,2-Dichloroethene	48.7		0.572	2.00	10	11/09/2023 16:23	WG2167871
1,2-Dichloropropane	U		0.508	2.00	10	11/09/2023 16:23	WG2167871
1,1-Dichloropropene	U		0.280	1.00	10	11/09/2023 16:23	WG2167871
1,3-Dichloropropane	U		0.700	2.00	10	11/09/2023 16:23	WG2167871
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/09/2023 16:23	WG2167871
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/09/2023 16:23	WG2167871
2,2-Dichloropropane	U		0.317	1.00	10	11/09/2023 16:23	WG2167871
Di-isopropyl ether	U		0.140	0.400	10	11/09/2023 16:23	WG2167871
Ethylbenzene	U		0.212	1.00	10	11/09/2023 16:23	WG2167871
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/09/2023 16:23	WG2167871
Isopropylbenzene	U		0.345	1.00	10	11/09/2023 16:23	WG2167871
p-Isopropyltoluene	U		0.932	2.00	10	11/09/2023 16:23	WG2167871
2-Butanone (MEK)	U		5.00	10.0	10	11/09/2023 16:23	WG2167871
Methylene Chloride	U		2.65	10.0	10	11/09/2023 16:23	WG2167871
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/09/2023 16:23	WG2167871
Methyl tert-butyl ether	U		0.118	0.400	10	11/09/2023 16:23	WG2167871
Naphthalene	U		1.24	5.00	10	11/09/2023 16:23	WG2167871
n-Propylbenzene	U		0.472	2.00	10	11/09/2023 16:23	WG2167871
Styrene	U		1.09	5.00	10	11/09/2023 16:23	WG2167871
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/09/2023 16:23	WG2167871
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/09/2023 16:23	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/09/2023 16:23	WG2167871
Tetrachloroethene	39.4		0.280	1.00	10	11/09/2023 16:23	WG2167871
Toluene	0.760	J	0.500	2.00	10	11/09/2023 16:23	WG2167871
1,2,3-Trichlorobenzene	U		0.250	5.00	10	11/09/2023 16:23	WG2167871
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/09/2023 16:23	WG2167871
1,1,1-Trichloroethane	U		0.110	1.00	10	11/09/2023 16:23	WG2167871
1,1,2-Trichloroethane	U		0.353	1.00	10	11/09/2023 16:23	WG2167871
Trichloroethene	69.0		0.160	0.400	10	11/09/2023 16:23	WG2167871
Trichlorofluoromethane	U		0.200	1.00	10	11/09/2023 16:23	WG2167871
1,2,3-Trichloropropane	U		2.04	5.00	10	11/09/2023 16:23	WG2167871
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/09/2023 16:23	WG2167871
1,2,3-Trimethylbenzene	1.48	J	0.460	2.00	10	11/09/2023 16:23	WG2167871
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/09/2023 16:23	WG2167871
Vinyl chloride	15700		27.3	100	1000	11/11/2023 06:51	WG2168846
Xylenes, Total	U		1.91	2.60	10	11/09/2023 16:23	WG2167871
Ethyl Ether	U		0.170	1.00	10	11/09/2023 16:23	WG2167871
Tetrahydrofuran	U		0.900	5.00	10	11/09/2023 16:23	WG2167871
Iodomethane	U		2.42	5.00	10	11/09/2023 16:23	WG2167871
Allyl chloride	U		5.80	10.0	10	11/09/2023 16:23	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/09/2023 16:23	WG2167871
(S) Toluene-d8	*103*			*75.0-131*		*11/09/2023 16:23*	WG2167871
(S) Toluene-d8	*98.8*			*75.0-131*		*11/11/2023 06:51*	WG2168846
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*11/09/2023 16:23*	WG2167871
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*11/11/2023 06:51*	WG2168846
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/09/2023 16:23*	WG2167871
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/11/2023 06:51*	WG2168846

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	395000		8450	20000	1	11/08/2023 16:30	WG2166450

Sample Narrative:

L1673441-02 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	29600		379	1000	1	11/03/2023 23:01	WG2164204
Nitrate	55.8	B J	48.0	100	1	11/03/2023 23:01	WG2164204
Sulfate	32600		594	5000	1	11/03/2023 23:01	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	14600		102	1000	1	11/21/2023 04:04	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2090		28.1	100	1	11/10/2023 19:11	WG2166496
Manganese	4720		0.704	5.00	1	11/10/2023 19:11	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1930		0.287	0.678	1	11/09/2023 10:14	WG2165856
Ethane	12.4		0.296	1.29	1	11/09/2023 10:14	WG2165856
Ethene	15.4		0.422	1.27	1	11/09/2023 10:14	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/05/2023 12:00	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:00	WG2164649
Benzene	U		0.0160	0.0400	1	11/05/2023 12:00	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:00	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:00	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:00	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:00	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:00	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:00	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:00	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:00	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:00	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:00	WG2164649
Chloroethane	4.02		0.0432	0.200	1	11/05/2023 12:00	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:00	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:00	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:00	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:00	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:00	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:00	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 12:00	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 12:00	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 12:00	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 12:00	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 12:00	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 12:00	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 12:00	WG2164649
1,1-Dichloroethene	12.1		0.0200	0.100	1	11/05/2023 12:00	WG2164649
cis-1,2-Dichloroethene	247		0.552	2.00	20	11/10/2023 03:42	WG2168000
trans-1,2-Dichloroethene	6.31		0.0572	0.200	1	11/05/2023 12:00	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 12:00	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 12:00	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 12:00	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 12:00	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 12:00	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 12:00	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 12:00	WG2164649
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 12:00	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 12:00	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 12:00	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 12:00	WG2164649
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 12:00	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 12:00	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 12:00	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 12:00	WG2164649
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 12:00	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 12:00	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 12:00	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 12:00	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 12:00	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 12:00	WG2164649
Tetrachloroethene	228		0.560	2.00	20	11/10/2023 03:42	WG2168000
Toluene	U		0.0500	0.200	1	11/05/2023 12:00	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 12:00	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 12:00	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 12:00	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 12:00	WG2164649
Trichloroethene	224		0.320	0.800	20	11/10/2023 03:42	WG2168000
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 12:00	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 12:00	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 12:00	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 12:00	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 12:00	WG2164649
Vinyl chloride	39.6		0.0273	0.100	1	11/05/2023 12:00	WG2164649
Xylenes, Total	U		0.191	0.260	1	11/05/2023 12:00	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 12:00	WG2164649
Tetrahydrofuran	0.274	J	0.0900	0.500	1	11/05/2023 12:00	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 12:00	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 12:00	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 12:00	WG2164649
(S) Toluene-d8	*98.7*			*75.0-131*		*11/05/2023 12:00*	WG2164649
(S) Toluene-d8	*95.4*			*75.0-131*		*11/10/2023 03:42*	WG2168000
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*		*11/05/2023 12:00*	WG2164649
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*11/10/2023 03:42*	WG2168000
(S) 1,2-Dichloroethane-d4	*99.2*			*70.0-130*		*11/05/2023 12:00*	WG2164649
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/10/2023 03:42*	WG2168000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1250000		8450	20000	1	11/08/2023 14:10	WG2166111

Sample Narrative:

L1673441-03 WG2166111: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	143000		379	1000	1	11/03/2023 23:13	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 23:13	WG2164204
Sulfate	U		594	5000	1	11/03/2023 23:13	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	14500		102	1000	1	11/21/2023 05:52	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	26500		28.1	100	1	11/10/2023 19:21	WG2166496
Manganese	2640		0.704	5.00	1	11/10/2023 19:21	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	17100		2.87	6.78	10	11/09/2023 15:45	WG2168088
Ethane	58.9		0.296	1.29	1	11/09/2023 10:45	WG2165856
Ethene	6.17		0.422	1.27	1	11/09/2023 10:45	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.57	C5	0.548	1.00	1	11/05/2023 12:19	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:19	WG2164649
Benzene	0.111		0.0160	0.0400	1	11/05/2023 12:19	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:19	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:19	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:19	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:19	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:19	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:19	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:19	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:19	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:19	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:19	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 12:19	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:19	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:19	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:19	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:19	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:19	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:19	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 12:19	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 12:19	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 12:19	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 12:19	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 12:19	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 12:19	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 12:19	WG2164649
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 12:19	WG2164649
cis-1,2-Dichloroethene	1.38		0.0276	0.100	1	11/10/2023 02:06	WG2168000
trans-1,2-Dichloroethene	0.171	J	0.0572	0.200	1	11/05/2023 12:19	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 12:19	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 12:19	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 12:19	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 12:19	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 12:19	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 12:19	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 12:19	WG2164649
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 12:19	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 12:19	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 12:19	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 12:19	WG2164649
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 12:19	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 12:19	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 12:19	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 12:19	WG2164649
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 12:19	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 12:19	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 12:19	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 12:19	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 12:19	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 12:19	WG2164649
Tetrachloroethene	U		0.0280	0.100	1	11/10/2023 02:06	WG2168000
Toluene	0.102	J	0.0500	0.200	1	11/05/2023 12:19	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 12:19	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 12:19	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 12:19	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 12:19	WG2164649
Trichloroethene	0.106		0.0160	0.0400	1	11/10/2023 02:06	WG2168000
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 12:19	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 12:19	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 12:19	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 12:19	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 12:19	WG2164649
Vinyl chloride	1.27		0.0273	0.100	1	11/05/2023 12:19	WG2164649
Xylenes, Total	U		0.191	0.260	1	11/05/2023 12:19	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 12:19	WG2164649
Tetrahydrofuran	1.87		0.0900	0.500	1	11/05/2023 12:19	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 12:19	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 12:19	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 12:19	WG2164649
(S) Toluene-d8	*96.3*			*75.0-131*		*11/05/2023 12:19*	WG2164649
(S) Toluene-d8	*96.7*			*75.0-131*		*11/10/2023 02:06*	WG2168000
(S) 4-Bromofluorobenzene	*87.1*			*67.0-138*		*11/05/2023 12:19*	WG2164649
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*11/10/2023 02:06*	WG2168000
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/05/2023 12:19*	WG2164649
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/10/2023 02:06*	WG2168000

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1110000		8450	20000	1	11/09/2023 09:29	WG2166959

Sample Narrative:
L1673441-04 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	113000		379	1000	1	11/03/2023 23:26	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 23:26	WG2164204
Sulfate	U		594	5000	1	11/03/2023 23:26	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10300		102	1000	1	11/21/2023 06:13	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10000		28.1	100	1	11/10/2023 19:24	WG2166496
Manganese	1890		0.704	5.00	1	11/10/2023 19:24	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	24700		2.87	6.78	10	11/09/2023 15:53	WG2168088
Ethane	256		0.296	1.29	1	11/09/2023 10:53	WG2165856
Ethene	3.98		0.422	1.27	1	11/09/2023 10:53	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.28	C5	0.548	1.00	1	11/05/2023 12:38	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:38	WG2164649
Benzene	0.0440		0.0160	0.0400	1	11/05/2023 12:38	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:38	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:38	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:38	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:38	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:38	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:38	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:38	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:38	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:38	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:38	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 12:38	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:38	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:38	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:38	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:38	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:38	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:38	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 12:38	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 12:38	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 12:38	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 12:38	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 12:38	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 12:38	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 12:38	WG2164649
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 12:38	WG2164649
cis-1,2-Dichloroethene	0.253		0.0276	0.100	1	11/10/2023 02:26	WG2168000
trans-1,2-Dichloroethene	0.708		0.0572	0.200	1	11/05/2023 12:38	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 12:38	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 12:38	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 12:38	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 12:38	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 12:38	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 12:38	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 12:38	WG2164649
Ethylbenzene	0.0230	J	0.0212	0.100	1	11/05/2023 12:38	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 12:38	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 12:38	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 12:38	WG2164649
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 12:38	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 12:38	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 12:38	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 12:38	WG2164649
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 12:38	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 12:38	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 12:38	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 12:38	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 12:38	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 12:38	WG2164649
Tetrachloroethene	U		0.0280	0.100	1	11/10/2023 02:26	WG2168000
Toluene	0.165	J	0.0500	0.200	1	11/05/2023 12:38	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 12:38	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 12:38	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 12:38	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 12:38	WG2164649
Trichloroethene	0.0820		0.0160	0.0400	1	11/10/2023 02:26	WG2168000
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 12:38	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 12:38	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 12:38	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 12:38	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 12:38	WG2164649
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 12:38	WG2164649
Xylenes, Total	U		0.191	0.260	1	11/05/2023 12:38	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 12:38	WG2164649
Tetrahydrofuran	0.552		0.0900	0.500	1	11/05/2023 12:38	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 12:38	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 12:38	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 12:38	WG2164649
(S) Toluene-d8	*99.6*			*75.0-131*		*11/05/2023 12:38*	WG2164649
(S) Toluene-d8	*94.1*			*75.0-131*		*11/10/2023 02:26*	WG2168000
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*11/05/2023 12:38*	WG2164649
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/10/2023 02:26*	WG2168000
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*11/05/2023 12:38*	WG2164649
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/10/2023 02:26*	WG2168000

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	805000		8450	20000	1	11/09/2023 09:35	WG2166959

Sample Narrative:
L1673441-05 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	87100		379	1000	1	11/04/2023 04:32	WG2164210
Nitrate	49.6	B J	48.0	100	1	11/04/2023 04:32	WG2164210
Sulfate	U		594	5000	1	11/04/2023 04:32	WG2164210

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7100		102	1000	1	11/21/2023 06:33	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3470		28.1	100	1	11/10/2023 19:27	WG2166496
Manganese	1050		0.704	5.00	1	11/10/2023 19:27	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	23300		2.87	6.78	10	11/09/2023 16:01	WG2168088
Ethane	398		0.296	1.29	1	11/09/2023 11:00	WG2165856
Ethene	U		0.422	1.27	1	11/09/2023 11:00	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	11.3	C5	0.548	1.00	1	11/05/2023 12:57	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:57	WG2164649
Benzene	0.0180	J	0.0160	0.0400	1	11/05/2023 12:57	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:57	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:57	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:57	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:57	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:57	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:57	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:57	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:57	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:57	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:57	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 12:57	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:57	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:57	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:57	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:57	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:57	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:57	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 12:57	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 12:57	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 12:57	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 12:57	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 12:57	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 12:57	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 12:57	WG2164649
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 12:57	WG2164649
cis-1,2-Dichloroethene	0.0800	J	0.0276	0.100	1	11/10/2023 02:44	WG2168000
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 12:57	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 12:57	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 12:57	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 12:57	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 12:57	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 12:57	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 12:57	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 12:57	WG2164649
Ethylbenzene	0.0670	J	0.0212	0.100	1	11/05/2023 12:57	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 12:57	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 12:57	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 12:57	WG2164649
2-Butanone (MEK)	0.583	J	0.500	1.00	1	11/05/2023 12:57	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 12:57	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 12:57	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 12:57	WG2164649
Naphthalene	U	C3	0.124	0.500	1	11/05/2023 12:57	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 12:57	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 12:57	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 12:57	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 12:57	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 12:57	WG2164649
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 12:57	WG2164649
Toluene	0.308		0.0500	0.200	1	11/05/2023 12:57	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 12:57	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 12:57	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 12:57	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 12:57	WG2164649
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 12:57	WG2164649
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 12:57	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 12:57	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 12:57	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 12:57	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 12:57	WG2164649
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 12:57	WG2164649
Xylenes, Total	0.419		0.191	0.260	1	11/05/2023 12:57	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 12:57	WG2164649
Tetrahydrofuran	1.03		0.0900	0.500	1	11/05/2023 12:57	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 12:57	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 12:57	WG2164649
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/05/2023 12:57	WG2164649
(S) Toluene-d8	*103*			*75.0-131*		*11/05/2023 12:57*	WG2164649
(S) Toluene-d8	*95.0*			*75.0-131*		*11/10/2023 02:44*	WG2168000
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*		*11/05/2023 12:57*	WG2164649
(S) 4-Bromofluorobenzene	*91.4*			*67.0-138*		*11/10/2023 02:44*	WG2168000
(S) 1,2-Dichloroethane-d4	*92.7*			*70.0-130*		*11/05/2023 12:57*	WG2164649
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/10/2023 02:44*	WG2168000

Method Blank (MB)

(MB) R3997258-2 11/08/23 11:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673043-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673043-01 11/08/23 12:04 • (DUP) R3997258-4 11/08/23 12:08

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

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673150-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673150-01 11/08/23 13:54 • (DUP) R3997258-6 11/08/23 13:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	196000	195000	1	0.191		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997258-1 11/08/23 11:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	103000	103	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997521-2 11/08/23 14:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673368-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673368-01 11/08/23 14:48 • (DUP) R3997521-3 11/08/23 14:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	752000	754000	1	0.235		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673384-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1673384-02 11/08/23 16:16 • (DUP) R3997521-4 11/08/23 16:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	100000	100000	1	0.0870		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997521-1 11/08/23 14:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	104000	104	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997849-2 11/09/23 08:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:
BLANK: Endpoint pH 4.5

L1673484-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-01 11/09/23 09:14 • (DUP) R3997849-3 11/09/23 09:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	593000	532000	1	10.7		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

L1673484-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-07 11/09/23 11:21 • (DUP) R3997849-4 11/09/23 11:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	385000	375000	1	2.52		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997849-1 11/09/23 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	105000	105	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997288-1 11/03/23 19:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	610	J	379	1000
Nitrate	49.7	J	48.0	100
Sulfate	U		594	5000

L1673438-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673438-01 11/03/23 20:28 • (DUP) R3997288-3 11/03/23 20:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	11400	11500	1	0.414		15
Nitrate	188	178	1	5.42		15
Sulfate	7000	6960	1	0.538		15

L1673464-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673464-01 11/03/23 23:52 • (DUP) R3997288-6 11/04/23 00:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2790	2680	1	4.00		15
Nitrate	972	973	1	0.134		15
Sulfate	27700	27600	1	0.371		15

Laboratory Control Sample (LCS)

(LCS) R3997288-2 11/03/23 19:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40900	102	80.0-120	
Nitrate	8000	7560	94.5	80.0-120	
Sulfate	40000	39100	97.7	80.0-120	

L1673438-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673438-01 11/03/23 20:28 • (MS) R3997288-4 11/03/23 20:53 • (MSD) R3997288-5 11/03/23 21:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	11400	50400	48600	97.4	92.9	1	80.0-120			3.67	15
Nitrate	8000	188	7990	7860	97.6	96.0	1	80.0-120			1.64	15
Sulfate	40000	7000	46200	44800	98.1	94.6	1	80.0-120			3.08	15

L1673464-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1673464-01 11/03/23 23:52 • (MS) R3997288-7 11/04/23 00:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	2790	43800	103	1	80.0-120	
Nitrate	8000	972	8640	95.8	1	80.0-120	
Sulfate	40000	27700	62200	86.2	1	80.0-120	

Method Blank (MB)

(MB) R3997293-1 11/04/23 02:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Nitrate	49.9	J	48.0	100
Sulfate	U		594	5000

L1673440-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-03 11/04/23 04:07 • (DUP) R3997293-5 11/04/23 04:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	76600	77800	1	1.65		15
Nitrate	51.4	U	1	200	P1	15
Sulfate	657	638	1	2.84	J	15

Laboratory Control Sample (LCS)

(LCS) R3997293-2 11/04/23 03:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39800	99.6	80.0-120	
Nitrate	8000	7590	94.9	80.0-120	
Sulfate	40000	39000	97.6	80.0-120	

L1673402-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673402-14 11/04/23 03:16 • (MS) R3997293-3 11/04/23 03:28 • (MSD) R3997293-4 11/04/23 03:41

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	40000	131000	146000	145000	35.3	34.5	1	80.0-120	J6	J6	0.200	15
Nitrate	8000	U	7800	7910	97.5	98.9	1	80.0-120			1.42	15
Sulfate	40000	102000	122000	122000	50.6	50.7	1	80.0-120	J6	J6	0.0259	15

Method Blank (MB)

(MB) R4002870-2 11/21/23 01:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	141	J	102	1000

L1673438-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673438-08 11/21/23 01:48 • (DUP) R4002870-3 11/21/23 02:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	6500	6570	1	1.15		20

L1673459-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673459-01 11/21/23 06:52 • (DUP) R4002870-6 11/21/23 07:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2050	2210	1	7.52		20

Laboratory Control Sample (LCS)

(LCS) R4002870-1 11/21/23 01:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23600	94.2	85.0-115	

L1673441-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673441-02 11/21/23 04:04 • (MS) R4002870-4 11/21/23 04:27 • (MSD) R4002870-5 11/21/23 04:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	14600	38700	38800	96.1	96.6	1	85.0-115			0.310	20

L1673473-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673473-02 11/21/23 07:56 • (MS) R4002870-7 11/21/23 08:18 • (MSD) R4002870-8 11/21/23 08:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	11700	35200	35700	94.2	96.2	1	85.0-115			1.41	20

Method Blank (MB)

(MB) R3998485-1 11/10/23 18:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3998485-2 11/10/23 18:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1150	115	80.0-120	
Manganese	50.0	55.7	111	80.0-120	

L1673440-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-01 11/10/23 18:48 • (MS) R3998485-4 11/10/23 18:55 • (MSD) R3998485-5 11/10/23 18:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	3170	4270	4330	109	115	1	75.0-125			1.43	20
Manganese	50.0	1390	1390	1480	7.51	181	1	75.0-125	V	V	6.05	20

Method Blank (MB)

(MB) R3997673-2 11/09/23 09:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-01 11/09/23 09:52 • (DUP) R3997673-3 11/09/23 11:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	762	765	1	0.393		20
Ethane	6.25	6.19	1	0.965		20
Ethene	U	U	1	0.000		20

L1673511-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-04 11/09/23 12:42 • (DUP) R3997673-4 11/09/23 13:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	179	175	1	2.26		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3997673-1 11/09/23 09:12 • (LCSD) R3997673-5 11/09/23 13:13

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.6	61.9	95.3	91.3	85.0-115			4.27	20
Ethane	129	110	112	85.3	86.8	85.0-115			1.80	20
Ethene	127	111	112	87.4	88.2	85.0-115			0.897	20

Method Blank (MB)

(MB) R3997931-2 11/09/23 15:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1673440-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-01 11/09/23 15:21 • (DUP) R3997931-3 11/09/23 16:45

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	27500	26900	10	2.21		20

L1673511-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-08 11/09/23 17:15 • (DUP) R3997931-4 11/09/23 17:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	7520	7510	10	0.133		20

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

(LCS) R3997931-1 11/09/23 15:08 • (LCSD) R3997931-5 11/09/23 17:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.0	60.9	94.4	89.8	85.0-115			4.96	20

Method Blank (MB)

(MB) R3997642-3 11/05/23 07:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100
p-Isopropyltoluene	U		0.0932	0.200

Method Blank (MB)

(MB) R3997642-3 11/05/23 07:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*98.6*			*75.0-131*
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*99.4*			*70.0-130*

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

(LCS) R3997642-1 11/05/23 05:29 • (LCSD) R3997642-2 11/05/23 05:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	39.7	35.1	159	140	10.0-160			12.3	31
Acrylonitrile	25.0	25.1	24.3	100	97.2	45.0-153			3.24	22
Benzene	5.00	5.26	5.30	105	106	70.0-123			0.758	20
Bromobenzene	5.00	5.09	5.15	102	103	73.0-121			1.17	20
Bromodichloromethane	5.00	5.45	5.25	109	105	73.0-121			3.74	20
Bromoform	5.00	4.73	4.83	94.6	96.6	64.0-132			2.09	20
Bromomethane	5.00	4.88	4.96	97.6	99.2	56.0-147			1.63	20
n-Butylbenzene	5.00	4.11	4.12	82.2	82.4	68.0-135			0.243	20
sec-Butylbenzene	5.00	4.31	4.11	86.2	82.2	74.0-130			4.75	20
tert-Butylbenzene	5.00	4.27	4.26	85.4	85.2	75.0-127			0.234	20
Carbon tetrachloride	5.00	5.74	5.53	115	111	66.0-128			3.73	20
Chlorobenzene	5.00	4.98	4.98	99.6	99.6	76.0-128			0.000	20
Chlorodibromomethane	5.00	4.95	4.97	99.0	99.4	74.0-127			0.403	20
Chloroethane	5.00	4.97	4.58	99.4	91.6	61.0-134			8.17	20
Chloroform	5.00	5.78	5.52	116	110	72.0-123			4.60	20
Chloromethane	5.00	4.52	4.10	90.4	82.0	51.0-138			9.74	20
2-Chlorotoluene	5.00	5.27	4.92	105	98.4	75.0-124			6.87	20
4-Chlorotoluene	5.00	4.80	4.78	96.0	95.6	75.0-124			0.418	20
1,2-Dibromo-3-Chloropropane	5.00	4.36	4.49	87.2	89.8	59.0-130			2.94	20
1,2-Dibromoethane	5.00	4.97	5.16	99.4	103	74.0-128			3.75	20
Dibromomethane	5.00	5.73	5.03	115	101	75.0-122			13.0	20
1,2-Dichlorobenzene	5.00	4.65	4.60	93.0	92.0	76.0-124			1.08	20
1,3-Dichlorobenzene	5.00	4.73	5.02	94.6	100	76.0-125			5.95	20
1,4-Dichlorobenzene	5.00	4.87	4.60	97.4	92.0	77.0-121			5.70	20
Dichlorodifluoromethane	5.00	4.65	4.70	93.0	94.0	43.0-156			1.07	20
1,1-Dichloroethane	5.00	4.82	4.70	96.4	94.0	70.0-127			2.52	20
1,2-Dichloroethane	5.00	4.89	4.91	97.8	98.2	65.0-131			0.408	20
1,1-Dichloroethene	5.00	4.71	4.37	94.2	87.4	65.0-131			7.49	20
trans-1,2-Dichloroethene	5.00	5.60	5.60	112	112	71.0-125			0.000	20
1,2-Dichloropropane	5.00	4.68	4.76	93.6	95.2	74.0-125			1.69	20
1,1-Dichloropropene	5.00	5.18	4.93	104	98.6	73.0-125			4.95	20
1,3-Dichloropropane	5.00	5.06	5.02	101	100	80.0-125			0.794	20
cis-1,3-Dichloropropene	5.00	5.24	5.20	105	104	76.0-127			0.766	20
trans-1,3-Dichloropropene	5.00	5.00	5.01	100	100	73.0-127			0.200	20
2,2-Dichloropropane	5.00	4.52	4.19	90.4	83.8	59.0-135			7.58	20
Di-isopropyl ether	5.00	4.55	4.30	91.0	86.0	60.0-136			5.65	20
Ethylbenzene	5.00	4.79	4.71	95.8	94.2	74.0-126			1.68	20
Hexachloro-1,3-butadiene	5.00	4.80	4.98	96.0	99.6	57.0-150			3.68	20
Isopropylbenzene	5.00	4.31	4.26	86.2	85.2	72.0-127			1.17	20
p-Isopropyltoluene	5.00	4.28	4.10	85.6	82.0	72.0-133			4.30	20

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

(LCS) R3997642-1 11/05/23 05:29 • (LCSD) R3997642-2 11/05/23 05:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	25.0	23.3	21.6	93.2	86.4	30.0-160			7.57	24
Methylene Chloride	5.00	5.23	5.43	105	109	68.0-123			3.75	20
4-Methyl-2-pentanone (MIBK)	25.0	22.5	22.6	90.0	90.4	56.0-143			0.443	20
Methyl tert-butyl ether	5.00	5.59	5.12	112	102	66.0-132			8.78	20
Naphthalene	5.00	3.50	3.67	70.0	73.4	59.0-130			4.74	20
n-Propylbenzene	5.00	4.78	4.74	95.6	94.8	74.0-126			0.840	20
Styrene	5.00	4.06	4.10	81.2	82.0	72.0-127			0.980	20
1,1,1,2-Tetrachloroethane	5.00	4.62	4.79	92.4	95.8	74.0-129			3.61	20
1,1,2,2-Tetrachloroethane	5.00	4.81	4.76	96.2	95.2	68.0-128			1.04	20
1,1,2-Trichlorotrifluoroethane	5.00	4.85	4.53	97.0	90.6	61.0-139			6.82	20
Tetrachloroethene	5.00	5.31	5.34	106	107	70.0-136			0.563	20
Toluene	5.00	5.12	5.01	102	100	75.0-121			2.17	20
1,2,3-Trichlorobenzene	5.00	4.08	4.44	81.6	88.8	59.0-139			8.45	20
1,2,4-Trichlorobenzene	5.00	4.05	4.30	81.0	86.0	62.0-137			5.99	20
1,1,1-Trichloroethane	5.00	5.60	5.17	112	103	69.0-126			7.99	20
1,1,2-Trichloroethane	5.00	5.28	5.28	106	106	78.0-123			0.000	20
Trichloroethene	5.00	5.49	5.63	110	113	76.0-126			2.52	20
Trichlorofluoromethane	5.00	5.29	4.88	106	97.6	61.0-142			8.06	20
1,2,3-Trichloropropane	5.00	5.46	5.30	109	106	67.0-129			2.97	20
1,2,4-Trimethylbenzene	5.00	4.39	4.43	87.8	88.6	70.0-126			0.907	20
1,2,3-Trimethylbenzene	5.00	4.48	4.42	89.6	88.4	74.0-124			1.35	20
1,3,5-Trimethylbenzene	5.00	4.59	4.38	91.8	87.6	73.0-127			4.68	20
Vinyl chloride	5.00	4.31	3.90	86.2	78.0	63.0-134			9.99	20
Xylenes, Total	15.0	13.6	13.9	90.7	92.7	72.0-127			2.18	20
Ethyl Ether	5.00	5.13	4.56	103	91.2	64.0-137			11.8	20
Tetrahydrofuran	5.00	5.26	4.63	105	92.6	37.0-146			12.7	24
Iodomethane	25.0	28.8	28.1	115	112	74.0-134			2.46	20
Allyl chloride	25.0	27.7	26.5	111	106	70.0-131			4.43	20
Trans-1,4-Dichloro-2-butene	5.00	3.33	3.32	66.6	66.4	45.0-143			0.301	20
(S) Toluene-d8				*99.7*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*89.9*	*90.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*99.3*	*98.3*	*70.0-130*				

L1673600-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673600-02 11/05/23 13:35 • (MS) R3997642-4 11/05/23 15:11 • (MSD) R3997642-5 11/05/23 15:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	5.52	134	151	103	116	1	10.0-160			11.9	40
Acrylonitrile	125	U	109	106	87.2	84.8	1	10.0-160			2.79	40
Benzene	25.0	0.259	20.7	22.0	81.8	87.0	1	10.0-149			6.09	37
Bromobenzene	25.0	U	21.4	21.5	85.6	86.0	1	10.0-156			0.466	38
Bromodichloromethane	25.0	U	22.4	23.2	89.6	92.8	1	10.0-143			3.51	37
Bromoform	25.0	U	21.1	20.2	84.4	80.8	1	10.0-146			4.36	36
Bromomethane	25.0	U	19.1	22.1	76.4	88.4	1	10.0-149			14.6	38
n-Butylbenzene	25.0	U	18.0	18.7	72.0	74.8	1	10.0-160			3.81	40
sec-Butylbenzene	25.0	U	19.5	20.8	78.0	83.2	1	10.0-159			6.45	39
tert-Butylbenzene	25.0	U	18.6	20.3	74.4	81.2	1	10.0-156			8.74	39
Carbon tetrachloride	25.0	U	22.7	25.7	90.8	103	1	10.0-145			12.4	37
Chlorobenzene	25.0	U	19.2	20.3	76.8	81.2	1	10.0-152			5.57	39
Chlorodibromomethane	25.0	U	20.4	20.9	81.6	83.6	1	10.0-146			2.42	37
Chloroethane	25.0	U	17.0	21.6	68.0	86.4	1	10.0-146			23.8	40
Chloroform	25.0	U	22.6	23.9	90.4	95.6	1	10.0-146			5.59	37
Chloromethane	25.0	U	15.1	18.9	60.4	75.6	1	10.0-159			22.4	37
2-Chlorotoluene	25.0	U	20.5	21.8	82.0	87.2	1	10.0-159			6.15	38
4-Chlorotoluene	25.0	U	20.0	21.4	80.0	85.6	1	10.0-155			6.76	39
1,2-Dibromo-3-Chloropropane	25.0	U	20.8	20.4	83.2	81.6	1	10.0-151			1.94	39
1,2-Dibromoethane	25.0	U	20.1	20.6	80.4	82.4	1	10.0-148			2.46	34
Dibromomethane	25.0	U	22.8	22.8	91.2	91.2	1	10.0-147			0.000	35
1,2-Dichlorobenzene	25.0	U	19.4	20.0	77.6	80.0	1	10.0-155			3.05	37
1,3-Dichlorobenzene	25.0	U	20.0	21.1	80.0	84.4	1	10.0-153			5.35	38
1,4-Dichlorobenzene	25.0	U	19.7	20.4	78.8	81.6	1	10.0-151			3.49	38
Dichlorodifluoromethane	25.0	U	19.1	22.7	76.4	90.8	1	10.0-160			17.2	35
1,1-Dichloroethane	25.0	U	18.8	20.3	75.2	81.2	1	10.0-147			7.67	37
1,2-Dichloroethane	25.0	U	20.2	19.6	80.8	78.4	1	10.0-148			3.02	35
1,1-Dichloroethene	25.0	U	18.3	20.8	73.2	83.2	1	10.0-155			12.8	37
trans-1,2-Dichloroethene	25.0	U	21.3	22.7	85.2	90.8	1	10.0-150			6.36	37
1,2-Dichloropropane	25.0	U	19.1	19.7	76.4	78.8	1	10.0-148			3.09	37
1,1-Dichloropropene	25.0	U	19.9	22.5	79.6	90.0	1	10.0-153			12.3	35
1,3-Dichloropropane	25.0	U	20.2	20.7	80.8	82.8	1	10.0-154			2.44	35
cis-1,3-Dichloropropene	25.0	U	20.4	21.4	81.6	85.6	1	10.0-151			4.78	37
trans-1,3-Dichloropropene	25.0	U	20.2	20.5	80.8	82.0	1	10.0-148			1.47	37
2,2-Dichloropropane	25.0	0.0370	16.9	18.3	67.5	73.1	1	10.0-138			7.95	36
Di-isopropyl ether	25.0	U	18.9	19.4	75.6	77.6	1	10.0-147			2.61	36
Ethylbenzene	25.0	U	18.9	20.0	75.6	80.0	1	10.0-160			5.66	38
Hexachloro-1,3-butadiene	25.0	U	20.8	23.0	83.2	92.0	1	10.0-160			10.0	40
Isopropylbenzene	25.0	U	18.5	19.9	74.0	79.6	1	10.0-155			7.29	38
p-Isopropyltoluene	25.0	U	19.1	19.9	76.4	79.6	1	10.0-160			4.10	40

L1673600-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673600-02 11/05/23 13:35 • (MS) R3997642-4 11/05/23 15:11 • (MSD) R3997642-5 11/05/23 15:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	125	U	84.1	115	67.3	92.0	1	10.0-160			31.0	40
Methylene Chloride	25.0	U	21.5	21.4	86.0	85.6	1	10.0-141			0.466	37
4-Methyl-2-pentanone (MIBK)	125	U	97.6	95.3	78.1	76.2	1	10.0-160			2.38	35
Methyl tert-butyl ether	25.0	U	24.5	24.0	98.0	96.0	1	11.0-147			2.06	35
Naphthalene	25.0	U	17.7	19.1	70.8	76.4	1	10.0-160			7.61	36
n-Propylbenzene	25.0	U	20.2	21.9	80.8	87.6	1	10.0-158			8.08	38
Styrene	25.0	U	16.3	17.4	65.2	69.6	1	10.0-160			6.53	40
1,1,1,2-Tetrachloroethane	25.0	U	19.3	20.7	77.2	82.8	1	10.0-149			7.00	39
1,1,2,2-Tetrachloroethane	25.0	U	22.7	22.6	90.8	90.4	1	10.0-160			0.442	35
1,1,2-Trichlorotrifluoroethane	25.0	U	19.9	23.1	79.6	92.4	1	10.0-160			14.9	36
Tetrachloroethene	25.0	U	19.2	21.5	76.8	86.0	1	10.0-156			11.3	39
Toluene	25.0	U	18.4	20.5	73.6	82.0	1	10.0-156			10.8	38
1,2,3-Trichlorobenzene	25.0	U	18.4	19.9	73.6	79.6	1	10.0-160			7.83	40
1,2,4-Trichlorobenzene	25.0	U	17.3	18.7	69.2	74.8	1	10.0-160			7.78	40
1,1,1-Trichloroethane	25.0	U	21.3	24.2	85.2	96.8	1	10.0-144			12.7	35
1,1,2-Trichloroethane	25.0	U	20.7	21.3	82.8	85.2	1	10.0-160			2.86	35
Trichloroethene	25.0	U	19.9	22.3	79.6	89.2	1	10.0-156			11.4	38
Trichlorofluoromethane	25.0	U	17.7	27.9	70.8	112	1	10.0-160		J3	44.7	40
1,2,3-Trichloropropane	25.0	U	22.7	22.3	90.8	89.2	1	10.0-156			1.78	35
1,2,4-Trimethylbenzene	25.0	U	19.8	20.8	79.2	83.2	1	10.0-160			4.93	36
1,2,3-Trimethylbenzene	25.0	U	19.5	20.2	78.0	80.8	1	10.0-160			3.53	36
1,3,5-Trimethylbenzene	25.0	U	19.4	20.6	77.6	82.4	1	10.0-160			6.00	38
Vinyl chloride	25.0	U	15.0	18.3	60.0	73.2	1	10.0-160			19.8	37
Xylenes, Total	75.0	U	53.1	59.1	70.8	78.8	1	10.0-160			10.7	38
Ethyl Ether	25.0	U	20.2	20.2	80.8	80.8	1	10.0-160			0.000	31
Tetrahydrofuran	25.0	0.177	23.0	23.1	91.3	91.7	1	10.0-158			0.434	33
Iodomethane	125	U	111	119	88.8	95.2	1	10.0-160			6.96	38
Allyl chloride	125	U	106	114	84.8	91.2	1	10.0-160			7.27	30
Trans-1,4-Dichloro-2-butene	25.0	U	15.8	15.8	63.2	63.2	1	10.0-152			0.000	36
(S) Toluene-d8					*94.1*	*94.4*		*75.0-131*				
(S) 4-Bromofluorobenzene					*89.3*	*88.2*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*107*	*105*		*70.0-130*				

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	36.3	145	10.0-160	
Acrylonitrile	25.0	30.0	120	45.0-153	
Benzene	5.00	5.83	117	70.0-123	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromobenzene	5.00	5.61	112	73.0-121	
Bromodichloromethane	5.00	5.37	107	73.0-121	
Bromoform	5.00	5.37	107	64.0-132	
Bromomethane	5.00	4.47	89.4	56.0-147	
n-Butylbenzene	5.00	4.49	89.8	68.0-135	
sec-Butylbenzene	5.00	6.03	121	74.0-130	
tert-Butylbenzene	5.00	5.48	110	75.0-127	
Carbon tetrachloride	5.00	5.36	107	66.0-128	
Chlorobenzene	5.00	5.61	112	76.0-128	
Chlorodibromomethane	5.00	5.73	115	74.0-127	
Chloroethane	5.00	6.04	121	61.0-134	
Chloroform	5.00	5.62	112	72.0-123	
Chloromethane	5.00	5.10	102	51.0-138	
2-Chlorotoluene	5.00	5.11	102	75.0-124	
4-Chlorotoluene	5.00	5.76	115	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	5.26	105	59.0-130	
1,2-Dibromoethane	5.00	5.56	111	74.0-128	
Dibromomethane	5.00	5.20	104	75.0-122	
1,2-Dichlorobenzene	5.00	5.54	111	76.0-124	
1,3-Dichlorobenzene	5.00	5.47	109	76.0-125	
1,4-Dichlorobenzene	5.00	5.34	107	77.0-121	
Dichlorodifluoromethane	5.00	5.02	100	43.0-156	
1,1-Dichloroethane	5.00	5.55	111	70.0-127	
1,2-Dichloroethane	5.00	5.14	103	65.0-131	
trans-1,2-Dichloroethene	5.00	5.73	115	71.0-125	
1,2-Dichloropropane	5.00	5.74	115	74.0-125	
1,1-Dichloropropene	5.00	5.67	113	73.0-125	
1,3-Dichloropropane	5.00	5.67	113	80.0-125	
cis-1,3-Dichloropropene	5.00	5.77	115	76.0-127	
trans-1,3-Dichloropropene	5.00	5.45	109	73.0-127	
2,2-Dichloropropane	5.00	6.47	129	59.0-135	
Di-isopropyl ether	5.00	5.79	116	60.0-136	
Ethylbenzene	5.00	5.78	116	74.0-126	
Hexachloro-1,3-butadiene	5.00	6.51	130	57.0-150	
Isopropylbenzene	5.00	5.50	110	72.0-127	
p-Isopropyltoluene	5.00	5.15	103	72.0-133	
2-Butanone (MEK)	25.0	33.4	134	30.0-160	
Methylene Chloride	5.00	5.50	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	30.0	120	56.0-143	
Methyl tert-butyl ether	5.00	5.73	115	66.0-132	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Naphthalene	5.00	4.99	99.8	59.0-130	
n-Propylbenzene	5.00	5.48	110	74.0-126	
Styrene	5.00	5.50	110	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.50	110	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.25	105	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	5.68	114	61.0-139	
Tetrachloroethene	5.00	5.85	117	70.0-136	
Toluene	5.00	5.76	115	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.72	94.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.96	99.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.98	120	69.0-126	
1,1,2-Trichloroethane	5.00	5.48	110	78.0-123	
Trichloroethene	5.00	5.68	114	76.0-126	
Trichlorofluoromethane	5.00	4.99	99.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.10	102	67.0-129	
1,2,4-Trimethylbenzene	5.00	5.71	114	70.0-126	
1,2,3-Trimethylbenzene	5.00	5.42	108	74.0-124	
1,3,5-Trimethylbenzene	5.00	5.95	119	73.0-127	
Xylenes, Total	15.0	16.8	112	72.0-127	
Ethyl Ether	5.00	5.72	114	64.0-137	
Tetrahydrofuran	5.00	4.98	99.6	37.0-146	
Iodomethane	25.0	27.3	109	74.0-134	
Allyl chloride	25.0	29.0	116	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	5.93	119	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

Method Blank (MB)

(MB) R3998421-3 11/09/23 18:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	U		0.0276	0.100
Tetrachloroethene	U		0.0280	0.100
Trichloroethene	U		0.0160	0.0400
(S) Toluene-d8	*94.7*			*75.0-131*
(S) 4-Bromofluorobenzene	*91.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*

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

(LCS) R3998421-1 11/09/23 16:50 • (LCSD) R3998421-2 11/09/23 17:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	5.00	5.30	5.40	106	108	73.0-125			1.87	20
Tetrachloroethene	5.00	4.88	5.11	97.6	102	70.0-136			4.60	20
Trichloroethene	5.00	5.73	5.77	115	115	76.0-126			0.696	20
(S) Toluene-d8				*94.5*	*94.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*94.3*	*94.8*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*109*	*70.0-130*				

Method Blank (MB)

(MB) R3998697-3 11/10/23 23:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
Vinyl chloride	U		0.0273	0.100
(S) Toluene-d8	*99.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*

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

(LCS) R3998697-1 11/10/23 21:40 • (LCSD) R3998697-2 11/10/23 22:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	5.00	5.38	5.18	108	104	65.0-131			3.79	20
cis-1,2-Dichloroethene	5.00	5.28	5.27	106	105	73.0-125			0.190	20
Vinyl chloride	5.00	5.40	5.05	108	101	63.0-134			6.70	20
(S) Toluene-d8				*102*	*99.1*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.0*	*95.0*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: **American Linen**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project # **443022-1413001.10.70**

Lab Project # **PESENVSWA-ALP**

Collected by (print): Osmin Monroy

Site/Facility ID #

P.O. # 10.701 **443018-1413001.~~05~~.601**

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-182-110223	Grab	GW	—	11/2/23	0908	10	X	X		X	X	X	X		-01
MW-184-110223	↓	GW	↓	↓	1134	↓	X	X		X	X	X	X		-02
MW-185-110223		GW			1348		X	X		X	X	X	X		-03
MW-186-110223		GW			1307		X	X		X	X	X	X		-04
MW-187-110223		GW			1443		X	X		X	X	X	X		-05
		GW													
		GW													
		GW													
		GW													
		GW													

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1673141

G010

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1033818**
PM: **546 - Jared Starkey**
PB: 10/26/23 CAM
Shipped Via:

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

Remarks: Tier 2 lab QA/QC (batch QC ok)

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6643 4314 3194

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11/2/23	1700	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Ei Dawn 17

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: PRE °C Bottles Received:
5.2+0=5.2 50

Date: 11-3-23 Time: 900

Hold:
PH-10BDH4321 TRC-23536
CR6-20221V
PH-10BDH4321 TRC-23536
CR6-20221V

Condition: NCF / OK

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

If preservation required by Login: Date/Time

ANALYTICAL REPORT

November 21, 2023

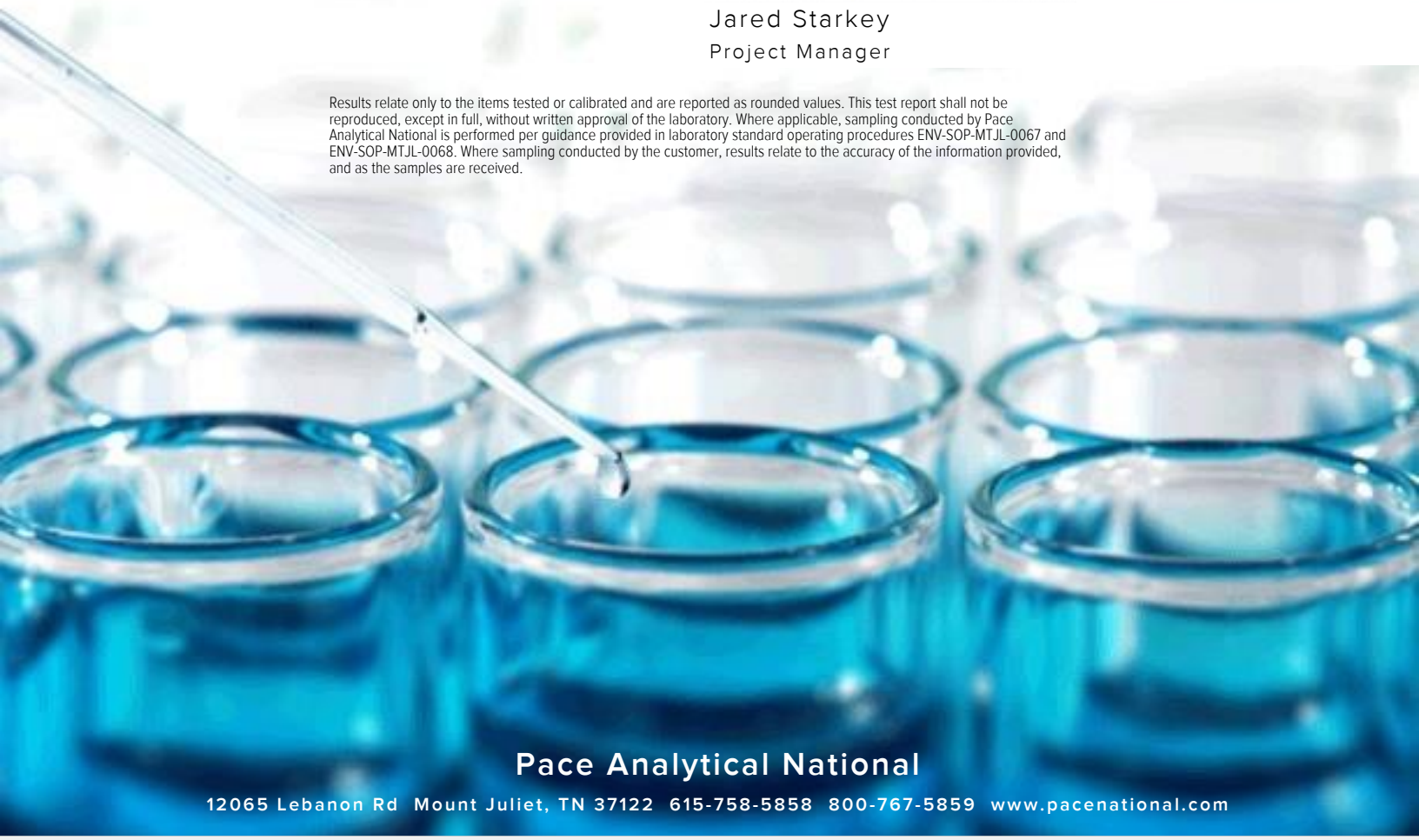
PES Environmental, Inc.- WA

Sample Delivery Group:	L1673473
Samples Received:	11/03/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-166-110223 L1673473-01 GW

Collected by: Osmin M. | Collected date/time: 11/02/23 09:24 | Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 09:42	11/09/23 09:42	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	25	11/04/23 13:32	11/04/23 13:32	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/04/23 00:55	11/04/23 00:55	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 07:34	11/21/23 07:34	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:34	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 11:10	11/09/23 11:10	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 16:08	11/09/23 16:08	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 12:23	11/09/23 12:23	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168846	100	11/11/23 07:10	11/11/23 07:10	JAH	Mt. Juliet, TN

MW-168-110223 L1673473-02 GW

Collected by: Osmin M. | Collected date/time: 11/02/23 10:37 | Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 09:48	11/09/23 09:48	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	1	11/04/23 13:33	11/04/23 13:33	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/04/23 01:08	11/04/23 01:08	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 07:56	11/21/23 07:56	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:37	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 11:28	11/09/23 11:28	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 16:18	11/09/23 16:18	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 12:41	11/09/23 12:41	KSD	Mt. Juliet, TN

MW-999-110223 L1673473-03 GW

Collected by: Osmin M. | Collected date/time: 11/02/23 10:37 | Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 09:55	11/09/23 09:55	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	1	11/04/23 13:33	11/04/23 13:33	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/04/23 01:21	11/04/23 01:21	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 09:43	11/21/23 09:43	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:40	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 11:57	11/09/23 11:57	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 16:33	11/09/23 16:33	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 13:00	11/09/23 13:00	KSD	Mt. Juliet, TN

MW-173-110223 L1673473-04 GW

Collected by: Osmin M. | Collected date/time: 11/02/23 12:16 | Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 10:13	11/09/23 10:13	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	1	11/04/23 13:34	11/04/23 13:34	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164204	1	11/04/23 01:34	11/04/23 01:34	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 10:05	11/21/23 10:05	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:44	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 12:07	11/09/23 12:07	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 16:53	11/09/23 16:53	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 13:18	11/09/23 13:18	KSD	Mt. Juliet, TN

SAMPLE SUMMARY

MW-175-110223 L1673473-05 GW

Collected by: Osmin M.
Collected date/time: 11/02/23 13:24
Received date/time: 11/03/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 10:20	11/09/23 10:20	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2164515	20	11/04/23 13:34	11/04/23 13:34	JAS	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164210	1	11/04/23 04:45	11/04/23 04:45	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172250	1	11/21/23 10:28	11/21/23 10:28	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:47	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 12:17	11/09/23 12:17	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 17:01	11/09/23 17:01	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 13:37	11/09/23 13:37	KSD	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.

Jared Starkey
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	909000		8450	20000	1	11/09/2023 09:42	WG2166959

Sample Narrative:
L1673473-01 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	28700	T8	375	1250	25	11/04/2023 13:32	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	101000		379	1000	1	11/04/2023 00:55	WG2164204
Nitrate	U		48.0	100	1	11/04/2023 00:55	WG2164204
Sulfate	9480		594	5000	1	11/04/2023 00:55	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	47400		102	1000	1	11/21/2023 07:34	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	40800		28.1	100	1	11/10/2023 19:34	WG2166496
Manganese	1330		0.704	5.00	1	11/10/2023 19:34	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	31000		2.87	6.78	10	11/09/2023 16:08	WG2168088
Ethane	542		0.296	1.29	1	11/09/2023 11:10	WG2165856
Ethene	1260		0.422	1.27	1	11/09/2023 11:10	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 12:23	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 12:23	WG2167871
Benzene	0.117		0.0160	0.0400	1	11/09/2023 12:23	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 12:23	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 12:23	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 12:23	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 12:23	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 12:23	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 12:23	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 12:23	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 12:23	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 12:23	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 12:23	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 12:23	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 12:23	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 12:23	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 12:23	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 12:23	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 12:23	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 12:23	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 12:23	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 12:23	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 12:23	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 12:23	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 12:23	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 12:23	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 12:23	WG2167871
1,1-Dichloroethene	8.30	J	2.00	10.0	100	11/11/2023 07:10	WG2168846
cis-1,2-Dichloroethene	8910		2.76	10.0	100	11/11/2023 07:10	WG2168846
trans-1,2-Dichloroethene	62.7		0.0572	0.200	1	11/09/2023 12:23	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 12:23	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 12:23	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 12:23	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 12:23	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 12:23	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 12:23	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 12:23	WG2167871
Ethylbenzene	0.0550	J	0.0212	0.100	1	11/09/2023 12:23	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 12:23	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 12:23	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 12:23	WG2167871
2-Butanone (MEK)	0.525	J	0.500	1.00	1	11/09/2023 12:23	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 12:23	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 12:23	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 12:23	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 12:23	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 12:23	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 12:23	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 12:23	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 12:23	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 12:23	WG2167871
Tetrachloroethene	0.289		0.0280	0.100	1	11/09/2023 12:23	WG2167871
Toluene	0.122	J	0.0500	0.200	1	11/09/2023 12:23	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 12:23	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 12:23	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 12:23	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 12:23	WG2167871
Trichloroethene	0.401		0.0160	0.0400	1	11/09/2023 12:23	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 12:23	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 12:23	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 12:23	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 12:23	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 12:23	WG2167871
Vinyl chloride	2770		2.73	10.0	100	11/11/2023 07:10	WG2168846
Xylenes, Total	U		0.191	0.260	1	11/09/2023 12:23	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 12:23	WG2167871
Tetrahydrofuran	1.02		0.0900	0.500	1	11/09/2023 12:23	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 12:23	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 12:23	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 12:23	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 12:23*	WG2167871

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	*101*			*75.0-131*		*11/11/2023 07:10*	WG2168846
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/09/2023 12:23*	WG2167871
(S) 4-Bromofluorobenzene	*95.7*			*67.0-138*		*11/11/2023 07:10*	WG2168846
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*11/09/2023 12:23*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/11/2023 07:10*	WG2168846

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	503000		8450	20000	1	11/09/2023 09:48	WG2166959

Sample Narrative:
L1673473-02 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	2630	T8	15.0	50.0	1	11/04/2023 13:33	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	43000		379	1000	1	11/04/2023 01:08	WG2164204
Nitrate	593		48.0	100	1	11/04/2023 01:08	WG2164204
Sulfate	1570	J	594	5000	1	11/04/2023 01:08	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11700		102	1000	1	11/21/2023 07:56	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5780		28.1	100	1	11/10/2023 19:37	WG2166496
Manganese	1120		0.704	5.00	1	11/10/2023 19:37	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	16900		2.87	6.78	10	11/09/2023 16:18	WG2168088
Ethane	332		0.296	1.29	1	11/09/2023 11:28	WG2165856
Ethene	17.5		0.422	1.27	1	11/09/2023 11:28	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 12:41	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 12:41	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 12:41	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 12:41	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 12:41	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 12:41	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 12:41	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 12:41	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 12:41	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 12:41	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 12:41	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 12:41	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 12:41	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 12:41	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 12:41	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 12:41	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 12:41	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 12:41	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 12:41	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 12:41	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 12:41	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 12:41	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 12:41	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 12:41	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 12:41	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 12:41	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 12:41	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 12:41	WG2167871
cis-1,2-Dichloroethene	23.0		0.0276	0.100	1	11/09/2023 12:41	WG2167871
trans-1,2-Dichloroethene	0.693		0.0572	0.200	1	11/09/2023 12:41	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 12:41	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 12:41	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 12:41	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 12:41	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 12:41	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 12:41	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 12:41	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 12:41	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 12:41	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 12:41	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 12:41	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 12:41	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 12:41	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 12:41	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 12:41	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 12:41	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 12:41	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 12:41	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 12:41	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 12:41	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 12:41	WG2167871
Tetrachloroethene	0.747		0.0280	0.100	1	11/09/2023 12:41	WG2167871
Toluene	0.0890	J	0.0500	0.200	1	11/09/2023 12:41	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 12:41	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 12:41	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 12:41	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 12:41	WG2167871
Trichloroethene	0.0500		0.0160	0.0400	1	11/09/2023 12:41	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 12:41	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 12:41	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 12:41	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 12:41	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 12:41	WG2167871
Vinyl chloride	22.4		0.0273	0.100	1	11/09/2023 12:41	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 12:41	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 12:41	WG2167871
Tetrahydrofuran	0.647		0.0900	0.500	1	11/09/2023 12:41	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 12:41	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 12:41	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 12:41	WG2167871
(S) Toluene-d8	*102*			*75.0-131*		*11/09/2023 12:41*	WG2167871

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/09/2023 12:41*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 12:41*	WG2167871

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	499000		8450	20000	1	11/09/2023 09:55	WG2166959

Sample Narrative:
L1673473-03 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	2830	T8	15.0	50.0	1	11/04/2023 13:33	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	42100		379	1000	1	11/04/2023 01:21	WG2164204
Nitrate	U		48.0	100	1	11/04/2023 01:21	WG2164204
Sulfate	1340	J	594	5000	1	11/04/2023 01:21	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11600		102	1000	1	11/21/2023 09:43	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5590		28.1	100	1	11/10/2023 19:40	WG2166496
Manganese	1150		0.704	5.00	1	11/10/2023 19:40	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	16800		2.87	6.78	10	11/09/2023 16:33	WG2168088
Ethane	332		0.296	1.29	1	11/09/2023 11:57	WG2165856
Ethene	17.3		0.422	1.27	1	11/09/2023 11:57	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 13:00	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 13:00	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 13:00	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 13:00	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 13:00	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 13:00	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 13:00	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 13:00	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 13:00	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 13:00	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 13:00	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 13:00	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 13:00	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 13:00	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 13:00	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 13:00	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 13:00	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 13:00	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 13:00	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 13:00	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 13:00	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 13:00	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 13:00	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 13:00	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 13:00	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 13:00	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 13:00	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 13:00	WG2167871
cis-1,2-Dichloroethene	9.58		0.0276	0.100	1	11/09/2023 13:00	WG2167871
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/09/2023 13:00	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 13:00	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 13:00	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 13:00	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 13:00	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 13:00	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 13:00	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 13:00	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 13:00	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 13:00	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 13:00	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 13:00	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 13:00	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 13:00	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 13:00	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 13:00	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 13:00	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 13:00	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 13:00	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 13:00	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 13:00	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 13:00	WG2167871
Tetrachloroethene	0.591		0.0280	0.100	1	11/09/2023 13:00	WG2167871
Toluene	0.0870	J	0.0500	0.200	1	11/09/2023 13:00	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 13:00	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 13:00	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 13:00	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 13:00	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 13:00	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 13:00	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 13:00	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 13:00	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 13:00	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 13:00	WG2167871
Vinyl chloride	13.1		0.0273	0.100	1	11/09/2023 13:00	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 13:00	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 13:00	WG2167871
Tetrahydrofuran	0.796		0.0900	0.500	1	11/09/2023 13:00	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 13:00	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 13:00	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 13:00	WG2167871
(S) Toluene-d8	*98.0*			*75.0-131*		*11/09/2023 13:00*	WG2167871

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/09/2023 13:00*	WG2167871
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/09/2023 13:00*	WG2167871

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	613000		8450	20000	1	11/09/2023 10:13	WG2166959

Sample Narrative:

L1673473-04 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	2750	T8	15.0	50.0	1	11/04/2023 13:34	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	49700		379	1000	1	11/04/2023 01:34	WG2164204
Nitrate	U		48.0	100	1	11/04/2023 01:34	WG2164204
Sulfate	U		594	5000	1	11/04/2023 01:34	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12300		102	1000	1	11/21/2023 10:05	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4020		28.1	100	1	11/10/2023 19:44	WG2166496
Manganese	2550		0.704	5.00	1	11/10/2023 19:44	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	25400		2.87	6.78	10	11/09/2023 16:53	WG2168088
Ethane	619		0.296	1.29	1	11/09/2023 12:07	WG2165856
Ethene	94.9		0.422	1.27	1	11/09/2023 12:07	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 13:18	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 13:18	WG2167871
Benzene	0.187		0.0160	0.0400	1	11/09/2023 13:18	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 13:18	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 13:18	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 13:18	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 13:18	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 13:18	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 13:18	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 13:18	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 13:18	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 13:18	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 13:18	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 13:18	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 13:18	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 13:18	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 13:18	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 13:18	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 13:18	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 13:18	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 13:18	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 13:18	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 13:18	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 13:18	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 13:18	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 13:18	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 13:18	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 13:18	WG2167871
cis-1,2-Dichloroethene	4.81		0.0276	0.100	1	11/09/2023 13:18	WG2167871
trans-1,2-Dichloroethene	0.381		0.0572	0.200	1	11/09/2023 13:18	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 13:18	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 13:18	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 13:18	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 13:18	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 13:18	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 13:18	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 13:18	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 13:18	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 13:18	WG2167871
Isopropylbenzene	0.149		0.0345	0.100	1	11/09/2023 13:18	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 13:18	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 13:18	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 13:18	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 13:18	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 13:18	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 13:18	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 13:18	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 13:18	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 13:18	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 13:18	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 13:18	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 13:18	WG2167871
Toluene	0.140	J	0.0500	0.200	1	11/09/2023 13:18	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 13:18	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 13:18	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 13:18	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 13:18	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 13:18	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 13:18	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 13:18	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 13:18	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 13:18	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 13:18	WG2167871
Vinyl chloride	4.70		0.0273	0.100	1	11/09/2023 13:18	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 13:18	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 13:18	WG2167871
Tetrahydrofuran	3.41		0.0900	0.500	1	11/09/2023 13:18	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 13:18	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 13:18	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 13:18	WG2167871
(S) Toluene-d8	*100*			*75.0-131*		*11/09/2023 13:18*	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/09/2023 13:18*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 13:18*	WG2167871

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1100000		8450	20000	1	11/09/2023 10:20	WG2166959

Sample Narrative:
L1673473-05 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	13900	T8	300	1000	20	11/04/2023 13:34	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	88000		379	1000	1	11/04/2023 04:45	WG2164210
Nitrate	72.8	B J	48.0	100	1	11/04/2023 04:45	WG2164210
Sulfate	U		594	5000	1	11/04/2023 04:45	WG2164210

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	20700		102	1000	1	11/21/2023 10:28	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	17600		28.1	100	1	11/10/2023 19:47	WG2166496
Manganese	3040		0.704	5.00	1	11/10/2023 19:47	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	31800		2.87	6.78	10	11/09/2023 17:01	WG2168088
Ethane	528		0.296	1.29	1	11/09/2023 12:17	WG2165856
Ethene	U		0.422	1.27	1	11/09/2023 12:17	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 13:37	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 13:37	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 13:37	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 13:37	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 13:37	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 13:37	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 13:37	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 13:37	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 13:37	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 13:37	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 13:37	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 13:37	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 13:37	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 13:37	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 13:37	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 13:37	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 13:37	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 13:37	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 13:37	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 13:37	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 13:37	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 13:37	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 13:37	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 13:37	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 13:37	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 13:37	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 13:37	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 13:37	WG2167871
cis-1,2-Dichloroethene	2.95		0.0276	0.100	1	11/09/2023 13:37	WG2167871
trans-1,2-Dichloroethene	0.876		0.0572	0.200	1	11/09/2023 13:37	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 13:37	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 13:37	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 13:37	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 13:37	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 13:37	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 13:37	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 13:37	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 13:37	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 13:37	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 13:37	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 13:37	WG2167871
2-Butanone (MEK)	0.553	J	0.500	1.00	1	11/09/2023 13:37	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 13:37	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 13:37	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 13:37	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 13:37	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 13:37	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 13:37	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 13:37	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 13:37	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 13:37	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 13:37	WG2167871
Toluene	0.0560	J	0.0500	0.200	1	11/09/2023 13:37	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 13:37	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 13:37	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 13:37	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 13:37	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 13:37	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 13:37	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 13:37	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 13:37	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 13:37	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 13:37	WG2167871
Vinyl chloride	2.58		0.0273	0.100	1	11/09/2023 13:37	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 13:37	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 13:37	WG2167871
Tetrahydrofuran	0.423	J	0.0900	0.500	1	11/09/2023 13:37	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 13:37	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 13:37	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 13:37	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 13:37*	WG2167871

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/09/2023 13:37*	WG2167871
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/09/2023 13:37*	WG2167871

Method Blank (MB)

(MB) R3997849-2 11/09/23 08:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673484-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-01 11/09/23 09:14 • (DUP) R3997849-3 11/09/23 09:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	593000	532000	1	10.7		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673484-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-07 11/09/23 11:21 • (DUP) R3997849-4 11/09/23 11:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	385000	375000	1	2.52		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997849-1 11/09/23 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	105000	105	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3995436-1 11/04/23 13:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ferrous Iron	U		15.0	50.0

L1673473-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673473-03 11/04/23 13:33 • (DUP) R3995436-5 11/04/23 13:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	2830	2720	1	4.00		20

Laboratory Control Sample (LCS)

(LCS) R3995436-2 11/04/23 13:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Ferrous Iron	1000	999	99.9	85.0-115	

L1673440-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-03 11/04/23 13:31 • (MS) R3995436-3 11/04/23 13:32 • (MSD) R3995436-4 11/04/23 13:32

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Ferrous Iron	20000	11400	30700	30500	96.5	95.4	20	80.0-120			0.660	20

Method Blank (MB)

(MB) R3997288-1 11/03/23 19:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	610	J	379	1000
Nitrate	49.7	J	48.0	100
Sulfate	U		594	5000

L1673438-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673438-01 11/03/23 20:28 • (DUP) R3997288-3 11/03/23 20:40

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	11400	11500	1	0.414		15
Nitrate	188	178	1	5.42		15
Sulfate	7000	6960	1	0.538		15

L1673464-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673464-01 11/03/23 23:52 • (DUP) R3997288-6 11/04/23 00:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2790	2680	1	4.00		15
Nitrate	972	973	1	0.134		15
Sulfate	27700	27600	1	0.371		15

Laboratory Control Sample (LCS)

(LCS) R3997288-2 11/03/23 19:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40900	102	80.0-120	
Nitrate	8000	7560	94.5	80.0-120	
Sulfate	40000	39100	97.7	80.0-120	

L1673438-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673438-01 11/03/23 20:28 • (MS) R3997288-4 11/03/23 20:53 • (MSD) R3997288-5 11/03/23 21:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	11400	50400	48600	97.4	92.9	1	80.0-120			3.67	15
Nitrate	8000	188	7990	7860	97.6	96.0	1	80.0-120			1.64	15
Sulfate	40000	7000	46200	44800	98.1	94.6	1	80.0-120			3.08	15

L1673464-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1673464-01 11/03/23 23:52 • (MS) R3997288-7 11/04/23 00:43

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	2790	43800	103	1	80.0-120	
Nitrate	8000	972	8640	95.8	1	80.0-120	
Sulfate	40000	27700	62200	86.2	1	80.0-120	

Method Blank (MB)

(MB) R3997293-1 11/04/23 02:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Nitrate	49.9	J	48.0	100
Sulfate	U		594	5000

L1673440-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-03 11/04/23 04:07 • (DUP) R3997293-5 11/04/23 04:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	76600	77800	1	1.65		15
Nitrate	51.4	U	1	200	P1	15
Sulfate	657	638	1	2.84	J	15

Laboratory Control Sample (LCS)

(LCS) R3997293-2 11/04/23 03:03

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39800	99.6	80.0-120	
Nitrate	8000	7590	94.9	80.0-120	
Sulfate	40000	39000	97.6	80.0-120	

L1673402-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673402-14 11/04/23 03:16 • (MS) R3997293-3 11/04/23 03:28 • (MSD) R3997293-4 11/04/23 03:41

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	40000	131000	146000	145000	35.3	34.5	1	80.0-120	J6	J6	0.200	15
Nitrate	8000	U	7800	7910	97.5	98.9	1	80.0-120			1.42	15
Sulfate	40000	102000	122000	122000	50.6	50.7	1	80.0-120	J6	J6	0.0259	15

Method Blank (MB)

(MB) R4002870-2 11/21/23 01:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	141	J	102	1000

L1673438-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673438-08 11/21/23 01:48 • (DUP) R4002870-3 11/21/23 02:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	6500	6570	1	1.15		20

L1673459-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673459-01 11/21/23 06:52 • (DUP) R4002870-6 11/21/23 07:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2050	2210	1	7.52		20

Laboratory Control Sample (LCS)

(LCS) R4002870-1 11/21/23 01:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23600	94.2	85.0-115	

L1673441-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673441-02 11/21/23 04:04 • (MS) R4002870-4 11/21/23 04:27 • (MSD) R4002870-5 11/21/23 04:50

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	14600	38700	38800	96.1	96.6	1	85.0-115			0.310	20

L1673473-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673473-02 11/21/23 07:56 • (MS) R4002870-7 11/21/23 08:18 • (MSD) R4002870-8 11/21/23 08:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	11700	35200	35700	94.2	96.2	1	85.0-115			1.41	20

Method Blank (MB)

(MB) R3998485-1 11/10/23 18:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3998485-2 11/10/23 18:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1150	115	80.0-120	
Manganese	50.0	55.7	111	80.0-120	

L1673440-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-01 11/10/23 18:48 • (MS) R3998485-4 11/10/23 18:55 • (MSD) R3998485-5 11/10/23 18:58

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	3170	4270	4330	109	115	1	75.0-125			1.43	20
Manganese	50.0	1390	1390	1480	7.51	181	1	75.0-125	V	V	6.05	20

Method Blank (MB)

(MB) R3997673-2 11/09/23 09:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-01 11/09/23 09:52 • (DUP) R3997673-3 11/09/23 11:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	6.25	6.19	1	0.965		20
Ethene	U	U	1	0.000		20

L1673511-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-04 11/09/23 12:42 • (DUP) R3997673-4 11/09/23 13:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3997673-1 11/09/23 09:12 • (LCSD) R3997673-5 11/09/23 13:13

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Ethane	129	110	112	85.3	86.8	85.0-115			1.80	20
Ethene	127	111	112	87.4	88.2	85.0-115			0.897	20

Method Blank (MB)

(MB) R3997931-2 11/09/23 15:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1673440-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-01 11/09/23 15:21 • (DUP) R3997931-3 11/09/23 16:45

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	27500	26900	10	2.21		20

L1673511-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-08 11/09/23 17:15 • (DUP) R3997931-4 11/09/23 17:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	7520	7510	10	0.133		20

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

(LCS) R3997931-1 11/09/23 15:08 • (LCSD) R3997931-5 11/09/23 17:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.0	60.9	94.4	89.8	85.0-115			4.96	20

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	36.3	145	10.0-160	
Acrylonitrile	25.0	30.0	120	45.0-153	
Benzene	5.00	5.83	117	70.0-123	
Bromobenzene	5.00	5.61	112	73.0-121	
Bromodichloromethane	5.00	5.37	107	73.0-121	
Bromoform	5.00	5.37	107	64.0-132	
Bromomethane	5.00	4.47	89.4	56.0-147	
n-Butylbenzene	5.00	4.49	89.8	68.0-135	
sec-Butylbenzene	5.00	6.03	121	74.0-130	
tert-Butylbenzene	5.00	5.48	110	75.0-127	
Carbon tetrachloride	5.00	5.36	107	66.0-128	
Chlorobenzene	5.00	5.61	112	76.0-128	
Chlorodibromomethane	5.00	5.73	115	74.0-127	
Chloroethane	5.00	6.04	121	61.0-134	
Chloroform	5.00	5.62	112	72.0-123	
Chloromethane	5.00	5.10	102	51.0-138	
2-Chlorotoluene	5.00	5.11	102	75.0-124	
4-Chlorotoluene	5.00	5.76	115	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	5.26	105	59.0-130	
1,2-Dibromoethane	5.00	5.56	111	74.0-128	
Dibromomethane	5.00	5.20	104	75.0-122	
1,2-Dichlorobenzene	5.00	5.54	111	76.0-124	
1,3-Dichlorobenzene	5.00	5.47	109	76.0-125	
1,4-Dichlorobenzene	5.00	5.34	107	77.0-121	
Dichlorodifluoromethane	5.00	5.02	100	43.0-156	
1,1-Dichloroethane	5.00	5.55	111	70.0-127	
1,2-Dichloroethane	5.00	5.14	103	65.0-131	
1,1-Dichloroethene	5.00	6.29	126	65.0-131	
cis-1,2-Dichloroethene	5.00	5.65	113	73.0-125	
trans-1,2-Dichloroethene	5.00	5.73	115	71.0-125	
1,2-Dichloropropane	5.00	5.74	115	74.0-125	
1,1-Dichloropropene	5.00	5.67	113	73.0-125	
1,3-Dichloropropane	5.00	5.67	113	80.0-125	
cis-1,3-Dichloropropene	5.00	5.77	115	76.0-127	
trans-1,3-Dichloropropene	5.00	5.45	109	73.0-127	
2,2-Dichloropropane	5.00	6.47	129	59.0-135	
Di-isopropyl ether	5.00	5.79	116	60.0-136	
Ethylbenzene	5.00	5.78	116	74.0-126	
Hexachloro-1,3-butadiene	5.00	6.51	130	57.0-150	
Isopropylbenzene	5.00	5.50	110	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	5.15	103	72.0-133	
2-Butanone (MEK)	25.0	33.4	134	30.0-160	
Methylene Chloride	5.00	5.50	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	30.0	120	56.0-143	
Methyl tert-butyl ether	5.00	5.73	115	66.0-132	
Naphthalene	5.00	4.99	99.8	59.0-130	
n-Propylbenzene	5.00	5.48	110	74.0-126	
Styrene	5.00	5.50	110	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.50	110	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.25	105	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	5.68	114	61.0-139	
Tetrachloroethene	5.00	5.85	117	70.0-136	
Toluene	5.00	5.76	115	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.72	94.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.96	99.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.98	120	69.0-126	
1,1,2-Trichloroethane	5.00	5.48	110	78.0-123	
Trichloroethene	5.00	5.68	114	76.0-126	
Trichlorofluoromethane	5.00	4.99	99.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.10	102	67.0-129	
1,2,4-Trimethylbenzene	5.00	5.71	114	70.0-126	
1,2,3-Trimethylbenzene	5.00	5.42	108	74.0-124	
1,3,5-Trimethylbenzene	5.00	5.95	119	73.0-127	
Vinyl chloride	5.00	5.74	115	63.0-134	
Xylenes, Total	15.0	16.8	112	72.0-127	
Ethyl Ether	5.00	5.72	114	64.0-137	
Tetrahydrofuran	5.00	4.98	99.6	37.0-146	
Iodomethane	25.0	27.3	109	74.0-134	
Allyl chloride	25.0	29.0	116	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	5.93	119	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

Method Blank (MB)

(MB) R3998697-3 11/10/23 23:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
Vinyl chloride	U		0.0273	0.100
(S) Toluene-d8	*99.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*

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

(LCS) R3998697-1 11/10/23 21:40 • (LCSD) R3998697-2 11/10/23 22:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,1-Dichloroethene	5.00	5.38	5.18	108	104	65.0-131			3.79	20
cis-1,2-Dichloroethene	5.00	5.28	5.27	106	105	73.0-125			0.190	20
Vinyl chloride	5.00	5.40	5.05	108	101	63.0-134			6.70	20
(S) Toluene-d8				*102*	*99.1*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.0*	*95.0*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-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.

Chain of Custody Page 1 of 1

Pace® PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1673473

E218

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 Can
Shipped Via:

PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project #: 443022-1413001.10.70

Lab Project #: PESENVSWA-ALP

Collected by (print): Osmin M.

Site/Facility ID #

P.O. #: 443018-1413001.~~05.601~~ 10.701

Collected by (signature): [signature]

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

Quote #

Date Results Needed: STD

Immediately Packed on Ice N ___ Y ✓

Analysis / Container / Preservative:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-166-110223	Grab	GW	—	11/2/23	924	10	X	X		X	X	X	X		-01
MW-168-110223	↓	GW	↓	↓	1037	↓	X	X		X	X	X	X		-02
MW-999-110223	↓	GW	↓	↓	1037	↓	X	X		X	X	X	X		-03
MW-173-110223	↓	GW	↓	↓	1216	↓	X	X		X	X	X	X		-04
MW-175-110223	↓	GW	↓	↓	1324	↓	X	X		X	X	X	X		-05
		GW													
		GW													
		GW													
		GW													
		GW													

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

Remarks: Tier 2 lab QA/QC (batch QC ok)

pH ______ Temp ______
Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 6643 4313 3209

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeOH TBR
[signature]	11/2/23	1700		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C 4.5+0=4.5 — Bottles Received: 50
[signature]				
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 11.3.23 Time: 0900

PH-10BDH4321 TRC-2352362
CR6-20221V

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

November 20, 2023

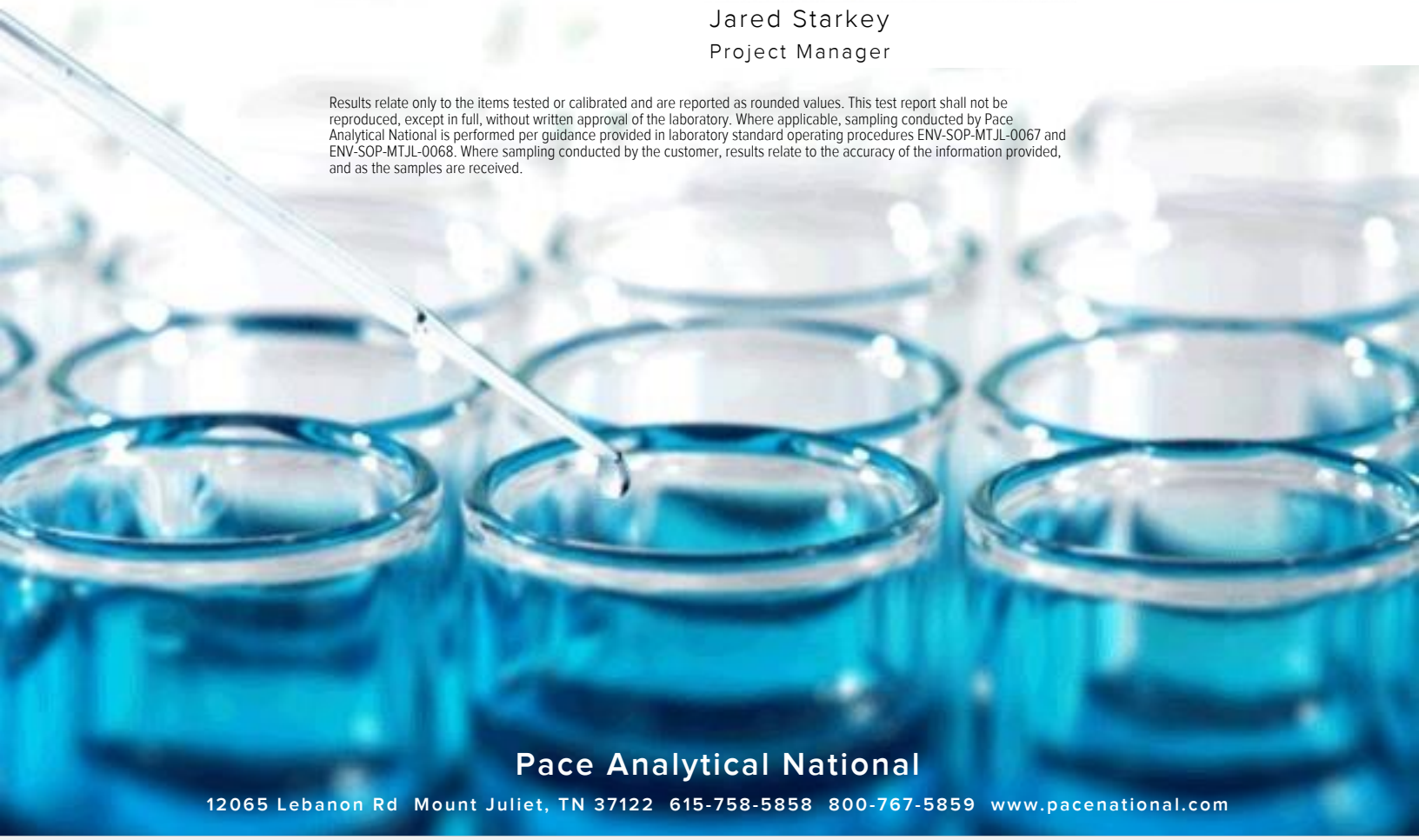
PES Environmental, Inc.- WA

Sample Delivery Group:	L1673835
Samples Received:	11/04/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

R-MW6-110323 L1673835-01 GW

Collected by	Collected date/time	Received date/time
	11/03/23 15:20	11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167358	1	11/09/23 13:31	11/09/23 13:31	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2164521	1	11/04/23 18:41	11/04/23 18:41	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172259	1	11/19/23 01:16	11/19/23 01:16	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 19:57	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165856	1	11/09/23 13:04	11/09/23 13:04	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168088	10	11/09/23 17:32	11/09/23 17:32	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 14:14	11/09/23 14:14	KSD	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.

Jared Starkey
Project Manager

Sample Delivery Group (SDG) Narrative

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

Lab Sample ID	Project Sample ID	Method
L1673835-01	R-MW6-110323	9060A

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	840000		8450	20000	1	11/09/2023 13:31	WG2167358

Sample Narrative:

L1673835-01 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10100		379	1000	1	11/04/2023 18:41	WG2164521
Nitrate	U		48.0	100	1	11/04/2023 18:41	WG2164521
Sulfate	22900		594	5000	1	11/04/2023 18:41	WG2164521

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5770		102	1000	1	11/19/2023 01:16	WG2172259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	15700		28.1	100	1	11/10/2023 19:57	WG2166496
Manganese	4710		0.704	5.00	1	11/10/2023 19:57	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	14400		2.87	6.78	10	11/09/2023 17:32	WG2168088
Ethane	17.7		0.296	1.29	1	11/09/2023 13:04	WG2165856
Ethene	U		0.422	1.27	1	11/09/2023 13:04	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 14:14	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 14:14	WG2167871
Benzene	0.0840		0.0160	0.0400	1	11/09/2023 14:14	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 14:14	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 14:14	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 14:14	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 14:14	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 14:14	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 14:14	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 14:14	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 14:14	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 14:14	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 14:14	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 14:14	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 14:14	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 14:14	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 14:14	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 14:14	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 14:14	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 14:14	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 14:14	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 14:14	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 14:14	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 14:14	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 14:14	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 14:14	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 14:14	WG2167871
1,1-Dichloroethene	0.0550	J	0.0200	0.100	1	11/09/2023 14:14	WG2167871
cis-1,2-Dichloroethene	4.66		0.0276	0.100	1	11/09/2023 14:14	WG2167871
trans-1,2-Dichloroethene	0.180	J	0.0572	0.200	1	11/09/2023 14:14	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 14:14	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 14:14	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 14:14	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 14:14	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 14:14	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 14:14	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 14:14	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 14:14	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 14:14	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 14:14	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 14:14	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 14:14	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 14:14	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 14:14	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 14:14	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 14:14	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 14:14	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 14:14	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 14:14	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 14:14	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 14:14	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 14:14	WG2167871
Toluene	0.0610	J	0.0500	0.200	1	11/09/2023 14:14	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 14:14	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 14:14	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 14:14	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 14:14	WG2167871
Trichloroethene	0.100		0.0160	0.0400	1	11/09/2023 14:14	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 14:14	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 14:14	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 14:14	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 14:14	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 14:14	WG2167871
Vinyl chloride	1.81		0.0273	0.100	1	11/09/2023 14:14	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 14:14	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 14:14	WG2167871
Tetrahydrofuran	1.29		0.0900	0.500	1	11/09/2023 14:14	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 14:14	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 14:14	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 14:14	WG2167871
(S) Toluene-d8	*96.5*			*75.0-131*		*11/09/2023 14:14*	WG2167871
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/09/2023 14:14*	WG2167871
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/09/2023 14:14*	WG2167871

Method Blank (MB)

(MB) R3997855-2 11/09/23 12:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673830-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673830-01 11/09/23 13:07 • (DUP) R3997855-4 11/09/23 13:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	114000	115000	1	0.600		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673848-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1673848-02 11/09/23 15:13 • (DUP) R3997855-6 11/09/23 15:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	109000	108000	1	0.785		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997855-1 11/09/23 12:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	104000	104	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997776-1 11/04/23 10:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1673842-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1673842-05 11/04/23 19:08 • (DUP) R3997776-3 11/04/23 19:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	109000	109000	1	0.409		15
Nitrate	12200	12100	1	0.587		15
Sulfate	110000	109000	1	0.479		15

L1673842-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1673842-11 11/04/23 21:24 • (DUP) R3997776-6 11/04/23 21:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	503000	503000	1	0.0418	E	15
Nitrate	9880	9770	1	1.08		15
Sulfate	172000	170000	1	1.05		15

Laboratory Control Sample (LCS)

(LCS) R3997776-2 11/04/23 10:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40000	100	80.0-120	
Nitrate	8000	7870	98.4	80.0-120	
Sulfate	40000	38300	95.6	80.0-120	

L1673842-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673842-05 11/04/23 19:08 • (MS) R3997776-4 11/04/23 19:35 • (MSD) R3997776-5 11/04/23 19:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	109000	129000	128000	48.7	47.9	1	80.0-120	J6	J6	0.235	15
Nitrate	8000	12200	18300	18200	75.9	75.5	1	80.0-120	J6	J6	0.197	15
Sulfate	40000	110000	130000	129000	49.9	49.1	1	80.0-120	J6	J6	0.253	15

L1673842-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673842-11 11/04/23 21:24 • (MS) R3997776-7 11/04/23 21:51 • (MSD) R3997776-8 11/04/23 22:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	503000	443000	444000	0.000	0.000	1	80.0-120	E V	E V	0.284	15
Nitrate	8000	9880	16400	16400	81.2	81.3	1	80.0-120			0.0183	15
Sulfate	40000	172000	180000	179000	20.0	19.9	1	80.0-120	V	V	0.0139	15

Method Blank (MB)

(MB) R4002100-2 11/18/23 15:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	286	J	102	1000

L1673644-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1673644-14 11/18/23 17:27 • (DUP) R4002100-3 11/18/23 18:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2250	2070	1	8.19		20

L1673797-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673797-01 11/18/23 21:15 • (DUP) R4002100-6 11/18/23 21:32

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	985	1080	1	9.62		20

Laboratory Control Sample (LCS)

(LCS) R4002100-1 11/18/23 14:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	26600	106	85.0-115	

L1673644-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673644-17 11/18/23 19:14 • (MS) R4002100-4 11/18/23 19:37 • (MSD) R4002100-5 11/18/23 20:00

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	3960	29700	29900	103	104	1	85.0-115			0.403	20

L1673817-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673817-01 11/18/23 22:06 • (MS) R4002100-7 11/18/23 22:28 • (MSD) R4002100-8 11/18/23 22:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	2400	26600	25800	96.9	93.7	1	85.0-115			3.05	20

Method Blank (MB)

(MB) R3998485-1 11/10/23 18:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3998485-2 11/10/23 18:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1150	115	80.0-120	
Manganese	50.0	55.7	111	80.0-120	

L1673440-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-01 11/10/23 18:48 • (MS) R3998485-4 11/10/23 18:55 • (MSD) R3998485-5 11/10/23 18:58

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	3170	4270	4330	109	115	1	75.0-125			1.43	20
Manganese	50.0	1390	1390	1480	7.51	181	1	75.0-125	V	V	6.05	20

Method Blank (MB)

(MB) R3997673-2 11/09/23 09:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673511-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-01 11/09/23 09:52 • (DUP) R3997673-3 11/09/23 11:48

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethane	6.25	6.19	1	0.965		20
Ethene	U	U	1	0.000		20

L1673511-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-04 11/09/23 12:42 • (DUP) R3997673-4 11/09/23 13:10

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3997673-1 11/09/23 09:12 • (LCSD) R3997673-5 11/09/23 13:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethane	129	110	112	85.3	86.8	85.0-115			1.80	20
Ethene	127	111	112	87.4	88.2	85.0-115			0.897	20

Method Blank (MB)

(MB) R3997931-2 11/09/23 15:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1673440-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673440-01 11/09/23 15:21 • (DUP) R3997931-3 11/09/23 16:45

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	27500	26900	10	2.21		20

L1673511-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1673511-08 11/09/23 17:15 • (DUP) R3997931-4 11/09/23 17:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	7520	7510	10	0.133		20

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

(LCS) R3997931-1 11/09/23 15:08 • (LCSD) R3997931-5 11/09/23 17:58

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.0	60.9	94.4	89.8	85.0-115			4.96	20

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	36.3	145	10.0-160	
Acrylonitrile	25.0	30.0	120	45.0-153	
Benzene	5.00	5.83	117	70.0-123	
Bromobenzene	5.00	5.61	112	73.0-121	
Bromodichloromethane	5.00	5.37	107	73.0-121	
Bromoform	5.00	5.37	107	64.0-132	
Bromomethane	5.00	4.47	89.4	56.0-147	
n-Butylbenzene	5.00	4.49	89.8	68.0-135	
sec-Butylbenzene	5.00	6.03	121	74.0-130	
tert-Butylbenzene	5.00	5.48	110	75.0-127	
Carbon tetrachloride	5.00	5.36	107	66.0-128	
Chlorobenzene	5.00	5.61	112	76.0-128	
Chlorodibromomethane	5.00	5.73	115	74.0-127	
Chloroethane	5.00	6.04	121	61.0-134	
Chloroform	5.00	5.62	112	72.0-123	
Chloromethane	5.00	5.10	102	51.0-138	
2-Chlorotoluene	5.00	5.11	102	75.0-124	
4-Chlorotoluene	5.00	5.76	115	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	5.26	105	59.0-130	
1,2-Dibromoethane	5.00	5.56	111	74.0-128	
Dibromomethane	5.00	5.20	104	75.0-122	
1,2-Dichlorobenzene	5.00	5.54	111	76.0-124	
1,3-Dichlorobenzene	5.00	5.47	109	76.0-125	
1,4-Dichlorobenzene	5.00	5.34	107	77.0-121	
Dichlorodifluoromethane	5.00	5.02	100	43.0-156	
1,1-Dichloroethane	5.00	5.55	111	70.0-127	
1,2-Dichloroethane	5.00	5.14	103	65.0-131	
1,1-Dichloroethene	5.00	6.29	126	65.0-131	
cis-1,2-Dichloroethene	5.00	5.65	113	73.0-125	
trans-1,2-Dichloroethene	5.00	5.73	115	71.0-125	
1,2-Dichloropropane	5.00	5.74	115	74.0-125	
1,1-Dichloropropene	5.00	5.67	113	73.0-125	
1,3-Dichloropropane	5.00	5.67	113	80.0-125	
cis-1,3-Dichloropropene	5.00	5.77	115	76.0-127	
trans-1,3-Dichloropropene	5.00	5.45	109	73.0-127	
2,2-Dichloropropane	5.00	6.47	129	59.0-135	
Di-isopropyl ether	5.00	5.79	116	60.0-136	
Ethylbenzene	5.00	5.78	116	74.0-126	
Hexachloro-1,3-butadiene	5.00	6.51	130	57.0-150	
Isopropylbenzene	5.00	5.50	110	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	5.15	103	72.0-133	
2-Butanone (MEK)	25.0	33.4	134	30.0-160	
Methylene Chloride	5.00	5.50	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	30.0	120	56.0-143	
Methyl tert-butyl ether	5.00	5.73	115	66.0-132	
Naphthalene	5.00	4.99	99.8	59.0-130	
n-Propylbenzene	5.00	5.48	110	74.0-126	
Styrene	5.00	5.50	110	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.50	110	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.25	105	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	5.68	114	61.0-139	
Tetrachloroethene	5.00	5.85	117	70.0-136	
Toluene	5.00	5.76	115	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.72	94.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.96	99.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.98	120	69.0-126	
1,1,2-Trichloroethane	5.00	5.48	110	78.0-123	
Trichloroethene	5.00	5.68	114	76.0-126	
Trichlorofluoromethane	5.00	4.99	99.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.10	102	67.0-129	
1,2,4-Trimethylbenzene	5.00	5.71	114	70.0-126	
1,2,3-Trimethylbenzene	5.00	5.42	108	74.0-124	
1,3,5-Trimethylbenzene	5.00	5.95	119	73.0-127	
Vinyl chloride	5.00	5.74	115	63.0-134	
Xylenes, Total	15.0	16.8	112	72.0-127	
Ethyl Ether	5.00	5.72	114	64.0-137	
Tetrahydrofuran	5.00	4.98	99.6	37.0-146	
Iodomethane	25.0	27.3	109	74.0-134	
Allyl chloride	25.0	29.0	116	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	5.93	119	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

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

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to:
~~Bill Haldeman~~ Erik Hedberg

Email To: erik.hedberg@nv5.com
jessica.babb@nv5.com;natalie.wisdom@nv5.com

Project Description:
American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project #
443022-1413001.10.70

Lab Project #
PESENVSWA-ALP

Collected by (print):

Site/Facility ID #

P.O. #
443018-1413001.05.601

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Date Results Needed

Quote #

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				
R-MW6-110323	Grab	GW	—	11/3/23	1520	10	X	X		X	X	X	X				-01
		GW				10 HR											
		GW				N/A											
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1673535

Tab L-191

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 cam

Shipped Via:

Remarks | Sample # (lab only)

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

Remarks: Tier 2 lab QA/QC required (batch QC ok)

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6043429[illegible]5460

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	11/3/23	1640	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			Hailey Kabatra

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp CC 4.9 IR 4.9 Bottles Received: 10

Date: 11/4/23 Time: 0900

If preservation required by Login: Date/Time

PH-10BDH4321 TRC 2352362
CR6-20221V

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

February 09, 2024

Revised Report

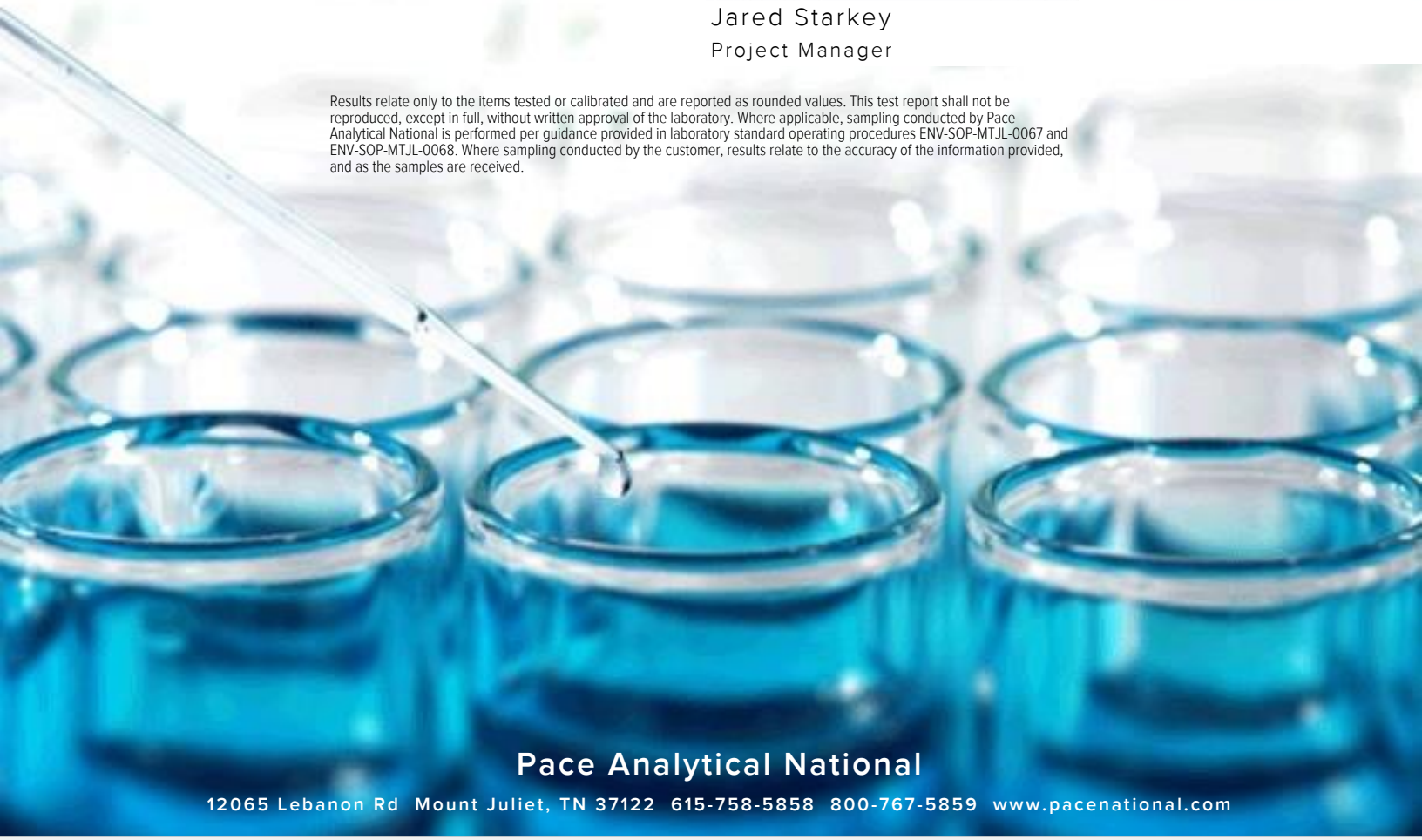
PES Environmental, Inc.- WA

Sample Delivery Group:	L1673863
Samples Received:	11/04/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-160-110323 L1673863-01 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 10:56
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 14:51	11/09/23 14:51	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168846	1	11/11/23 05:52	11/11/23 05:52	JAH	Mt. Juliet, TN

MW-174-110323 L1673863-02 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 13:42
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167358	1	11/09/23 14:40	11/09/23 14:40	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168330	1	11/10/23 09:37	11/10/23 09:37	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172266	1	11/20/23 12:37	11/20/23 12:37	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 20:00	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2164806	1	11/06/23 17:20	11/06/23 17:20	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165659	10	11/06/23 19:05	11/06/23 19:05	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	5	11/09/23 16:42	11/09/23 16:42	KSD	Mt. Juliet, TN

MW107-110323 L1673863-03 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 14:40
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166962	1	11/08/23 18:45	11/08/23 18:45	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168330	1	11/10/23 09:49	11/10/23 09:49	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172266	1	11/20/23 12:59	11/20/23 12:59	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 20:03	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2164806	1	11/06/23 17:26	11/06/23 17:26	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165659	10	11/06/23 19:12	11/06/23 19:12	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 15:10	11/09/23 15:10	KSD	Mt. Juliet, TN

MW124-110323 L1673863-04 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 09:44
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 15:28	11/09/23 15:28	KSD	Mt. Juliet, TN

MW-301-110323 L1673863-05 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 10:34
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 15:47	11/09/23 15:47	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2168846	1	11/11/23 06:11	11/11/23 06:11	JAH	Mt. Juliet, TN

MW-993-110323 L1673863-06 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 12:00
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169072	1	11/10/23 23:31	11/10/23 23:31	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2170135	1	11/13/23 20:54	11/13/23 20:54	DWR	Mt. Juliet, TN

MW-188-110323 L1673863-07 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 14:59
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167358	1	11/09/23 14:34	11/09/23 14:34	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168330	1	11/10/23 10:02	11/10/23 10:02	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172266	1	11/20/23 13:18	11/20/23 13:18	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 20:06	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2164806	1	11/06/23 17:34	11/06/23 17:34	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169072	1	11/10/23 23:50	11/10/23 23:50	DWR	Mt. Juliet, TN

MW-189-110323 L1673863-08 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 10:15
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167358	1	11/09/23 14:47	11/09/23 14:47	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168330	1	11/10/23 10:40	11/10/23 10:40	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172266	1	11/20/23 13:55	11/20/23 13:55	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 20:10	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2164806	1	11/06/23 17:45	11/06/23 17:45	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169072	1	11/11/23 00:09	11/11/23 00:09	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2170135	1	11/13/23 21:13	11/13/23 21:13	DWR	Mt. Juliet, TN

MW-169-110323 L1673863-09 GW

Collected by: Osmin M.
Collected date/time: 11/03/23 13:31
Received date/time: 11/04/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167358	1	11/09/23 14:54	11/09/23 14:54	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168330	1	11/10/23 10:53	11/10/23 10:53	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2172266	1	11/20/23 14:18	11/20/23 14:18	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166496	1	11/10/23 02:04	11/10/23 20:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2164806	1	11/06/23 17:52	11/06/23 17:52	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165659	10	11/06/23 19:18	11/06/23 19:18	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169072	1	11/11/23 00:28	11/11/23 00:28	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2170135	1	11/13/23 21:32	11/13/23 21:32	DWR	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/22/23 09:29

Project Narrative

ID Corrections, removed erroneous T8 qualifiers.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 05:52	WG2168846
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 14:51	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 14:51	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 14:51	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 14:51	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 14:51	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 14:51	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 14:51	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 14:51	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 14:51	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 14:51	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 14:51	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 14:51	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 14:51	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 14:51	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 14:51	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 14:51	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 14:51	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 14:51	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 14:51	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 14:51	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 14:51	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 14:51	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 14:51	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 14:51	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 14:51	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 14:51	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 14:51	WG2167871
cis-1,2-Dichloroethene	1.82		0.0276	0.100	1	11/09/2023 14:51	WG2167871
trans-1,2-Dichloroethene	0.0640	J	0.0572	0.200	1	11/09/2023 14:51	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 14:51	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 14:51	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 14:51	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 14:51	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 14:51	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 14:51	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 14:51	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 14:51	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 14:51	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 14:51	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 14:51	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 14:51	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 14:51	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 14:51	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 14:51	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 14:51	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 14:51	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 14:51	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 14:51	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 14:51	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 14:51	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 14:51	WG2167871
Toluene	U		0.0500	0.200	1	11/09/2023 14:51	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 14:51	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 14:51	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 14:51	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 14:51	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 14:51	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 14:51	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 14:51	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 14:51	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 14:51	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 14:51	WG2167871
Vinyl chloride	2.03		0.0273	0.100	1	11/09/2023 14:51	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 14:51	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 14:51	WG2167871
Tetrahydrofuran	U		0.0900	0.500	1	11/09/2023 14:51	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 14:51	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 14:51	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 14:51	WG2167871
(S) Toluene-d8	*100*			*75.0-131*		*11/09/2023 14:51*	WG2167871
(S) Toluene-d8	*99.8*			*75.0-131*		*11/11/2023 05:52*	WG2168846
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/09/2023 14:51*	WG2167871
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*11/11/2023 05:52*	WG2168846
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/09/2023 14:51*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/11/2023 05:52*	WG2168846

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1150000		8450	20000	1	11/09/2023 14:40	WG2167358

Sample Narrative:

L1673863-02 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	98200	T8	379	1000	1	11/10/2023 09:37	WG2168330
Nitrate	91.0	B J T8	48.0	100	1	11/10/2023 09:37	WG2168330
Sulfate	2720	J T8	594	5000	1	11/10/2023 09:37	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	30900		102	1000	1	11/20/2023 12:37	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16400		28.1	100	1	11/10/2023 20:00	WG2166496
Manganese	4090		0.704	5.00	1	11/10/2023 20:00	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	29100		2.87	6.78	10	11/06/2023 19:05	WG2165659
Ethane	180		0.296	1.29	1	11/06/2023 17:20	WG2164806
Ethene	58.6		0.422	1.27	1	11/06/2023 17:20	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		2.74	5.00	5	11/09/2023 16:42	WG2167871
Acrylonitrile	U		0.380	2.50	5	11/09/2023 16:42	WG2167871
Benzene	U		0.0800	0.200	5	11/09/2023 16:42	WG2167871
Bromobenzene	U		0.210	2.50	5	11/09/2023 16:42	WG2167871
Bromodichloromethane	U		0.158	0.500	5	11/09/2023 16:42	WG2167871
Bromoform	U		1.20	5.00	5	11/09/2023 16:42	WG2167871
Bromomethane	U		0.740	2.50	5	11/09/2023 16:42	WG2167871
n-Butylbenzene	U		0.765	2.50	5	11/09/2023 16:42	WG2167871
sec-Butylbenzene	U		0.505	2.50	5	11/09/2023 16:42	WG2167871
tert-Butylbenzene	U		0.310	1.00	5	11/09/2023 16:42	WG2167871
Carbon tetrachloride	U		0.216	1.00	5	11/09/2023 16:42	WG2167871
Chlorobenzene	U		0.115	0.500	5	11/09/2023 16:42	WG2167871
Chlorodibromomethane	U		0.0900	0.500	5	11/09/2023 16:42	WG2167871
Chloroethane	U		0.216	1.00	5	11/09/2023 16:42	WG2167871
Chloroform	U		0.0830	0.500	5	11/09/2023 16:42	WG2167871
Chloromethane	U		0.278	2.50	5	11/09/2023 16:42	WG2167871
2-Chlorotoluene	U		0.184	0.500	5	11/09/2023 16:42	WG2167871
4-Chlorotoluene	U		0.226	1.00	5	11/09/2023 16:42	WG2167871
1,2-Dibromo-3-Chloropropane	U		1.02	5.00	5	11/09/2023 16:42	WG2167871
1,2-Dibromoethane	U		0.105	0.500	5	11/09/2023 16:42	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.200	1.00	5	11/09/2023 16:42	WG2167871
1,2-Dichlorobenzene	U		0.290	1.00	5	11/09/2023 16:42	WG2167871
1,3-Dichlorobenzene	U		0.340	1.00	5	11/09/2023 16:42	WG2167871
1,4-Dichlorobenzene	U		0.394	1.00	5	11/09/2023 16:42	WG2167871
Dichlorodifluoromethane	U		0.164	0.500	5	11/09/2023 16:42	WG2167871
1,1-Dichloroethane	U		0.115	0.500	5	11/09/2023 16:42	WG2167871
1,2-Dichloroethane	U		0.0950	0.500	5	11/09/2023 16:42	WG2167871
1,1-Dichloroethene	U		0.100	0.500	5	11/09/2023 16:42	WG2167871
cis-1,2-Dichloroethene	86.6		0.138	0.500	5	11/09/2023 16:42	WG2167871
trans-1,2-Dichloroethene	2.93		0.286	1.00	5	11/09/2023 16:42	WG2167871
1,2-Dichloropropane	U		0.254	1.00	5	11/09/2023 16:42	WG2167871
1,1-Dichloropropene	U		0.140	0.500	5	11/09/2023 16:42	WG2167871
1,3-Dichloropropane	U		0.350	1.00	5	11/09/2023 16:42	WG2167871
cis-1,3-Dichloropropene	U		0.136	0.500	5	11/09/2023 16:42	WG2167871
trans-1,3-Dichloropropene	U		0.306	1.00	5	11/09/2023 16:42	WG2167871
2,2-Dichloropropane	U		0.159	0.500	5	11/09/2023 16:42	WG2167871
Di-isopropyl ether	U		0.0700	0.200	5	11/09/2023 16:42	WG2167871
Ethylbenzene	U		0.106	0.500	5	11/09/2023 16:42	WG2167871
Hexachloro-1,3-butadiene	U		2.54	5.00	5	11/09/2023 16:42	WG2167871
Isopropylbenzene	U		0.173	0.500	5	11/09/2023 16:42	WG2167871
p-Isopropyltoluene	U		0.466	1.00	5	11/09/2023 16:42	WG2167871
2-Butanone (MEK)	U		2.50	5.00	5	11/09/2023 16:42	WG2167871
Methylene Chloride	U		1.33	5.00	5	11/09/2023 16:42	WG2167871
4-Methyl-2-pentanone (MIBK)	U		2.00	5.00	5	11/09/2023 16:42	WG2167871
Methyl tert-butyl ether	U		0.0590	0.200	5	11/09/2023 16:42	WG2167871
Naphthalene	U		0.620	2.50	5	11/09/2023 16:42	WG2167871
n-Propylbenzene	U		0.236	1.00	5	11/09/2023 16:42	WG2167871
Styrene	U		0.545	2.50	5	11/09/2023 16:42	WG2167871
1,1,1,2-Tetrachloroethane	U		0.100	0.500	5	11/09/2023 16:42	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0780	0.500	5	11/09/2023 16:42	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.135	0.500	5	11/09/2023 16:42	WG2167871
Tetrachloroethene	U		0.140	0.500	5	11/09/2023 16:42	WG2167871
Toluene	U		0.250	1.00	5	11/09/2023 16:42	WG2167871
1,2,3-Trichlorobenzene	U		0.125	2.50	5	11/09/2023 16:42	WG2167871
1,2,4-Trichlorobenzene	U		0.965	2.50	5	11/09/2023 16:42	WG2167871
1,1,1-Trichloroethane	U		0.0550	0.500	5	11/09/2023 16:42	WG2167871
1,1,2-Trichloroethane	U		0.177	0.500	5	11/09/2023 16:42	WG2167871
Trichloroethene	U		0.0800	0.200	5	11/09/2023 16:42	WG2167871
Trichlorofluoromethane	U		0.100	0.500	5	11/09/2023 16:42	WG2167871
1,2,3-Trichloropropane	U		1.02	2.50	5	11/09/2023 16:42	WG2167871
1,2,4-Trimethylbenzene	U		0.232	1.00	5	11/09/2023 16:42	WG2167871
1,2,3-Trimethylbenzene	U		0.230	1.00	5	11/09/2023 16:42	WG2167871
1,3,5-Trimethylbenzene	U		0.216	1.00	5	11/09/2023 16:42	WG2167871
Vinyl chloride	228		0.137	0.500	5	11/09/2023 16:42	WG2167871
Xylenes, Total	U		0.955	1.30	5	11/09/2023 16:42	WG2167871
Ethyl Ether	U		0.0850	0.500	5	11/09/2023 16:42	WG2167871
Tetrahydrofuran	U		0.450	2.50	5	11/09/2023 16:42	WG2167871
Iodomethane	U		1.21	2.50	5	11/09/2023 16:42	WG2167871
Allyl chloride	U		2.90	5.00	5	11/09/2023 16:42	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.280	1.00	5	11/09/2023 16:42	WG2167871
(S) Toluene-d8	*99.3*			*75.0-131*		*11/09/2023 16:42*	WG2167871
(S) 4-Bromofluorobenzene	*92.4*			*67.0-138*		*11/09/2023 16:42*	WG2167871
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/09/2023 16:42*	WG2167871

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	656000	T8	8450	20000	1	11/08/2023 18:45	WG2166962

Sample Narrative:

L1673863-03 WG2166962: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43800	T8	379	1000	1	11/10/2023 09:49	WG2168330
Nitrate	94.0	B J T8	48.0	100	1	11/10/2023 09:49	WG2168330
Sulfate	911	J T8	594	5000	1	11/10/2023 09:49	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9170		102	1000	1	11/20/2023 12:59	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10900		28.1	100	1	11/10/2023 20:03	WG2166496
Manganese	1510		0.704	5.00	1	11/10/2023 20:03	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	23300		2.87	6.78	10	11/06/2023 19:12	WG2165659
Ethane	311		0.296	1.29	1	11/06/2023 17:26	WG2164806
Ethene	15.9		0.422	1.27	1	11/06/2023 17:26	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 15:10	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 15:10	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 15:10	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 15:10	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 15:10	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 15:10	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 15:10	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 15:10	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 15:10	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 15:10	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 15:10	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 15:10	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 15:10	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 15:10	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 15:10	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 15:10	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 15:10	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 15:10	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 15:10	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 15:10	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 15:10	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 15:10	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 15:10	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 15:10	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 15:10	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 15:10	WG2167871
1,2-Dichloroethane	0.140		0.0190	0.100	1	11/09/2023 15:10	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 15:10	WG2167871
cis-1,2-Dichloroethene	13.0		0.0276	0.100	1	11/09/2023 15:10	WG2167871
trans-1,2-Dichloroethene	3.47		0.0572	0.200	1	11/09/2023 15:10	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 15:10	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 15:10	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 15:10	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 15:10	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 15:10	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 15:10	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 15:10	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 15:10	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 15:10	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 15:10	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 15:10	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 15:10	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 15:10	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 15:10	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 15:10	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 15:10	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 15:10	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 15:10	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 15:10	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 15:10	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 15:10	WG2167871
Tetrachloroethene	0.125		0.0280	0.100	1	11/09/2023 15:10	WG2167871
Toluene	0.255		0.0500	0.200	1	11/09/2023 15:10	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 15:10	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 15:10	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 15:10	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 15:10	WG2167871
Trichloroethene	0.606		0.0160	0.0400	1	11/09/2023 15:10	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 15:10	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 15:10	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 15:10	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 15:10	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 15:10	WG2167871
Vinyl chloride	14.7		0.0273	0.100	1	11/09/2023 15:10	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 15:10	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 15:10	WG2167871
Tetrahydrofuran	3.45		0.0900	0.500	1	11/09/2023 15:10	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 15:10	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 15:10	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 15:10	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 15:10*	WG2167871
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/09/2023 15:10*	WG2167871
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/09/2023 15:10*	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 15:28	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 15:28	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 15:28	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 15:28	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 15:28	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 15:28	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 15:28	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 15:28	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 15:28	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 15:28	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 15:28	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 15:28	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 15:28	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 15:28	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 15:28	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 15:28	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 15:28	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 15:28	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 15:28	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 15:28	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 15:28	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 15:28	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 15:28	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 15:28	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 15:28	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 15:28	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 15:28	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 15:28	WG2167871
cis-1,2-Dichloroethene	0.818		0.0276	0.100	1	11/09/2023 15:28	WG2167871
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/09/2023 15:28	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 15:28	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 15:28	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 15:28	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 15:28	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 15:28	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 15:28	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 15:28	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 15:28	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 15:28	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 15:28	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 15:28	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 15:28	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 15:28	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 15:28	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 15:28	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 15:28	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 15:28	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 15:28	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 15:28	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 15:28	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 15:28	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 15:28	WG2167871
Toluene	U		0.0500	0.200	1	11/09/2023 15:28	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 15:28	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 15:28	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 15:28	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 15:28	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 15:28	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 15:28	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 15:28	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 15:28	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 15:28	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 15:28	WG2167871
Vinyl chloride	0.685		0.0273	0.100	1	11/09/2023 15:28	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 15:28	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 15:28	WG2167871
Tetrahydrofuran	U		0.0900	0.500	1	11/09/2023 15:28	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 15:28	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 15:28	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 15:28	WG2167871
(S) Toluene-d8	*98.9*			*75.0-131*		*11/09/2023 15:28*	WG2167871
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/09/2023 15:28*	WG2167871
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/09/2023 15:28*	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 06:11	WG2168846
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 15:47	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 15:47	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 15:47	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 15:47	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 15:47	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 15:47	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 15:47	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 15:47	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 15:47	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 15:47	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 15:47	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 15:47	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 15:47	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 15:47	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 15:47	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 15:47	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 15:47	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 15:47	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 15:47	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 15:47	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 15:47	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 15:47	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 15:47	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 15:47	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 15:47	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 15:47	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 15:47	WG2167871
cis-1,2-Dichloroethene	1.04		0.0276	0.100	1	11/09/2023 15:47	WG2167871
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/09/2023 15:47	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 15:47	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 15:47	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 15:47	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 15:47	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 15:47	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 15:47	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 15:47	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 15:47	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 15:47	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 15:47	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 15:47	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 15:47	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 15:47	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 15:47	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 15:47	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 15:47	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 15:47	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 15:47	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 15:47	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 15:47	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 15:47	WG2167871
Tetrachloroethene	2.56		0.0280	0.100	1	11/09/2023 15:47	WG2167871
Toluene	0.0560	J	0.0500	0.200	1	11/09/2023 15:47	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 15:47	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 15:47	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 15:47	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 15:47	WG2167871
Trichloroethene	0.211		0.0160	0.0400	1	11/09/2023 15:47	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 15:47	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 15:47	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 15:47	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 15:47	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 15:47	WG2167871
Vinyl chloride	0.721		0.0273	0.100	1	11/09/2023 15:47	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 15:47	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 15:47	WG2167871
Tetrahydrofuran	0.721		0.0900	0.500	1	11/09/2023 15:47	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 15:47	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 15:47	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 15:47	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 15:47*	WG2167871
(S) Toluene-d8	*100*			*75.0-131*		*11/11/2023 06:11*	WG2168846
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*11/09/2023 15:47*	WG2167871
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*11/11/2023 06:11*	WG2168846
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/09/2023 15:47*	WG2167871
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/11/2023 06:11*	WG2168846

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/13/2023 20:54	WG2170135
Acrylonitrile	U		0.0760	0.500	1	11/10/2023 23:31	WG2169072
Benzene	U		0.0160	0.0400	1	11/10/2023 23:31	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/10/2023 23:31	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/10/2023 23:31	WG2169072
Bromoform	U		0.239	1.00	1	11/10/2023 23:31	WG2169072
Bromomethane	U		0.148	0.500	1	11/10/2023 23:31	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/10/2023 23:31	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/10/2023 23:31	WG2169072
tert-Butylbenzene	U	J3	0.0620	0.200	1	11/10/2023 23:31	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2023 23:31	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/10/2023 23:31	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2023 23:31	WG2169072
Chloroethane	U		0.0432	0.200	1	11/10/2023 23:31	WG2169072
Chloroform	U		0.0166	0.100	1	11/10/2023 23:31	WG2169072
Chloromethane	U		0.0556	0.500	1	11/10/2023 23:31	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2023 23:31	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2023 23:31	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2023 23:31	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2023 23:31	WG2169072
Dibromomethane	U		0.0400	0.200	1	11/10/2023 23:31	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2023 23:31	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2023 23:31	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2023 23:31	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2023 23:31	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2023 23:31	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2023 23:31	WG2169072
1,1-Dichloroethene	U		0.0200	0.100	1	11/10/2023 23:31	WG2169072
cis-1,2-Dichloroethene	0.255		0.0276	0.100	1	11/10/2023 23:31	WG2169072
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/10/2023 23:31	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2023 23:31	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2023 23:31	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2023 23:31	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2023 23:31	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2023 23:31	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2023 23:31	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2023 23:31	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/10/2023 23:31	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2023 23:31	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/10/2023 23:31	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2023 23:31	WG2169072
2-Butanone (MEK)	U	J3 J4	0.500	1.00	1	11/10/2023 23:31	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/10/2023 23:31	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/10/2023 23:31	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2023 23:31	WG2169072
Naphthalene	U		0.124	0.500	1	11/10/2023 23:31	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/10/2023 23:31	WG2169072
Styrene	U		0.109	0.500	1	11/10/2023 23:31	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2023 23:31	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2023 23:31	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2023 23:31	WG2169072
Tetrachloroethene	2.26		0.0280	0.100	1	11/10/2023 23:31	WG2169072
Toluene	U		0.0500	0.200	1	11/10/2023 23:31	WG2169072
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/10/2023 23:31	WG2169072
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/10/2023 23:31	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2023 23:31	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2023 23:31	WG2169072
Trichloroethene	0.185		0.0160	0.0400	1	11/10/2023 23:31	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2023 23:31	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2023 23:31	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2023 23:31	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2023 23:31	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2023 23:31	WG2169072
Vinyl chloride	U		0.0273	0.100	1	11/10/2023 23:31	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/10/2023 23:31	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/10/2023 23:31	WG2169072
Tetrahydrofuran	1.02		0.0900	0.500	1	11/10/2023 23:31	WG2169072
Iodomethane	U	J3	0.242	0.500	1	11/10/2023 23:31	WG2169072
Allyl chloride	U		0.580	1.00	1	11/10/2023 23:31	WG2169072
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/10/2023 23:31	WG2169072
(S) Toluene-d8	*95.0*			*75.0-131*		*11/10/2023 23:31*	WG2169072
(S) Toluene-d8	*101*			*75.0-131*		*11/13/2023 20:54*	WG2170135
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*11/10/2023 23:31*	WG2169072
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/13/2023 20:54*	WG2170135
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/10/2023 23:31*	WG2169072
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/13/2023 20:54*	WG2170135

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	298000		8450	20000	1	11/09/2023 14:34	WG2167358

Sample Narrative:

L1673863-07 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	42500	T8	379	1000	1	11/10/2023 10:02	WG2168330
Nitrate	78.0	B J T8	48.0	100	1	11/10/2023 10:02	WG2168330
Sulfate	20400	T8	594	5000	1	11/10/2023 10:02	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2050		102	1000	1	11/20/2023 13:18	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2030		28.1	100	1	11/10/2023 20:06	WG2166496
Manganese	667		0.704	5.00	1	11/10/2023 20:06	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	883		0.287	0.678	1	11/06/2023 17:34	WG2164806
Ethane	23.3		0.296	1.29	1	11/06/2023 17:34	WG2164806
Ethene	U		0.422	1.27	1	11/06/2023 17:34	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.548	1.00	1	11/10/2023 23:50	WG2169072
Acrylonitrile	U		0.0760	0.500	1	11/10/2023 23:50	WG2169072
Benzene	U		0.0160	0.0400	1	11/10/2023 23:50	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/10/2023 23:50	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/10/2023 23:50	WG2169072
Bromoform	U		0.239	1.00	1	11/10/2023 23:50	WG2169072
Bromomethane	U		0.148	0.500	1	11/10/2023 23:50	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/10/2023 23:50	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/10/2023 23:50	WG2169072
tert-Butylbenzene	U	J3	0.0620	0.200	1	11/10/2023 23:50	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2023 23:50	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/10/2023 23:50	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2023 23:50	WG2169072
Chloroethane	U		0.0432	0.200	1	11/10/2023 23:50	WG2169072
Chloroform	U		0.0166	0.100	1	11/10/2023 23:50	WG2169072
Chloromethane	U		0.0556	0.500	1	11/10/2023 23:50	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2023 23:50	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2023 23:50	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2023 23:50	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2023 23:50	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/10/2023 23:50	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2023 23:50	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2023 23:50	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2023 23:50	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2023 23:50	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2023 23:50	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2023 23:50	WG2169072
1,1-Dichloroethene	U		0.0200	0.100	1	11/10/2023 23:50	WG2169072
cis-1,2-Dichloroethene	0.103		0.0276	0.100	1	11/10/2023 23:50	WG2169072
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/10/2023 23:50	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2023 23:50	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2023 23:50	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2023 23:50	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2023 23:50	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2023 23:50	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2023 23:50	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2023 23:50	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/10/2023 23:50	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2023 23:50	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/10/2023 23:50	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2023 23:50	WG2169072
2-Butanone (MEK)	U	J3 J4	0.500	1.00	1	11/10/2023 23:50	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/10/2023 23:50	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/10/2023 23:50	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2023 23:50	WG2169072
Naphthalene	U		0.124	0.500	1	11/10/2023 23:50	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/10/2023 23:50	WG2169072
Styrene	U		0.109	0.500	1	11/10/2023 23:50	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2023 23:50	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2023 23:50	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2023 23:50	WG2169072
Tetrachloroethene	U		0.0280	0.100	1	11/10/2023 23:50	WG2169072
Toluene	U		0.0500	0.200	1	11/10/2023 23:50	WG2169072
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/10/2023 23:50	WG2169072
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/10/2023 23:50	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2023 23:50	WG2169072
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2023 23:50	WG2169072
Trichloroethene	U		0.0160	0.0400	1	11/10/2023 23:50	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2023 23:50	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2023 23:50	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2023 23:50	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2023 23:50	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2023 23:50	WG2169072
Vinyl chloride	0.135		0.0273	0.100	1	11/10/2023 23:50	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/10/2023 23:50	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/10/2023 23:50	WG2169072
Tetrahydrofuran	0.214	J	0.0900	0.500	1	11/10/2023 23:50	WG2169072
Iodomethane	U	J3	0.242	0.500	1	11/10/2023 23:50	WG2169072
Allyl chloride	U		0.580	1.00	1	11/10/2023 23:50	WG2169072
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/10/2023 23:50	WG2169072
(S) Toluene-d8	*95.3*			*75.0-131*		*11/10/2023 23:50*	WG2169072
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*11/10/2023 23:50*	WG2169072
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/10/2023 23:50*	WG2169072

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	271000		8450	20000	1	11/09/2023 14:47	WG2167358

Sample Narrative:

L1673863-08 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19700	T8	379	1000	1	11/10/2023 10:40	WG2168330
Nitrate	108	B T8	48.0	100	1	11/10/2023 10:40	WG2168330
Sulfate	45400	T8	594	5000	1	11/10/2023 10:40	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6280		102	1000	1	11/20/2023 13:55	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4270		28.1	100	1	11/10/2023 20:10	WG2166496
Manganese	1340		0.704	5.00	1	11/10/2023 20:10	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4310		0.287	0.678	1	11/06/2023 17:45	WG2164806
Ethane	7.79		0.296	1.29	1	11/06/2023 17:45	WG2164806
Ethene	32.5		0.422	1.27	1	11/06/2023 17:45	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/13/2023 21:13	WG2170135
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 00:09	WG2169072
Benzene	U		0.0160	0.0400	1	11/11/2023 00:09	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/11/2023 00:09	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 00:09	WG2169072
Bromoform	U		0.239	1.00	1	11/11/2023 00:09	WG2169072
Bromomethane	U		0.148	0.500	1	11/11/2023 00:09	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 00:09	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 00:09	WG2169072
tert-Butylbenzene	U	J3	0.0620	0.200	1	11/11/2023 00:09	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 00:09	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 00:09	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 00:09	WG2169072
Chloroethane	0.990		0.0432	0.200	1	11/11/2023 00:09	WG2169072
Chloroform	U		0.0166	0.100	1	11/11/2023 00:09	WG2169072
Chloromethane	U		0.0556	0.500	1	11/11/2023 00:09	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 00:09	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 00:09	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 00:09	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 00:09	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/11/2023 00:09	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 00:09	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 00:09	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 00:09	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 00:09	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 00:09	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 00:09	WG2169072
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 00:09	WG2169072
cis-1,2-Dichloroethene	2.43		0.0276	0.100	1	11/11/2023 00:09	WG2169072
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 00:09	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 00:09	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 00:09	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 00:09	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 00:09	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 00:09	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 00:09	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 00:09	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 00:09	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 00:09	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 00:09	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 00:09	WG2169072
2-Butanone (MEK)	U	J3 J4	0.500	1.00	1	11/11/2023 00:09	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/11/2023 00:09	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 00:09	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 00:09	WG2169072
Naphthalene	U		0.124	0.500	1	11/11/2023 00:09	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 00:09	WG2169072
Styrene	U		0.109	0.500	1	11/11/2023 00:09	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 00:09	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 00:09	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 00:09	WG2169072
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 00:09	WG2169072
Toluene	0.144	J	0.0500	0.200	1	11/11/2023 00:09	WG2169072
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 00:09	WG2169072
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 00:09	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 00:09	WG2169072
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 00:09	WG2169072
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 00:09	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 00:09	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 00:09	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 00:09	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 00:09	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 00:09	WG2169072
Vinyl chloride	30.4		0.0273	0.100	1	11/11/2023 00:09	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/11/2023 00:09	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 00:09	WG2169072
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 00:09	WG2169072
Iodomethane	U	J3	0.242	0.500	1	11/11/2023 00:09	WG2169072
Allyl chloride	U		0.580	1.00	1	11/11/2023 00:09	WG2169072
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/11/2023 00:09	WG2169072
(S) Toluene-d8	*94.8*			*75.0-131*		*11/11/2023 00:09*	WG2169072
(S) Toluene-d8	*103*			*75.0-131*		*11/13/2023 21:13*	WG2170135
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/11/2023 00:09*	WG2169072
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/13/2023 21:13*	WG2170135
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/11/2023 00:09*	WG2169072
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/13/2023 21:13*	WG2170135

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	486000		8450	20000	1	11/09/2023 14:54	WG2167358

Sample Narrative:

L1673863-09 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	86400	T8	379	1000	1	11/10/2023 10:53	WG2168330
Nitrate	75.6	B J T8	48.0	100	1	11/10/2023 10:53	WG2168330
Sulfate	824	J T8	594	5000	1	11/10/2023 10:53	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13300		102	1000	1	11/20/2023 14:18	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7410		28.1	100	1	11/10/2023 20:13	WG2166496
Manganese	889		0.704	5.00	1	11/10/2023 20:13	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	33100		2.87	6.78	10	11/06/2023 19:18	WG2165659
Ethane	171		0.296	1.29	1	11/06/2023 17:52	WG2164806
Ethene	5.19		0.422	1.27	1	11/06/2023 17:52	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/13/2023 21:32	WG2170135
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 00:28	WG2169072
Benzene	0.119		0.0160	0.0400	1	11/11/2023 00:28	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/11/2023 00:28	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 00:28	WG2169072
Bromoform	U		0.239	1.00	1	11/11/2023 00:28	WG2169072
Bromomethane	U		0.148	0.500	1	11/11/2023 00:28	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 00:28	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 00:28	WG2169072
tert-Butylbenzene	U	J3	0.0620	0.200	1	11/11/2023 00:28	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 00:28	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 00:28	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 00:28	WG2169072
Chloroethane	U		0.0432	0.200	1	11/11/2023 00:28	WG2169072
Chloroform	U		0.0166	0.100	1	11/11/2023 00:28	WG2169072
Chloromethane	U		0.0556	0.500	1	11/11/2023 00:28	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 00:28	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 00:28	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 00:28	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 00:28	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/11/2023 00:28	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 00:28	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 00:28	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 00:28	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 00:28	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 00:28	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 00:28	WG2169072
1,1-Dichloroethene	0.0580	J	0.0200	0.100	1	11/11/2023 00:28	WG2169072
cis-1,2-Dichloroethene	0.156		0.0276	0.100	1	11/11/2023 00:28	WG2169072
trans-1,2-Dichloroethene	0.244		0.0572	0.200	1	11/11/2023 00:28	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 00:28	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 00:28	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 00:28	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 00:28	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 00:28	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 00:28	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 00:28	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 00:28	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 00:28	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 00:28	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 00:28	WG2169072
2-Butanone (MEK)	U	J3 J4	0.500	1.00	1	11/11/2023 00:28	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/11/2023 00:28	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 00:28	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 00:28	WG2169072
Naphthalene	U		0.124	0.500	1	11/11/2023 00:28	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 00:28	WG2169072
Styrene	U		0.109	0.500	1	11/11/2023 00:28	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 00:28	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 00:28	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 00:28	WG2169072
Tetrachloroethene	0.0380	J	0.0280	0.100	1	11/11/2023 00:28	WG2169072
Toluene	0.0640	J	0.0500	0.200	1	11/11/2023 00:28	WG2169072
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 00:28	WG2169072
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 00:28	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 00:28	WG2169072
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 00:28	WG2169072
Trichloroethene	0.0550		0.0160	0.0400	1	11/11/2023 00:28	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 00:28	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 00:28	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 00:28	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 00:28	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 00:28	WG2169072
Vinyl chloride	4.10		0.0273	0.100	1	11/11/2023 00:28	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/11/2023 00:28	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 00:28	WG2169072
Tetrahydrofuran	4.60		0.0900	0.500	1	11/11/2023 00:28	WG2169072
Iodomethane	U	J3	0.242	0.500	1	11/11/2023 00:28	WG2169072
Allyl chloride	U		0.580	1.00	1	11/11/2023 00:28	WG2169072
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/11/2023 00:28	WG2169072
(S) Toluene-d8	*95.1*			*75.0-131*		*11/11/2023 00:28*	WG2169072
(S) Toluene-d8	*102*			*75.0-131*		*11/13/2023 21:32*	WG2170135
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*11/11/2023 00:28*	WG2169072
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/13/2023 21:32*	WG2170135
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/11/2023 00:28*	WG2169072
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/13/2023 21:32*	WG2170135

Method Blank (MB)

(MB) R3997531-2 11/08/23 15:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673484-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-11 11/08/23 16:22 • (DUP) R3997531-3 11/08/23 16:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	661000	665000	1	0.646		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673682-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673682-01 11/08/23 18:22 • (DUP) R3997531-4 11/08/23 18:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	149000	150000	1	0.644		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997531-1 11/08/23 15:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	100000	100	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997855-2 11/09/23 12:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673830-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673830-01 11/09/23 13:07 • (DUP) R3997855-4 11/09/23 13:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	114000	115000	1	0.600		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673848-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1673848-02 11/09/23 15:13 • (DUP) R3997855-6 11/09/23 15:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	109000	108000	1	0.785		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997855-1 11/09/23 12:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	104000	104	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3998241-1 11/10/23 03:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Nitrate	72.0	J	48.0	100
Sulfate	U		594	5000

L1675845-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675845-02 11/10/23 05:09 • (DUP) R3998241-3 11/10/23 05:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	23400	23400	1	0.0432		15
Nitrate	1640	1640	1	0.0917		15
Sulfate	3340	3370	1	0.691	J	15

L1673863-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1673863-07 11/10/23 10:02 • (DUP) R3998241-6 11/10/23 10:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	42500	42500	1	0.0341		15
Nitrate	78.0	78.8	1	1.02	J	15
Sulfate	20400	20400	1	0.0985		15

Laboratory Control Sample (LCS)

(LCS) R3998241-2 11/10/23 04:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39400	98.4	80.0-120	
Nitrate	8000	7690	96.1	80.0-120	
Sulfate	40000	39400	98.5	80.0-120	

L1675845-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675845-02 11/10/23 05:09 • (MS) R3998241-4 11/10/23 05:35 • (MSD) R3998241-5 11/10/23 05:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	23400	59500	59600	90.2	90.6	1	80.0-120			0.291	15
Nitrate	8000	1640	9330	9340	96.1	96.2	1	80.0-120			0.0847	15
Sulfate	40000	3340	42100	42200	96.8	97.0	1	80.0-120			0.201	15

L1673863-07 Original Sample (OS) • Matrix Spike (MS)

(OS) L1673863-07 11/10/23 10:02 • (MS) R3998241-7 11/10/23 10:28

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	42500	75100	81.5	1	80.0-120	
Nitrate	8000	78.0	7680	95.1	1	80.0-120	
Sulfate	40000	20400	56600	90.4	1	80.0-120	

Method Blank (MB)

(MB) R4002869-2 11/20/23 11:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		102	1000

L1673863-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1673863-07 11/20/23 13:18 • (DUP) R4002869-3 11/20/23 13:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2050	2030	1	0.832		20

L1673956-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673956-03 11/20/23 19:11 • (DUP) R4002869-8 11/20/23 19:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	17800	17400	1	2.73		20

Laboratory Control Sample (LCS)

(LCS) R4002869-1 11/20/23 11:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23900	95.5	85.0-115	

L1673875-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673875-01 11/20/23 14:35 • (MS) R4002869-4 11/20/23 14:58 • (MSD) R4002869-5 11/20/23 15:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	340	23500	24300	92.8	95.7	1	85.0-115			3.10	20

L1673956-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673956-01 11/20/23 17:23 • (MS) R4002869-6 11/20/23 17:50 • (MSD) R4002869-7 11/20/23 18:18

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	22000	45800	45900	95.1	95.7	1	85.0-115			0.349	20

Method Blank (MB)

(MB) R3998485-1 11/10/23 18:42

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3998485-2 11/10/23 18:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1150	115	80.0-120	
Manganese	50.0	55.7	111	80.0-120	

L1673440-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673440-01 11/10/23 18:48 • (MS) R3998485-4 11/10/23 18:55 • (MSD) R3998485-5 11/10/23 18:58

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	3170	4270	4330	109	115	1	75.0-125			1.43	20
Manganese	50.0	1390	1390	1480	7.51	181	1	75.0-125	V	V	6.05	20

Method Blank (MB)

(MB) R3996137-2 11/06/23 15:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1671536-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1671536-04 11/06/23 15:56 • (DUP) R3996137-3 11/06/23 16:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1672135-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1672135-09 11/06/23 16:56 • (DUP) R3996137-4 11/06/23 17:59

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3996137-1 11/06/23 15:33 • (LCSD) R3996137-5 11/06/23 18:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	61.2	60.2	90.3	88.8	85.0-115			1.65	20
Ethane	129	111	111	86.0	86.0	85.0-115			0.000	20
Ethene	127	111	112	87.4	88.2	85.0-115			0.897	20

Method Blank (MB)

(MB) R3996148-2 11/06/23 18:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1672135-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1672135-10 11/06/23 18:46 • (DUP) R3996148-3 11/06/23 19:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	8870	9020	10	1.68		20

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

(LCS) R3996148-1 11/06/23 18:35 • (LCSD) R3996148-4 11/06/23 19:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	65.0	64.7	95.9	95.4	85.0-115			0.463	20

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	36.3	145	10.0-160	
Acrylonitrile	25.0	30.0	120	45.0-153	
Benzene	5.00	5.83	117	70.0-123	
Bromobenzene	5.00	5.61	112	73.0-121	
Bromodichloromethane	5.00	5.37	107	73.0-121	
Bromoform	5.00	5.37	107	64.0-132	
Bromomethane	5.00	4.47	89.4	56.0-147	
n-Butylbenzene	5.00	4.49	89.8	68.0-135	
sec-Butylbenzene	5.00	6.03	121	74.0-130	
tert-Butylbenzene	5.00	5.48	110	75.0-127	
Carbon tetrachloride	5.00	5.36	107	66.0-128	
Chlorobenzene	5.00	5.61	112	76.0-128	
Chlorodibromomethane	5.00	5.73	115	74.0-127	
Chloroethane	5.00	6.04	121	61.0-134	
Chloroform	5.00	5.62	112	72.0-123	
Chloromethane	5.00	5.10	102	51.0-138	
2-Chlorotoluene	5.00	5.11	102	75.0-124	
4-Chlorotoluene	5.00	5.76	115	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	5.26	105	59.0-130	
1,2-Dibromoethane	5.00	5.56	111	74.0-128	
Dibromomethane	5.00	5.20	104	75.0-122	
1,2-Dichlorobenzene	5.00	5.54	111	76.0-124	
1,3-Dichlorobenzene	5.00	5.47	109	76.0-125	
1,4-Dichlorobenzene	5.00	5.34	107	77.0-121	
Dichlorodifluoromethane	5.00	5.02	100	43.0-156	
1,1-Dichloroethane	5.00	5.55	111	70.0-127	
1,2-Dichloroethane	5.00	5.14	103	65.0-131	
1,1-Dichloroethene	5.00	6.29	126	65.0-131	
cis-1,2-Dichloroethene	5.00	5.65	113	73.0-125	
trans-1,2-Dichloroethene	5.00	5.73	115	71.0-125	
1,2-Dichloropropane	5.00	5.74	115	74.0-125	
1,1-Dichloropropene	5.00	5.67	113	73.0-125	
1,3-Dichloropropane	5.00	5.67	113	80.0-125	
cis-1,3-Dichloropropene	5.00	5.77	115	76.0-127	
trans-1,3-Dichloropropene	5.00	5.45	109	73.0-127	
2,2-Dichloropropane	5.00	6.47	129	59.0-135	
Di-isopropyl ether	5.00	5.79	116	60.0-136	
Ethylbenzene	5.00	5.78	116	74.0-126	
Hexachloro-1,3-butadiene	5.00	6.51	130	57.0-150	
Isopropylbenzene	5.00	5.50	110	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	5.15	103	72.0-133	
2-Butanone (MEK)	25.0	33.4	134	30.0-160	
Methylene Chloride	5.00	5.50	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	30.0	120	56.0-143	
Methyl tert-butyl ether	5.00	5.73	115	66.0-132	
Naphthalene	5.00	4.99	99.8	59.0-130	
n-Propylbenzene	5.00	5.48	110	74.0-126	
Styrene	5.00	5.50	110	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.50	110	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.25	105	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	5.68	114	61.0-139	
Tetrachloroethene	5.00	5.85	117	70.0-136	
Toluene	5.00	5.76	115	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.72	94.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.96	99.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.98	120	69.0-126	
1,1,2-Trichloroethane	5.00	5.48	110	78.0-123	
Trichloroethene	5.00	5.68	114	76.0-126	
Trichlorofluoromethane	5.00	4.99	99.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.10	102	67.0-129	
1,2,4-Trimethylbenzene	5.00	5.71	114	70.0-126	
1,2,3-Trimethylbenzene	5.00	5.42	108	74.0-124	
1,3,5-Trimethylbenzene	5.00	5.95	119	73.0-127	
Vinyl chloride	5.00	5.74	115	63.0-134	
Xylenes, Total	15.0	16.8	112	72.0-127	
Ethyl Ether	5.00	5.72	114	64.0-137	
Tetrahydrofuran	5.00	4.98	99.6	37.0-146	
Iodomethane	25.0	27.3	109	74.0-134	
Allyl chloride	25.0	29.0	116	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	5.93	119	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

Method Blank (MB)

(MB) R3998697-3 11/10/23 23:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
(S) Toluene-d8	*99.2*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*95.3*			*70.0-130*

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

(LCS) R3998697-1 11/10/23 21:40 • (LCSD) R3998697-2 11/10/23 22:00

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	21.1	23.4	84.4	93.6	10.0-160			10.3	31
(S) Toluene-d8				*102*	*99.1*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*98.9*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.0*	*95.0*	*70.0-130*				

Method Blank (MB)

(MB) R3998908-3 11/10/23 20:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3998908-3 11/10/23 20:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	0.335	J	0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	0.0540	J	0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*94.1*			*75.0-131*
(S) 4-Bromofluorobenzene	*96.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*

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

(LCS) R3998908-1 11/10/23 18:32 • (LCSD) R3998908-2 11/10/23 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	49.8	56.9	199	228	10.0-160	J4	J4	13.3	31
Acrylonitrile	25.0	28.6	30.4	114	122	45.0-153			6.10	22
Benzene	5.00	5.32	5.27	106	105	70.0-123			0.944	20
Bromobenzene	5.00	5.56	5.25	111	105	73.0-121			5.74	20
Bromodichloromethane	5.00	5.57	5.53	111	111	73.0-121			0.721	20
Bromoform	5.00	4.31	4.28	86.2	85.6	64.0-132			0.698	20
Bromomethane	5.00	4.85	4.66	97.0	93.2	56.0-147			4.00	20
n-Butylbenzene	5.00	4.12	4.14	82.4	82.8	68.0-135			0.484	20
sec-Butylbenzene	5.00	4.96	4.73	99.2	94.6	74.0-130			4.75	20
tert-Butylbenzene	5.00	5.60	4.50	112	90.0	75.0-127		J3	21.8	20
Carbon tetrachloride	5.00	5.44	5.46	109	109	66.0-128			0.367	20
Chlorobenzene	5.00	4.96	4.93	99.2	98.6	76.0-128			0.607	20
Chlorodibromomethane	5.00	4.80	4.95	96.0	99.0	74.0-127			3.08	20
Chloroethane	5.00	4.91	5.21	98.2	104	61.0-134			5.93	20
Chloroform	5.00	5.63	5.94	113	119	72.0-123			5.36	20
Chloromethane	5.00	5.62	5.65	112	113	51.0-138			0.532	20
2-Chlorotoluene	5.00	5.46	5.30	109	106	75.0-124			2.97	20
4-Chlorotoluene	5.00	5.42	5.16	108	103	75.0-124			4.91	20
1,2-Dibromo-3-Chloropropane	5.00	4.74	4.46	94.8	89.2	59.0-130			6.09	20
1,2-Dibromoethane	5.00	4.99	4.94	99.8	98.8	74.0-128			1.01	20
Dibromomethane	5.00	5.54	5.66	111	113	75.0-122			2.14	20
1,2-Dichlorobenzene	5.00	4.60	4.64	92.0	92.8	76.0-124			0.866	20
1,3-Dichlorobenzene	5.00	5.04	4.75	101	95.0	76.0-125			5.92	20
1,4-Dichlorobenzene	5.00	4.89	4.83	97.8	96.6	77.0-121			1.23	20
Dichlorodifluoromethane	5.00	5.60	5.33	112	107	43.0-156			4.94	20
1,1-Dichloroethane	5.00	5.10	5.28	102	106	70.0-127			3.47	20
1,2-Dichloroethane	5.00	5.47	5.74	109	115	65.0-131			4.82	20
1,1-Dichloroethene	5.00	5.27	5.32	105	106	65.0-131			0.944	20
cis-1,2-Dichloroethene	5.00	5.32	5.33	106	107	73.0-125			0.188	20
trans-1,2-Dichloroethene	5.00	5.38	5.62	108	112	71.0-125			4.36	20
1,2-Dichloropropane	5.00	5.05	4.98	101	99.6	74.0-125			1.40	20
1,1-Dichloropropene	5.00	5.55	5.64	111	113	73.0-125			1.61	20
1,3-Dichloropropane	5.00	4.96	4.95	99.2	99.0	80.0-125			0.202	20
cis-1,3-Dichloropropene	5.00	5.14	5.15	103	103	76.0-127			0.194	20
trans-1,3-Dichloropropene	5.00	4.89	4.87	97.8	97.4	73.0-127			0.410	20
2,2-Dichloropropane	5.00	4.78	4.39	95.6	87.8	59.0-135			8.51	20
Di-isopropyl ether	5.00	5.24	5.29	105	106	60.0-136			0.950	20
Ethylbenzene	5.00	4.86	4.92	97.2	98.4	74.0-126			1.23	20
Hexachloro-1,3-butadiene	5.00	4.38	4.25	87.6	85.0	57.0-150			3.01	20
Isopropylbenzene	5.00	4.48	4.51	89.6	90.2	72.0-127			0.667	20

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

(LCS) R3998908-1 11/10/23 18:32 • (LCSD) R3998908-2 11/10/23 18:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.56	4.60	91.2	92.0	72.0-133			0.873	20
2-Butanone (MEK)	25.0	26.4	41.8	106	167	30.0-160		J3 J4	45.2	24
Methylene Chloride	5.00	5.48	5.90	110	118	68.0-123			7.38	20
4-Methyl-2-pentanone (MIBK)	25.0	27.0	27.0	108	108	56.0-143			0.000	20
Methyl tert-butyl ether	5.00	5.70	5.59	114	112	66.0-132			1.95	20
Naphthalene	5.00	4.35	4.06	87.0	81.2	59.0-130			6.90	20
n-Propylbenzene	5.00	5.17	5.25	103	105	74.0-126			1.54	20
Styrene	5.00	4.18	4.20	83.6	84.0	72.0-127			0.477	20
1,1,1,2-Tetrachloroethane	5.00	4.70	4.74	94.0	94.8	74.0-129			0.847	20
1,1,2,2-Tetrachloroethane	5.00	5.73	5.26	115	105	68.0-128			8.55	20
1,1,2-Trichlorotrifluoroethane	5.00	5.47	5.36	109	107	61.0-139			2.03	20
Tetrachloroethene	5.00	4.89	4.95	97.8	99.0	70.0-136			1.22	20
Toluene	5.00	4.86	4.93	97.2	98.6	75.0-121			1.43	20
1,2,3-Trichlorobenzene	5.00	3.91	3.98	78.2	79.6	59.0-139			1.77	20
1,2,4-Trichlorobenzene	5.00	3.82	3.94	76.4	78.8	62.0-137			3.09	20
1,1,1-Trichloroethane	5.00	5.27	5.27	105	105	69.0-126			0.000	20
1,1,2-Trichloroethane	5.00	5.02	5.15	100	103	78.0-123			2.56	20
Trichloroethene	5.00	5.59	5.68	112	114	76.0-126			1.60	20
Trichlorofluoromethane	5.00	5.31	5.33	106	107	61.0-142			0.376	20
1,2,3-Trichloropropane	5.00	6.26	5.82	125	116	67.0-129			7.28	20
1,2,4-Trimethylbenzene	5.00	4.89	4.73	97.8	94.6	70.0-126			3.33	20
1,2,3-Trimethylbenzene	5.00	4.82	4.72	96.4	94.4	74.0-124			2.10	20
1,3,5-Trimethylbenzene	5.00	5.06	4.80	101	96.0	73.0-127			5.27	20
Vinyl chloride	5.00	4.47	4.46	89.4	89.2	63.0-134			0.224	20
Xylenes, Total	15.0	13.2	14.2	88.0	94.7	72.0-127			7.30	20
Ethyl Ether	5.00	5.65	5.63	113	113	64.0-137			0.355	20
Tetrahydrofuran	5.00	5.89	6.41	118	128	37.0-146			8.46	24
Iodomethane	25.0	28.9	18.9	116	75.6	74.0-134		J3	41.8	20
Allyl chloride	25.0	26.2	26.2	105	105	70.0-131			0.000	20
Trans-1,4-Dichloro-2-butene	5.00	1.92	2.05	38.4	41.0	45.0-143	J4	J4	6.55	20
(S) Toluene-d8				*94.8*	*95.3*	*75.0-131*				
(S) 4-Bromofluorobenzene				*90.0*	*92.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*108*	*70.0-130*				

Method Blank (MB)

(MB) R3999342-3 11/13/23 19:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*110*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*

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

(LCS) R3999342-1 11/13/23 16:42 • (LCSD) R3999342-2 11/13/23 17:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	20.5	23.1	82.0	92.4	10.0-160			11.9	31
(S) Toluene-d8				*104*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*107*	*107*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*106*	*106*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: Erik.hedberg@nv5.com
jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project # 443022-1413001.10.70

Lab Project # PESENVSWA-ALP

Collected by (print): Osmin Monroy

Site/Facility ID #

P.O. # 10.701
443018-1413001.~~05.601~~

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-160-110323	G	GW	—	11/03/23	1056								X		-01
MW-174-110323		GW	—		1342		X	X		X	X	X	X		-02
MW107-110323		GW	—		1440		X	X		X	X	X	X		-03
MW124-110323		GW	—		944								X		-04
MW-301-110323		GW	—		1034								X		-05
MW-993-110323		GW	—		1200								X		-06
MW-188-110323		GW	—		1459		X	X	X	X	X	X	X		-07
MW-189-110323		GW	—		1015		X	X	X	X	X	X	X		-08
MW-169-110323		GW	—		1331		X	X	X	X	X	X	X		-09

* 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 #

Chain of Custody Page ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1673663

Ta D144

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 CAT
Shipped Via:

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date: 11/3/23 ~~16:40~~	Time: 1640	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 3.1 °C Bottles Received: 23 3.1+0=3.1
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Brandon Leggett	Date: 11/04/23 Time: 0900

If pres... PH-10BDH4321 TRC-2352362 CR6-20221V PH-10BDH4321 TRC-2352362 CR6-20221V .../Time

Hold: Condition: NCF / OK

ANALYTICAL REPORT

November 20, 2023

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

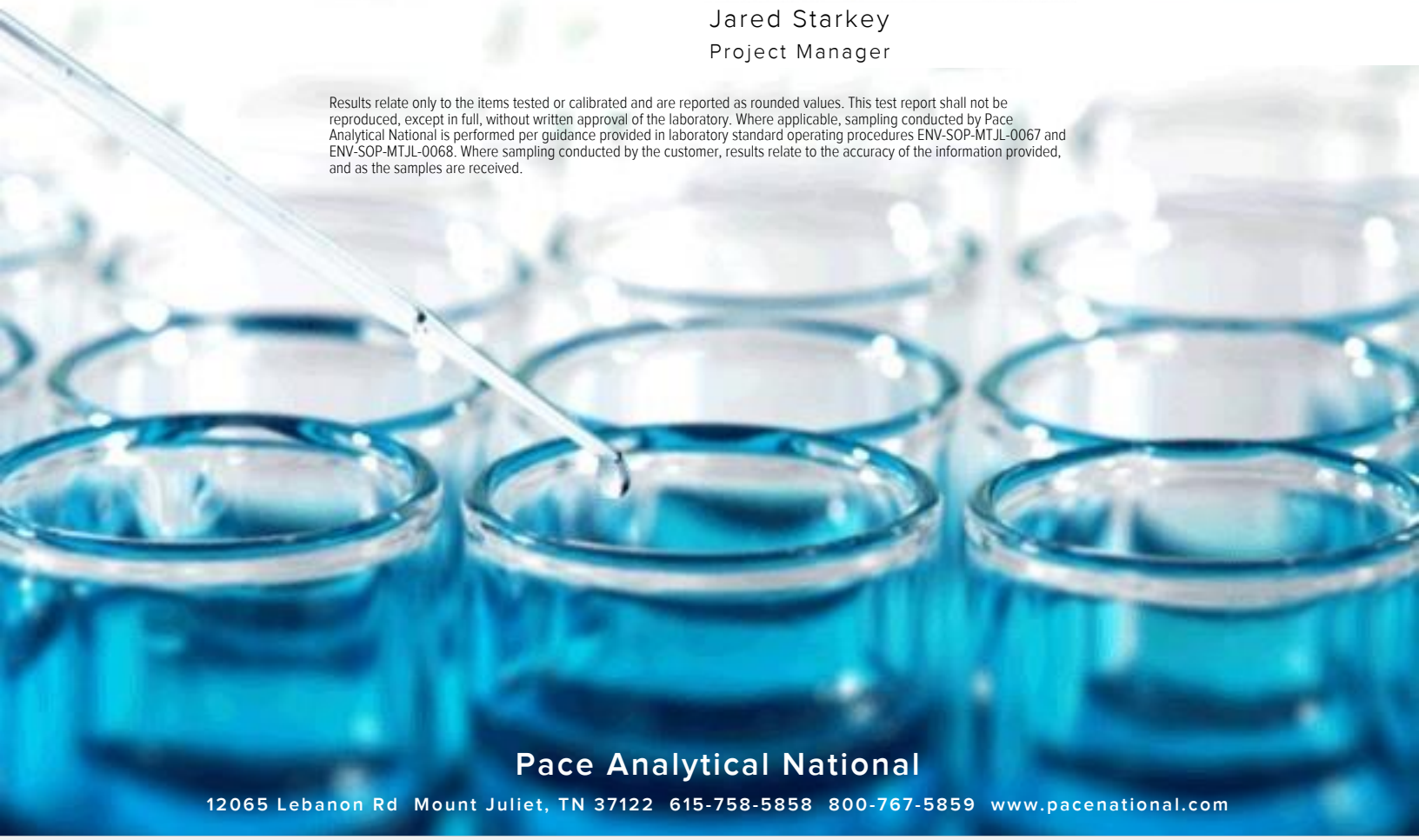
PES Environmental, Inc.- WA

Sample Delivery Group:	L1673871
Samples Received:	11/02/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

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MW-171-110123 L1673871-01 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 15:10 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166111	1	11/08/23 14:06	11/08/23 14:06	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166836	1	11/08/23 21:43	11/08/23 21:43	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171405	1	11/16/23 06:19	11/16/23 06:19	AW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2167812	5	11/09/23 10:56	11/09/23 17:04	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 11:36	11/07/23 11:36	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	250	11/09/23 17:01	11/09/23 17:01	KSD	Mt. Juliet, TN

MW-165-110123 L1673871-02 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 14:15 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2165406	1	11/08/23 12:07	11/08/23 12:07	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166836	1	11/08/23 21:56	11/08/23 21:56	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171405	1	11/16/23 06:39	11/16/23 06:39	AW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2167812	50	11/09/23 10:56	11/09/23 17:07	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 11:52	11/07/23 11:52	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 14:58	11/07/23 14:58	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 16:05	11/09/23 16:05	KSD	Mt. Juliet, TN

MW-181-110123 L1673871-03 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 14:36 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166444	1	11/08/23 15:05	11/08/23 15:05	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166836	1	11/08/23 22:09	11/08/23 22:09	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2171405	1	11/16/23 06:58	11/16/23 06:58	AW	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2167812	10	11/09/23 10:56	11/09/23 17:10	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2165206	1	11/07/23 12:05	11/07/23 12:05	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2166209	10	11/07/23 15:03	11/07/23 15:03	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	200	11/09/23 17:19	11/09/23 17:19	KSD	Mt. Juliet, TN

TB-110123 L1673871-04 GW

Collected by: Osmin Monroy | Collected date/time: 11/01/23 15:00 | Received date/time: 11/02/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2167871	1	11/09/23 11:46	11/09/23 11:46	KSD	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.

Jared Starkey
Project Manager

Sample Delivery Group (SDG) Narrative

pH outside of method requirement.

Lab Sample ID	Project Sample ID	Method
L1673871-02	MW-165-110123	8260D

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	350000		8450	20000	1	11/08/2023 14:06	WG2166111

Sample Narrative:

L1673871-01 WG2166111: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	110000		379	1000	1	11/08/2023 21:43	WG2166836
Nitrate	76.7	B J Q	48.0	100	1	11/08/2023 21:43	WG2166836
Sulfate	11600		594	5000	1	11/08/2023 21:43	WG2166836

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6970		102	1000	1	11/16/2023 06:19	WG2171405

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3680		140	500	5	11/09/2023 17:04	WG2167812
Manganese	682		3.52	25.0	5	11/09/2023 17:04	WG2167812

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6720		0.287	0.678	1	11/07/2023 11:36	WG2165206
Ethane	20.8		0.296	1.29	1	11/07/2023 11:36	WG2165206
Ethene	551		0.422	1.27	1	11/07/2023 11:36	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		137	250	250	11/09/2023 17:01	WG2167871
Acrylonitrile	U		19.0	125	250	11/09/2023 17:01	WG2167871
Benzene	U		4.00	10.0	250	11/09/2023 17:01	WG2167871
Bromobenzene	U		10.5	125	250	11/09/2023 17:01	WG2167871
Bromodichloromethane	U		7.88	25.0	250	11/09/2023 17:01	WG2167871
Bromoform	U		59.8	250	250	11/09/2023 17:01	WG2167871
Bromomethane	U		37.0	125	250	11/09/2023 17:01	WG2167871
n-Butylbenzene	U		38.3	125	250	11/09/2023 17:01	WG2167871
sec-Butylbenzene	U		25.3	125	250	11/09/2023 17:01	WG2167871
tert-Butylbenzene	U		15.5	50.0	250	11/09/2023 17:01	WG2167871
Carbon tetrachloride	U		10.8	50.0	250	11/09/2023 17:01	WG2167871
Chlorobenzene	U		5.73	25.0	250	11/09/2023 17:01	WG2167871
Chlorodibromomethane	U		4.50	25.0	250	11/09/2023 17:01	WG2167871
Chloroethane	U		10.8	50.0	250	11/09/2023 17:01	WG2167871
Chloroform	U		4.15	25.0	250	11/09/2023 17:01	WG2167871
Chloromethane	U		13.9	125	250	11/09/2023 17:01	WG2167871
2-Chlorotoluene	U		9.20	25.0	250	11/09/2023 17:01	WG2167871
4-Chlorotoluene	U		11.3	50.0	250	11/09/2023 17:01	WG2167871
1,2-Dibromo-3-Chloropropane	U		51.0	250	250	11/09/2023 17:01	WG2167871
1,2-Dibromoethane	U		5.25	25.0	250	11/09/2023 17:01	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		10.0	50.0	250	11/09/2023 17:01	WG2167871
1,2-Dichlorobenzene	U		14.5	50.0	250	11/09/2023 17:01	WG2167871
1,3-Dichlorobenzene	U		17.0	50.0	250	11/09/2023 17:01	WG2167871
1,4-Dichlorobenzene	U		19.7	50.0	250	11/09/2023 17:01	WG2167871
Dichlorodifluoromethane	U		8.18	25.0	250	11/09/2023 17:01	WG2167871
1,1-Dichloroethane	U		5.75	25.0	250	11/09/2023 17:01	WG2167871
1,2-Dichloroethane	U		4.75	25.0	250	11/09/2023 17:01	WG2167871
1,1-Dichloroethene	U		5.00	25.0	250	11/09/2023 17:01	WG2167871
cis-1,2-Dichloroethene	4140		6.90	25.0	250	11/09/2023 17:01	WG2167871
trans-1,2-Dichloroethene	14.5	J	14.3	50.0	250	11/09/2023 17:01	WG2167871
1,2-Dichloropropane	U		12.7	50.0	250	11/09/2023 17:01	WG2167871
1,1-Dichloropropene	U		7.00	25.0	250	11/09/2023 17:01	WG2167871
1,3-Dichloropropane	U		17.5	50.0	250	11/09/2023 17:01	WG2167871
cis-1,3-Dichloropropene	U		6.78	25.0	250	11/09/2023 17:01	WG2167871
trans-1,3-Dichloropropene	U		15.3	50.0	250	11/09/2023 17:01	WG2167871
2,2-Dichloropropane	U		7.93	25.0	250	11/09/2023 17:01	WG2167871
Di-isopropyl ether	U		3.50	10.0	250	11/09/2023 17:01	WG2167871
Ethylbenzene	U		5.30	25.0	250	11/09/2023 17:01	WG2167871
Hexachloro-1,3-butadiene	U		127	250	250	11/09/2023 17:01	WG2167871
Isopropylbenzene	U		8.63	25.0	250	11/09/2023 17:01	WG2167871
p-Isopropyltoluene	U		23.3	50.0	250	11/09/2023 17:01	WG2167871
2-Butanone (MEK)	U		125	250	250	11/09/2023 17:01	WG2167871
Methylene Chloride	72.3	J	66.3	250	250	11/09/2023 17:01	WG2167871
4-Methyl-2-pentanone (MIBK)	U		100	250	250	11/09/2023 17:01	WG2167871
Methyl tert-butyl ether	U		2.95	10.0	250	11/09/2023 17:01	WG2167871
Naphthalene	U		31.0	125	250	11/09/2023 17:01	WG2167871
n-Propylbenzene	U		11.8	50.0	250	11/09/2023 17:01	WG2167871
Styrene	U		27.3	125	250	11/09/2023 17:01	WG2167871
1,1,1,2-Tetrachloroethane	U		5.00	25.0	250	11/09/2023 17:01	WG2167871
1,1,2,2-Tetrachloroethane	U		3.90	25.0	250	11/09/2023 17:01	WG2167871
1,1,2-Trichlorotrifluoroethane	U		6.75	25.0	250	11/09/2023 17:01	WG2167871
Tetrachloroethene	U		7.00	25.0	250	11/09/2023 17:01	WG2167871
Toluene	U		12.5	50.0	250	11/09/2023 17:01	WG2167871
1,2,3-Trichlorobenzene	U		6.25	125	250	11/09/2023 17:01	WG2167871
1,2,4-Trichlorobenzene	U		48.3	125	250	11/09/2023 17:01	WG2167871
1,1,1-Trichloroethane	U		2.75	25.0	250	11/09/2023 17:01	WG2167871
1,1,2-Trichloroethane	U		8.83	25.0	250	11/09/2023 17:01	WG2167871
Trichloroethene	94.8		4.00	10.0	250	11/09/2023 17:01	WG2167871
Trichlorofluoromethane	U		5.00	25.0	250	11/09/2023 17:01	WG2167871
1,2,3-Trichloropropane	U		51.0	125	250	11/09/2023 17:01	WG2167871
1,2,4-Trimethylbenzene	U		11.6	50.0	250	11/09/2023 17:01	WG2167871
1,2,3-Trimethylbenzene	U		11.5	50.0	250	11/09/2023 17:01	WG2167871
1,3,5-Trimethylbenzene	U		10.8	50.0	250	11/09/2023 17:01	WG2167871
Vinyl chloride	1410		6.82	25.0	250	11/09/2023 17:01	WG2167871
Xylenes, Total	U		47.8	65.0	250	11/09/2023 17:01	WG2167871
Ethyl Ether	U		4.25	25.0	250	11/09/2023 17:01	WG2167871
Tetrahydrofuran	U		22.5	125	250	11/09/2023 17:01	WG2167871
Iodomethane	U		60.5	125	250	11/09/2023 17:01	WG2167871
Allyl chloride	U		145	250	250	11/09/2023 17:01	WG2167871
Trans-1,4-Dichloro-2-butene	U		14.0	50.0	250	11/09/2023 17:01	WG2167871
(S) Toluene-d8	*99.4*			*75.0-131*		*11/09/2023 17:01*	WG2167871
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*11/09/2023 17:01*	WG2167871
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/09/2023 17:01*	WG2167871

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1010000		8450	20000	1	11/08/2023 12:07	WG2165406

Sample Narrative:

L1673871-02 WG2165406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	89400		379	1000	1	11/08/2023 21:56	WG2166836
Nitrate	71.4	B J Q	48.0	100	1	11/08/2023 21:56	WG2166836
Sulfate	U		594	5000	1	11/08/2023 21:56	WG2166836

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	26200		102	1000	1	11/16/2023 06:39	WG2171405

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	25700		1400	5000	50	11/09/2023 17:07	WG2167812
Manganese	5930		35.2	250	50	11/09/2023 17:07	WG2167812

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25700		2.87	6.78	10	11/07/2023 14:58	WG2166209
Ethane	378		0.296	1.29	1	11/07/2023 11:52	WG2165206
Ethene	6.89		0.422	1.27	1	11/07/2023 11:52	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 16:05	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 16:05	WG2167871
Benzene	0.105		0.0160	0.0400	1	11/09/2023 16:05	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 16:05	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 16:05	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 16:05	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 16:05	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 16:05	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 16:05	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 16:05	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 16:05	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 16:05	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 16:05	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 16:05	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 16:05	WG2167871
Chloromethane	0.0570	J	0.0556	0.500	1	11/09/2023 16:05	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 16:05	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 16:05	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 16:05	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 16:05	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 16:05	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 16:05	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 16:05	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 16:05	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 16:05	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 16:05	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 16:05	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 16:05	WG2167871
cis-1,2-Dichloroethene	7.03		0.0276	0.100	1	11/09/2023 16:05	WG2167871
trans-1,2-Dichloroethene	1.21		0.0572	0.200	1	11/09/2023 16:05	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 16:05	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 16:05	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 16:05	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 16:05	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 16:05	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 16:05	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 16:05	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 16:05	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 16:05	WG2167871
Isopropylbenzene	0.0800	J	0.0345	0.100	1	11/09/2023 16:05	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 16:05	WG2167871
2-Butanone (MEK)	0.907	J	0.500	1.00	1	11/09/2023 16:05	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 16:05	WG2167871
4-Methyl-2-pentanone (MIBK)	0.434	J	0.400	1.00	1	11/09/2023 16:05	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 16:05	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 16:05	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 16:05	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 16:05	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 16:05	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 16:05	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 16:05	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 16:05	WG2167871
Toluene	0.311		0.0500	0.200	1	11/09/2023 16:05	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 16:05	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 16:05	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 16:05	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 16:05	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 16:05	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 16:05	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 16:05	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 16:05	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 16:05	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 16:05	WG2167871
Vinyl chloride	10.3		0.0273	0.100	1	11/09/2023 16:05	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 16:05	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 16:05	WG2167871
Tetrahydrofuran	2.42		0.0900	0.500	1	11/09/2023 16:05	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 16:05	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 16:05	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 16:05	WG2167871
(S) Toluene-d8	*99.4*			*75.0-131*		*11/09/2023 16:05*	WG2167871
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/09/2023 16:05*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 16:05*	WG2167871

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	640000		8450	20000	1	11/08/2023 15:05	WG2166444

Sample Narrative:

L1673871-03 WG2166444: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	95100		379	1000	1	11/08/2023 22:09	WG2166836
Nitrate	120	B Q	48.0	100	1	11/08/2023 22:09	WG2166836
Sulfate	U		594	5000	1	11/08/2023 22:09	WG2166836

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	32700		102	1000	1	11/16/2023 06:58	WG2171405

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	15800		281	1000	10	11/09/2023 17:10	WG2167812
Manganese	1860		7.04	50.0	10	11/09/2023 17:10	WG2167812

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	19600		2.87	6.78	10	11/07/2023 15:03	WG2166209
Ethane	230		0.296	1.29	1	11/07/2023 12:05	WG2165206
Ethene	1230		0.422	1.27	1	11/07/2023 12:05	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		110	200	200	11/09/2023 17:19	WG2167871
Acrylonitrile	U		15.2	100	200	11/09/2023 17:19	WG2167871
Benzene	U		3.20	8.00	200	11/09/2023 17:19	WG2167871
Bromobenzene	U		8.40	100	200	11/09/2023 17:19	WG2167871
Bromodichloromethane	U		6.30	20.0	200	11/09/2023 17:19	WG2167871
Bromoform	U		47.8	200	200	11/09/2023 17:19	WG2167871
Bromomethane	U		29.6	100	200	11/09/2023 17:19	WG2167871
n-Butylbenzene	U		30.6	100	200	11/09/2023 17:19	WG2167871
sec-Butylbenzene	U		20.2	100	200	11/09/2023 17:19	WG2167871
tert-Butylbenzene	U		12.4	40.0	200	11/09/2023 17:19	WG2167871
Carbon tetrachloride	U		8.64	40.0	200	11/09/2023 17:19	WG2167871
Chlorobenzene	U		4.58	20.0	200	11/09/2023 17:19	WG2167871
Chlorodibromomethane	U		3.60	20.0	200	11/09/2023 17:19	WG2167871
Chloroethane	U		8.64	40.0	200	11/09/2023 17:19	WG2167871
Chloroform	U		3.32	20.0	200	11/09/2023 17:19	WG2167871
Chloromethane	U		11.1	100	200	11/09/2023 17:19	WG2167871
2-Chlorotoluene	U		7.36	20.0	200	11/09/2023 17:19	WG2167871
4-Chlorotoluene	U		9.04	40.0	200	11/09/2023 17:19	WG2167871
1,2-Dibromo-3-Chloropropane	U		40.8	200	200	11/09/2023 17:19	WG2167871
1,2-Dibromoethane	U		4.20	20.0	200	11/09/2023 17:19	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		8.00	40.0	200	11/09/2023 17:19	WG2167871
1,2-Dichlorobenzene	U		11.6	40.0	200	11/09/2023 17:19	WG2167871
1,3-Dichlorobenzene	U		13.6	40.0	200	11/09/2023 17:19	WG2167871
1,4-Dichlorobenzene	U		15.8	40.0	200	11/09/2023 17:19	WG2167871
Dichlorodifluoromethane	U		6.54	20.0	200	11/09/2023 17:19	WG2167871
1,1-Dichloroethane	U		4.60	20.0	200	11/09/2023 17:19	WG2167871
1,2-Dichloroethane	U		3.80	20.0	200	11/09/2023 17:19	WG2167871
1,1-Dichloroethene	U		4.00	20.0	200	11/09/2023 17:19	WG2167871
cis-1,2-Dichloroethene	7530		5.52	20.0	200	11/09/2023 17:19	WG2167871
trans-1,2-Dichloroethene	28.4	J	11.4	40.0	200	11/09/2023 17:19	WG2167871
1,2-Dichloropropane	U		10.2	40.0	200	11/09/2023 17:19	WG2167871
1,1-Dichloropropene	U		5.60	20.0	200	11/09/2023 17:19	WG2167871
1,3-Dichloropropane	U		14.0	40.0	200	11/09/2023 17:19	WG2167871
cis-1,3-Dichloropropene	U		5.42	20.0	200	11/09/2023 17:19	WG2167871
trans-1,3-Dichloropropene	U		12.2	40.0	200	11/09/2023 17:19	WG2167871
2,2-Dichloropropane	U		6.34	20.0	200	11/09/2023 17:19	WG2167871
Di-isopropyl ether	U		2.80	8.00	200	11/09/2023 17:19	WG2167871
Ethylbenzene	U		4.24	20.0	200	11/09/2023 17:19	WG2167871
Hexachloro-1,3-butadiene	U		102	200	200	11/09/2023 17:19	WG2167871
Isopropylbenzene	U		6.90	20.0	200	11/09/2023 17:19	WG2167871
p-Isopropyltoluene	U		18.6	40.0	200	11/09/2023 17:19	WG2167871
2-Butanone (MEK)	U		100	200	200	11/09/2023 17:19	WG2167871
Methylene Chloride	U		53.0	200	200	11/09/2023 17:19	WG2167871
4-Methyl-2-pentanone (MIBK)	U		80.0	200	200	11/09/2023 17:19	WG2167871
Methyl tert-butyl ether	U		2.36	8.00	200	11/09/2023 17:19	WG2167871
Naphthalene	U		24.8	100	200	11/09/2023 17:19	WG2167871
n-Propylbenzene	U		9.44	40.0	200	11/09/2023 17:19	WG2167871
Styrene	U		21.8	100	200	11/09/2023 17:19	WG2167871
1,1,1,2-Tetrachloroethane	U		4.00	20.0	200	11/09/2023 17:19	WG2167871
1,1,2,2-Tetrachloroethane	U		3.12	20.0	200	11/09/2023 17:19	WG2167871
1,1,2-Trichlorotrifluoroethane	U		5.40	20.0	200	11/09/2023 17:19	WG2167871
Tetrachloroethene	U		5.60	20.0	200	11/09/2023 17:19	WG2167871
Toluene	U		10.0	40.0	200	11/09/2023 17:19	WG2167871
1,2,3-Trichlorobenzene	U		5.00	100	200	11/09/2023 17:19	WG2167871
1,2,4-Trichlorobenzene	U		38.6	100	200	11/09/2023 17:19	WG2167871
1,1,1-Trichloroethane	U		2.20	20.0	200	11/09/2023 17:19	WG2167871
1,1,2-Trichloroethane	U		7.06	20.0	200	11/09/2023 17:19	WG2167871
Trichloroethene	U		3.20	8.00	200	11/09/2023 17:19	WG2167871
Trichlorofluoromethane	U		4.00	20.0	200	11/09/2023 17:19	WG2167871
1,2,3-Trichloropropane	U		40.8	100	200	11/09/2023 17:19	WG2167871
1,2,4-Trimethylbenzene	U		9.28	40.0	200	11/09/2023 17:19	WG2167871
1,2,3-Trimethylbenzene	U		9.20	40.0	200	11/09/2023 17:19	WG2167871
1,3,5-Trimethylbenzene	U		8.64	40.0	200	11/09/2023 17:19	WG2167871
Vinyl chloride	6830		5.46	20.0	200	11/09/2023 17:19	WG2167871
Xylenes, Total	U		38.2	52.0	200	11/09/2023 17:19	WG2167871
Ethyl Ether	U		3.40	20.0	200	11/09/2023 17:19	WG2167871
Tetrahydrofuran	U		18.0	100	200	11/09/2023 17:19	WG2167871
Iodomethane	U		48.4	100	200	11/09/2023 17:19	WG2167871
Allyl chloride	U		116	200	200	11/09/2023 17:19	WG2167871
Trans-1,4-Dichloro-2-butene	U		11.2	40.0	200	11/09/2023 17:19	WG2167871
(S) Toluene-d8	*105*			*75.0-131*		*11/09/2023 17:19*	WG2167871
(S) 4-Bromofluorobenzene	*89.7*			*67.0-138*		*11/09/2023 17:19*	WG2167871
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/09/2023 17:19*	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 11:46	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 11:46	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 11:46	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 11:46	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 11:46	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 11:46	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 11:46	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 11:46	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 11:46	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 11:46	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 11:46	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 11:46	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 11:46	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 11:46	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 11:46	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 11:46	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 11:46	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 11:46	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 11:46	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 11:46	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 11:46	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 11:46	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 11:46	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 11:46	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 11:46	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 11:46	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 11:46	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 11:46	WG2167871
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/09/2023 11:46	WG2167871
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/09/2023 11:46	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 11:46	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 11:46	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 11:46	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 11:46	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 11:46	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 11:46	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 11:46	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 11:46	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 11:46	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 11:46	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 11:46	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 11:46	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 11:46	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 11:46	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 11:46	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 11:46	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 11:46	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 11:46	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 11:46	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 11:46	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 11:46	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 11:46	WG2167871
Toluene	U		0.0500	0.200	1	11/09/2023 11:46	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 11:46	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 11:46	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 11:46	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 11:46	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 11:46	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 11:46	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 11:46	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 11:46	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 11:46	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 11:46	WG2167871
Vinyl chloride	U		0.0273	0.100	1	11/09/2023 11:46	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 11:46	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 11:46	WG2167871
Tetrahydrofuran	U		0.0900	0.500	1	11/09/2023 11:46	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 11:46	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 11:46	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 11:46	WG2167871
(S) Toluene-d8	*98.5*			*75.0-131*		*11/09/2023 11:46*	WG2167871
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/09/2023 11:46*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 11:46*	WG2167871

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

Method Blank (MB)

(MB) R3997252-2 11/08/23 08:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1672686-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1672686-06 11/08/23 09:26 • (DUP) R3997252-3 11/08/23 09:34

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	128000	132000	1	2.57		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1672780-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1672780-03 11/08/23 11:32 • (DUP) R3997252-4 11/08/23 11:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	2330000	2230000	1	3.99		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997252-1 11/08/23 08:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	103000	103	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997258-2 11/08/23 11:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673043-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673043-01 11/08/23 12:04 • (DUP) R3997258-4 11/08/23 12:08

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

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673150-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673150-01 11/08/23 13:54 • (DUP) R3997258-6 11/08/23 13:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	196000	195000	1	0.191		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997258-1 11/08/23 11:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	103000	103	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997253-2 11/08/23 12:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:
BLANK: Endpoint pH 4.5

L1672487-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672487-01 11/08/23 12:53 • (DUP) R3997253-3 11/08/23 12:57

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	81500	83000	1	1.81		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

L1673297-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1673297-03 11/08/23 14:43 • (DUP) R3997253-4 11/08/23 14:51

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	167000	168000	1	0.592		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997253-1 11/08/23 12:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	99000	99.0	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997647-1 11/08/23 13:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	78.1	J	48.0	100
Sulfate	U		594	5000

Method Blank (MB)

(MB) R3998238-1 11/09/23 12:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	73.8	J	48.0	100
Sulfate	U		594	5000

L1672900-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672900-01 11/08/23 18:07 • (DUP) R3997647-4 11/08/23 18:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	400000	400000	1	0.121	E	15
Nitrate	371	358	1	3.60		15
Sulfate	214000	213000	1	0.0849	E	15

L1672900-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672900-01 11/08/23 18:58 • (DUP) R3997647-9 11/08/23 19:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	389000	389000	5	0.0332		15
Sulfate	204000	204000	5	0.262		15

L1674589-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674589-01 11/08/23 22:34 • (DUP) R3997647-10 11/08/23 23:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	12400	12100	1	2.20		15
Nitrate	161	149	1	7.23		15
Sulfate	19500	19000	1	2.53		15

L1672900-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672900-01 11/09/23 18:43 • (DUP) R3998238-3 11/09/23 18:56

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	399000	400000	1	0.360	E	15
Nitrate	184	183	1	0.763		15
Sulfate	211000	211000	1	0.371	E	15

L1672900-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1672900-01 11/09/23 19:34 • (DUP) R3998238-6 11/09/23 19:47

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Sulfate	204000	204000	5	0.243		15

L1674589-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674589-01 11/09/23 23:10 • (DUP) R3998238-7 11/09/23 23:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	12300	12100	1	1.75		15
Nitrate	147	147	1	0.0680		15
Sulfate	19500	19400	1	0.519		15

Laboratory Control Sample (LCS)

(LCS) R3997647-2 11/08/23 13:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40100	100	80.0-120	
Nitrate	8000	7630	95.4	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3997647-2 11/08/23 13:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	38500	96.3	80.0-120	

Laboratory Control Sample (LCS)

(LCS) R3998238-2 11/09/23 12:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39700	99.4	80.0-120	
Nitrate	8000	7750	96.8	80.0-120	
Sulfate	40000	39200	98.0	80.0-120	

L1672900-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672900-01 11/08/23 18:07 • (MS) R3997647-7 11/08/23 18:32 • (MSD) R3997647-8 11/08/23 18:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	400000	359000	358000	0.000	0.000	1	80.0-120	E V	E V	0.0336	15
Nitrate	8000	371	7320	7380	86.9	87.7	1	80.0-120			0.891	15
Sulfate	40000	214000	203000	202000	0.000	0.000	1	80.0-120	E V	E V	0.252	15

L1674589-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1674589-01 11/08/23 22:34 • (MS) R3997647-11 11/08/23 23:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	12400	49000	91.6	1	80.0-120	
Nitrate	8000	161	7360	90.0	1	80.0-120	
Sulfate	40000	19500	54300	87.0	1	80.0-120	

L1672900-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672900-01 11/09/23 18:43 • (MS) R3998238-4 11/09/23 19:08 • (MSD) R3998238-5 11/09/23 19:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	399000	359000	359000	0.000	0.000	1	80.0-120	E V	E V	0.0192	15
Nitrate	8000	184	7900	7900	96.5	96.4	1	80.0-120			0.0456	15
Sulfate	40000	211000	217000	217000	15.2	14.8	1	80.0-120	E V	E V	0.0666	15

L1674589-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1674589-01 11/09/23 23:10 • (MS) R3998238-8 11/10/23 00:01

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	12300	48800	91.2	1	80.0-120	
Nitrate	8000	147	7560	92.7	1	80.0-120	
Sulfate	40000	19500	55200	89.1	1	80.0-120	

Method Blank (MB)

(MB) R4001006-2 11/15/23 18:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	141	J	102	1000

L1672957-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1672957-02 11/15/23 23:12 • (DUP) R4001006-5 11/15/23 23:26

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	4900	4470	1	8.99		20

L1673293-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1673293-04 11/16/23 01:28 • (DUP) R4001006-6 11/16/23 01:43

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	6020	6020	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4001006-1 11/15/23 17:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24300	97.3	85.0-115	

L1672957-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1672957-01 11/15/23 22:16 • (MS) R4001006-3 11/15/23 22:37 • (MSD) R4001006-4 11/15/23 22:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	5530	26100	26200	82.4	82.7	1	85.0-115	J6	J6	0.268	20

L1673438-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673438-01 11/16/23 02:52 • (MS) R4001006-7 11/16/23 03:11 • (MSD) R4001006-8 11/16/23 03:33

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	7570	31600	32500	96.1	99.6	1	85.0-115			2.71	20

Method Blank (MB)

(MB) R3997924-1 11/09/23 15:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3997924-2 11/09/23 15:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1110	111	80.0-120	
Manganese	50.0	59.1	118	80.0-120	

L1673260-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673260-07 11/09/23 15:53 • (MS) R3997924-4 11/09/23 16:00 • (MSD) R3997924-5 11/09/23 16:03

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	8210	9240	9090	104	88.9	1	75.0-125			1.63	20
Manganese	50.0	440	491	489	102	98.8	1	75.0-125			0.331	20

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

Method Blank (MB)

(MB) R3996455-2 11/07/23 09:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1673102-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673102-01 11/07/23 10:31 • (DUP) R3996455-3 11/07/23 10:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1673351-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1673351-05 11/07/23 11:20 • (DUP) R3996455-4 11/07/23 12:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3996455-1 11/07/23 09:18 • (LCSD) R3996455-5 11/07/23 12:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	61.3	65.0	90.4	95.9	85.0-115			5.86	20
Ethane	129	113	112	87.6	86.8	85.0-115			0.889	20
Ethene	127	113	112	89.0	88.2	85.0-115			0.889	20

Method Blank (MB)

(MB) R3996599-2 11/07/23 14:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1672476-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1672476-03 11/07/23 14:20 • (DUP) R3996599-3 11/07/23 15:08

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	22800	22600	10	0.881		20

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

(LCS) R3996599-1 11/07/23 14:12 • (LCSD) R3996599-4 11/07/23 15:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.7	61.4	95.4	90.6	85.0-115			5.23	20

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3998169-2 11/09/23 09:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*100*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	36.3	145	10.0-160	
Acrylonitrile	25.0	30.0	120	45.0-153	
Benzene	5.00	5.83	117	70.0-123	
Bromobenzene	5.00	5.61	112	73.0-121	
Bromodichloromethane	5.00	5.37	107	73.0-121	
Bromoform	5.00	5.37	107	64.0-132	
Bromomethane	5.00	4.47	89.4	56.0-147	
n-Butylbenzene	5.00	4.49	89.8	68.0-135	
sec-Butylbenzene	5.00	6.03	121	74.0-130	
tert-Butylbenzene	5.00	5.48	110	75.0-127	
Carbon tetrachloride	5.00	5.36	107	66.0-128	
Chlorobenzene	5.00	5.61	112	76.0-128	
Chlorodibromomethane	5.00	5.73	115	74.0-127	
Chloroethane	5.00	6.04	121	61.0-134	
Chloroform	5.00	5.62	112	72.0-123	
Chloromethane	5.00	5.10	102	51.0-138	
2-Chlorotoluene	5.00	5.11	102	75.0-124	
4-Chlorotoluene	5.00	5.76	115	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	5.26	105	59.0-130	
1,2-Dibromoethane	5.00	5.56	111	74.0-128	
Dibromomethane	5.00	5.20	104	75.0-122	
1,2-Dichlorobenzene	5.00	5.54	111	76.0-124	
1,3-Dichlorobenzene	5.00	5.47	109	76.0-125	
1,4-Dichlorobenzene	5.00	5.34	107	77.0-121	
Dichlorodifluoromethane	5.00	5.02	100	43.0-156	
1,1-Dichloroethane	5.00	5.55	111	70.0-127	
1,2-Dichloroethane	5.00	5.14	103	65.0-131	
1,1-Dichloroethene	5.00	6.29	126	65.0-131	
cis-1,2-Dichloroethene	5.00	5.65	113	73.0-125	
trans-1,2-Dichloroethene	5.00	5.73	115	71.0-125	
1,2-Dichloropropane	5.00	5.74	115	74.0-125	
1,1-Dichloropropene	5.00	5.67	113	73.0-125	
1,3-Dichloropropane	5.00	5.67	113	80.0-125	
cis-1,3-Dichloropropene	5.00	5.77	115	76.0-127	
trans-1,3-Dichloropropene	5.00	5.45	109	73.0-127	
2,2-Dichloropropane	5.00	6.47	129	59.0-135	
Di-isopropyl ether	5.00	5.79	116	60.0-136	
Ethylbenzene	5.00	5.78	116	74.0-126	
Hexachloro-1,3-butadiene	5.00	6.51	130	57.0-150	
Isopropylbenzene	5.00	5.50	110	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R3998169-1 11/09/23 08:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	5.15	103	72.0-133	
2-Butanone (MEK)	25.0	33.4	134	30.0-160	
Methylene Chloride	5.00	5.50	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	30.0	120	56.0-143	
Methyl tert-butyl ether	5.00	5.73	115	66.0-132	
Naphthalene	5.00	4.99	99.8	59.0-130	
n-Propylbenzene	5.00	5.48	110	74.0-126	
Styrene	5.00	5.50	110	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.50	110	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	5.25	105	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	5.68	114	61.0-139	
Tetrachloroethene	5.00	5.85	117	70.0-136	
Toluene	5.00	5.76	115	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.72	94.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.96	99.2	62.0-137	
1,1,1-Trichloroethane	5.00	5.98	120	69.0-126	
1,1,2-Trichloroethane	5.00	5.48	110	78.0-123	
Trichloroethene	5.00	5.68	114	76.0-126	
Trichlorofluoromethane	5.00	4.99	99.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.10	102	67.0-129	
1,2,4-Trimethylbenzene	5.00	5.71	114	70.0-126	
1,2,3-Trimethylbenzene	5.00	5.42	108	74.0-124	
1,3,5-Trimethylbenzene	5.00	5.95	119	73.0-127	
Vinyl chloride	5.00	5.74	115	63.0-134	
Xylenes, Total	15.0	16.8	112	72.0-127	
Ethyl Ether	5.00	5.72	114	64.0-137	
Tetrahydrofuran	5.00	4.98	99.6	37.0-146	
Iodomethane	25.0	27.3	109	74.0-134	
Allyl chloride	25.0	29.0	116	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	5.93	119	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*108*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*99.1*	*70.0-130*	

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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.

PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Pace

MT JULIET, TN

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project #: 443022-1413001.10.70

Lab Project #: PESENVSWA-ALP

SDG #: L1673867

Table #

Collected by (print): Osmin Murray

Site/Facility ID #

P.O. #: 443018-1413001.~~05.601~~ 10.701 a

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/27/23 cam

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-171-110123	G	GW	—	11/01/23	1510		X	X	X	X	X	X	X		-01
MW-165-110123	↓	GW	—	↓	1415		X	X	X	X	X	X	X		-02
MW-181-110123	↓	GW	—	↓	1436		X	X	X	X	X	X	X		-03
TB-110123	G	GW	—	—	1500								X		-04
		GW													
		GW													
		GW													
		GW													
		GW													
		GW													

* 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 #: 664342965449

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR	
	11/1/23	1700			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: DP PB °C 3.3±0=3.3 Bottles Received:	If preservation required by Login: Date/Time
Relinquished by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/2/23 Time: 0900	Hold: Condition: NCF / OK

11/2-NCF-PESENVSWA L1673871

R5

Time estimate: oh **Time spent:** oh

Members

Hailey Melson (responsible) JS Jared Starkey

Due on *6 November 2023 8:00 AM* for target *Done*

- [ ] Login Clarification needed
- [ ] Chain of custody is incomplete
- [ ] Please specify Metals requested
- [ ] Please specify TCLP requested
- [ ] Received additional samples not listed on COC
- [ ] Sample IDs on containers do not match IDs on COC
- [ ] Client did not "X" analysis
- [x] Chain of Custody is missing
- [x] If no COC: Received by:_Josh L._____
- [x] If no COC: Date/Time:_11/2/23 @ 0900_____
- [x] If no COC: Temp./Cont.Rec./pH:_3.3_____
- [x] If no COC: Carrier:_FedEx_____
- [x] If no COC: Tracking #:_664342965449_____
- [ ] Client informed by call
- [ ] Client informed by Email
- [ ] Client informed by Voicemail
- [ ] Date/Time:_____
- [ ] PM initials:_____
- [ ] Client Contact:_____

Comments

Hailey Melson *2 November 2023 5:26 PM*

Received IDs: MW-165-110123 (11/1/23 @ 1450), MW-181-110123 (11/1/23 @ 1436), MW-171-110123 (11/1/23 @ 1510) with no COC.
P1033818, T240736
Received 10 containers per ID: (2-250ml Amb-H_2SO_4, 5-40ml amb-HCl, 1-250ml HDPE-HNO_3, 2-125ml HDPE-No Pres)

Jared Starkey *2 November 2023 8:40 PM*

Please use attached COC.

Jared Starkey *3 November 2023 12:39 PM*

Do not log FERROUS FE

Hailey Melson *4 November 2023 2:48 PM*

Done

ANALYTICAL REPORT

February 09, 2024

Revised Report

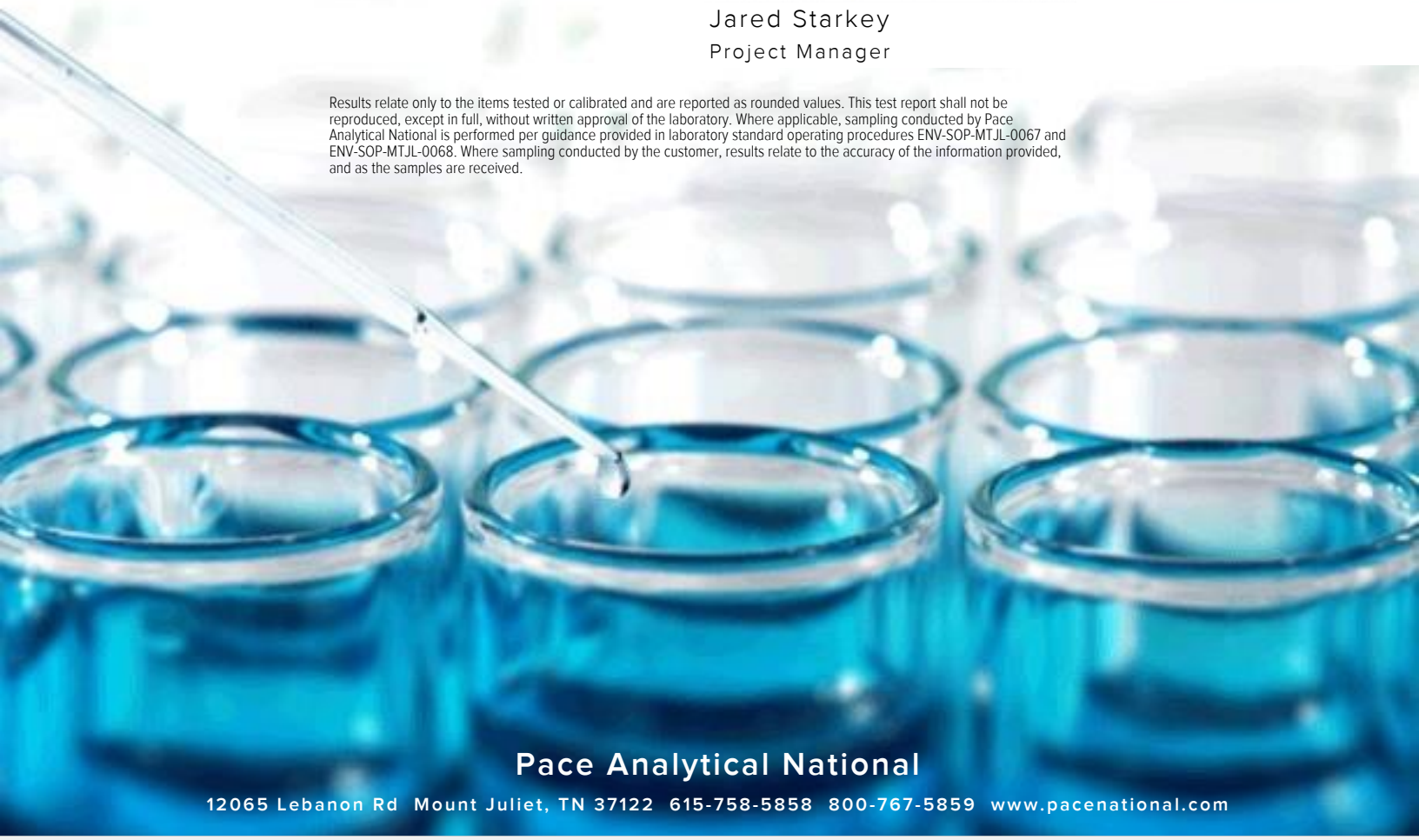
PES Environmental, Inc.- WA

Sample Delivery Group:	L1674499
Samples Received:	11/07/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW127-110623 L1674499-01 GW

Collected by: N. Wisdom | Collected date/time: 11/06/23 10:51 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 06:31	11/11/23 06:31	KSD	Mt. Juliet, TN

MW-190-110623 L1674499-02 GW

Collected by: N. Wisdom | Collected date/time: 11/06/23 09:00 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167858	1	11/12/23 10:22	11/12/23 10:22	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 13:40	11/07/23 13:40	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 01:30	11/22/23 01:30	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 16:45	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 10:39	11/14/23 10:39	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 06:50	11/11/23 06:50	KSD	Mt. Juliet, TN

MW120-110623 L1674499-03 GW

Collected by: N. Wisdom | Collected date/time: 11/06/23 11:23 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167858	1	11/12/23 10:26	11/12/23 10:26	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 13:55	11/07/23 13:55	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 01:48	11/22/23 01:48	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 16:48	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 10:45	11/14/23 10:45	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 07:09	11/11/23 07:09	KSD	Mt. Juliet, TN

MW-9-110623 L1674499-04 GW

Collected by: N. Wisdom | Collected date/time: 11/06/23 12:03 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2166959	1	11/09/23 11:01	11/09/23 11:01	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 14:10	11/07/23 14:10	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 02:03	11/22/23 02:03	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 16:52	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 10:52	11/14/23 10:52	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 07:28	11/11/23 07:28	KSD	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/22/23 11:22

Project Narrative

ID Corrections

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/11/2023 06:31	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 06:31	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 06:31	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 06:31	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 06:31	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 06:31	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 06:31	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 06:31	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 06:31	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 06:31	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 06:31	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 06:31	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 06:31	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 06:31	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 06:31	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 06:31	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 06:31	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 06:31	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 06:31	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 06:31	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 06:31	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 06:31	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 06:31	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 06:31	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 06:31	WG2169075
1,1-Dichloroethane	0.478		0.0230	0.100	1	11/11/2023 06:31	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 06:31	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 06:31	WG2169075
cis-1,2-Dichloroethene	0.724		0.0276	0.100	1	11/11/2023 06:31	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 06:31	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 06:31	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 06:31	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 06:31	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 06:31	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 06:31	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 06:31	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 06:31	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 06:31	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 06:31	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 06:31	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 06:31	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 06:31	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 06:31	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 06:31	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 06:31	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 06:31	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 06:31	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 06:31	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 06:31	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 06:31	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 06:31	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 06:31	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 06:31	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 06:31	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 06:31	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 06:31	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 06:31	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 06:31	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 06:31	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 06:31	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 06:31	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 06:31	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 06:31	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 06:31	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 06:31	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 06:31	WG2169075
Tetrahydrofuran	0.385	J	0.0900	0.500	1	11/11/2023 06:31	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 06:31	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 06:31	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 06:31	WG2169075
(S) Toluene-d8	*92.6*			*75.0-131*		*11/11/2023 06:31*	WG2169075
(S) 4-Bromofluorobenzene	*89.4*			*67.0-138*		*11/11/2023 06:31*	WG2169075
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/11/2023 06:31*	WG2169075

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	227000		8450	20000	1	11/12/2023 10:22	WG2167858

Sample Narrative:

L1674499-02 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15900		379	1000	1	11/07/2023 13:40	WG2166050
Nitrate	88.7	J	48.0	100	1	11/07/2023 13:40	WG2166050
Sulfate	36400		594	5000	1	11/07/2023 13:40	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6440		102	1000	1	11/22/2023 01:30	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2340		28.1	100	1	11/14/2023 16:45	WG2166505
Manganese	872		0.704	5.00	1	11/14/2023 16:45	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4110		0.287	0.678	1	11/14/2023 10:39	WG2168264
Ethane	28.4		0.296	1.29	1	11/14/2023 10:39	WG2168264
Ethene	30.4		0.422	1.27	1	11/14/2023 10:39	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	14.5	C5 J4	0.548	1.00	1	11/11/2023 06:50	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 06:50	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 06:50	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 06:50	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 06:50	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 06:50	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 06:50	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 06:50	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 06:50	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 06:50	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 06:50	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 06:50	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 06:50	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 06:50	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 06:50	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 06:50	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 06:50	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 06:50	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 06:50	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 06:50	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 06:50	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 06:50	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 06:50	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 06:50	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 06:50	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 06:50	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 06:50	WG2169075
1,1-Dichloroethene	0.134		0.0200	0.100	1	11/11/2023 06:50	WG2169075
cis-1,2-Dichloroethene	78.8		0.0276	0.100	1	11/11/2023 06:50	WG2169075
trans-1,2-Dichloroethene	0.0960	J	0.0572	0.200	1	11/11/2023 06:50	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 06:50	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 06:50	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 06:50	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 06:50	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 06:50	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 06:50	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 06:50	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 06:50	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 06:50	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 06:50	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 06:50	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 06:50	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 06:50	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 06:50	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 06:50	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 06:50	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 06:50	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 06:50	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 06:50	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 06:50	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 06:50	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 06:50	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 06:50	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 06:50	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 06:50	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 06:50	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 06:50	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 06:50	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 06:50	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 06:50	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 06:50	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 06:50	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 06:50	WG2169075
Vinyl chloride	64.8		0.0273	0.100	1	11/11/2023 06:50	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 06:50	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 06:50	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 06:50	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 06:50	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 06:50	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 06:50	WG2169075
(S) Toluene-d8	*94.8*			*75.0-131*		*11/11/2023 06:50*	WG2169075
(S) 4-Bromofluorobenzene	*89.4*			*67.0-138*		*11/11/2023 06:50*	WG2169075
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/11/2023 06:50*	WG2169075

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	182000		8450	20000	1	11/12/2023 10:26	WG2167858

Sample Narrative:

L1674499-03 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22200		379	1000	1	11/07/2023 13:55	WG2166050
Nitrate	1660		48.0	100	1	11/07/2023 13:55	WG2166050
Sulfate	53800		594	5000	1	11/07/2023 13:55	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1350	B	102	1000	1	11/22/2023 01:48	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	952		28.1	100	1	11/14/2023 16:48	WG2166505
Manganese	344		0.704	5.00	1	11/14/2023 16:48	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17.4		0.287	0.678	1	11/14/2023 10:45	WG2168264
Ethane	0.758	J	0.296	1.29	1	11/14/2023 10:45	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 10:45	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.45	C5 J4	0.548	1.00	1	11/11/2023 07:09	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 07:09	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 07:09	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 07:09	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 07:09	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 07:09	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 07:09	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 07:09	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 07:09	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 07:09	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 07:09	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 07:09	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 07:09	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 07:09	WG2169075
Chloroform	0.144	J4	0.0166	0.100	1	11/11/2023 07:09	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 07:09	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 07:09	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 07:09	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 07:09	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 07:09	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 07:09	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 07:09	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 07:09	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 07:09	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 07:09	WG2169075
1,1-Dichloroethane	1.42		0.0230	0.100	1	11/11/2023 07:09	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 07:09	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 07:09	WG2169075
cis-1,2-Dichloroethene	21.2		0.0276	0.100	1	11/11/2023 07:09	WG2169075
trans-1,2-Dichloroethene	0.161	J	0.0572	0.200	1	11/11/2023 07:09	WG2169075
1,2-Dichloropropane	0.570		0.0508	0.200	1	11/11/2023 07:09	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 07:09	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 07:09	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 07:09	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 07:09	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 07:09	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 07:09	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 07:09	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 07:09	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 07:09	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 07:09	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 07:09	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 07:09	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 07:09	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 07:09	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 07:09	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 07:09	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 07:09	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 07:09	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 07:09	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 07:09	WG2169075
Tetrachloroethene	58.3		0.0280	0.100	1	11/11/2023 07:09	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 07:09	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 07:09	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 07:09	WG2169075
1,1,1-Trichloroethane	0.215		0.0110	0.100	1	11/11/2023 07:09	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 07:09	WG2169075
Trichloroethene	17.5		0.0160	0.0400	1	11/11/2023 07:09	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 07:09	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 07:09	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 07:09	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 07:09	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 07:09	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 07:09	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 07:09	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 07:09	WG2169075
Tetrahydrofuran	0.480	J	0.0900	0.500	1	11/11/2023 07:09	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 07:09	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 07:09	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 07:09	WG2169075
(S) Toluene-d8	*96.0*			*75.0-131*		*11/11/2023 07:09*	WG2169075
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*11/11/2023 07:09*	WG2169075
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/11/2023 07:09*	WG2169075

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	587000		8450	20000	1	11/09/2023 11:01	WG2166959

Sample Narrative:

L1674499-04 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	63800		379	1000	1	11/07/2023 14:10	WG2166050
Nitrate	1040		48.0	100	1	11/07/2023 14:10	WG2166050
Sulfate	56000		594	5000	1	11/07/2023 14:10	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4500		102	1000	1	11/22/2023 02:03	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17600		28.1	100	1	11/14/2023 16:52	WG2166505
Manganese	3740		0.704	5.00	1	11/14/2023 16:52	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	128		0.287	0.678	1	11/14/2023 10:52	WG2168264
Ethane	1.53		0.296	1.29	1	11/14/2023 10:52	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 10:52	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.548	1.00	1	11/11/2023 07:28	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 07:28	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 07:28	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 07:28	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 07:28	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 07:28	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 07:28	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 07:28	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 07:28	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 07:28	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 07:28	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 07:28	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 07:28	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 07:28	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 07:28	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 07:28	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 07:28	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 07:28	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 07:28	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 07:28	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 07:28	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 07:28	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 07:28	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 07:28	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 07:28	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 07:28	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 07:28	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 07:28	WG2169075
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 07:28	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 07:28	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 07:28	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 07:28	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 07:28	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 07:28	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 07:28	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 07:28	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 07:28	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 07:28	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 07:28	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 07:28	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 07:28	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 07:28	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 07:28	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 07:28	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 07:28	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 07:28	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 07:28	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 07:28	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 07:28	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 07:28	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 07:28	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 07:28	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 07:28	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 07:28	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 07:28	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 07:28	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 07:28	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 07:28	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 07:28	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 07:28	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 07:28	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 07:28	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 07:28	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 07:28	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 07:28	WG2169075
Ethyl Ether	0.191		0.0170	0.100	1	11/11/2023 07:28	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 07:28	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 07:28	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 07:28	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 07:28	WG2169075
(S) Toluene-d8	*93.9*			*75.0-131*		*11/11/2023 07:28*	WG2169075
(S) 4-Bromofluorobenzene	*89.3*			*67.0-138*		*11/11/2023 07:28*	WG2169075
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/11/2023 07:28*	WG2169075

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

Method Blank (MB)

(MB) R3997849-2 11/09/23 08:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1673484-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-01 11/09/23 09:14 • (DUP) R3997849-3 11/09/23 09:20

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	593000	532000	1	10.7		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1673484-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1673484-07 11/09/23 11:21 • (DUP) R3997849-4 11/09/23 11:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	385000	375000	1	2.52		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3997849-1 11/09/23 08:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	105000	105	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

QUALITY CONTROL SUMMARY

L1674499-02,03

Method Blank (MB)

(MB) R3998753-2 11/12/23 09:59

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1674532-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674532-01 11/12/23 10:12 • (DUP) R3998753-3 11/12/23 10:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	126000	130000	1	3.04		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1674537-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674537-01 11/12/23 11:48 • (DUP) R3998753-4 11/12/23 11:52

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

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3998753-1 11/12/23 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	106000	106	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

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

Method Blank (MB)

(MB) R3997021-1 11/07/23 09:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1674504-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1674504-07 11/07/23 15:40 • (DUP) R3997021-3 11/07/23 15:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	39400	40800	1	3.47		15
Nitrate	159	167	1	5.09		15
Sulfate	13500	14000	1	2.99		15

Laboratory Control Sample (LCS)

(LCS) R3997021-2 11/07/23 09:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39900	99.8	80.0-120	
Nitrate	8000	7800	97.5	80.0-120	
Sulfate	40000	39300	98.3	80.0-120	

L1674504-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674504-07 11/07/23 15:40 • (MS) R3997021-4 11/07/23 16:10 • (MSD) R3997021-5 11/07/23 16:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	39400	74800	74900	88.6	88.8	1	80.0-120			0.126	15
Nitrate	8000	159	8290	8380	102	103	1	80.0-120			1.03	15
Sulfate	40000	13500	53200	53200	99.1	99.2	1	80.0-120			0.0478	15

Method Blank (MB)

(MB) R4003292-2 11/21/23 18:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	167	J	102	1000

L1673884-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1673884-05 11/21/23 19:54 • (DUP) R4003292-3 11/21/23 20:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	4400	4140	1	6.16		20

L1673953-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673953-01 11/21/23 22:37 • (DUP) R4003292-6 11/21/23 22:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	8570	8330	1	2.76		20

Laboratory Control Sample (LCS)

(LCS) R4003292-1 11/21/23 18:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24100	96.3	85.0-115	

L1673884-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673884-06 11/21/23 20:25 • (MS) R4003292-4 11/21/23 20:47 • (MSD) R4003292-5 11/21/23 21:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	4530	28900	28800	97.3	96.9	1	85.0-115			0.278	20

L1673953-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673953-04 11/21/23 23:41 • (MS) R4003292-7 11/22/23 00:02 • (MSD) R4003292-8 11/22/23 00:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	181	24300	24300	96.6	96.6	1	85.0-115			0.0411	20

Method Blank (MB)

(MB) R3999775-1 11/14/23 16:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3999775-2 11/14/23 16:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1090	109	80.0-120	
Manganese	50.0	55.6	111	80.0-120	

L1674496-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674496-01 11/14/23 17:10 • (MS) R3999775-7 11/14/23 17:16 • (MSD) R3999775-8 11/14/23 17:19

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	1340	2330	2360	99.0	102	1	75.0-125			1.12	20
Manganese	50.0	697	739	736	85.6	79.6	1	75.0-125			0.410	20

Method Blank (MB)

(MB) R3999622-2 11/14/23 10:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1674575-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-04 11/14/23 11:34 • (DUP) R3999622-3 11/14/23 11:54

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	177	178	1	0.563		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1674575-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-07 11/14/23 11:59 • (DUP) R3999622-4 11/14/23 14:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3999622-1 11/14/23 09:58 • (LCSD) R3999622-5 11/14/23 14:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	61.9	63.3	91.3	93.4	85.0-115			2.24	20
Ethane	129	112	115	86.8	89.1	85.0-115			2.64	20
Ethene	127	113	114	89.0	89.8	85.0-115			0.881	20

Method Blank (MB)

(MB) R3999488-3 11/11/23 05:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3999488-3 11/11/23 05:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*94.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

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

(LCS) R3999488-1 11/11/23 04:17 • (LCSD) R3999488-2 11/11/23 04:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	56.8	52.3	227	209	10.0-160	J4	J4	8.25	31
Acrylonitrile	25.0	30.3	30.5	121	122	45.0-153			0.658	22
Benzene	5.00	5.21	5.77	104	115	70.0-123			10.2	20
Bromobenzene	5.00	4.95	5.23	99.0	105	73.0-121			5.50	20
Bromodichloromethane	5.00	5.56	5.78	111	116	73.0-121			3.88	20
Bromoform	5.00	4.45	4.34	89.0	86.8	64.0-132			2.50	20
Bromomethane	5.00	5.06	5.90	101	118	56.0-147			15.3	20
n-Butylbenzene	5.00	3.93	4.28	78.6	85.6	68.0-135			8.53	20
sec-Butylbenzene	5.00	4.48	4.77	89.6	95.4	74.0-130			6.27	20
tert-Butylbenzene	5.00	4.21	4.49	84.2	89.8	75.0-127			6.44	20
Carbon tetrachloride	5.00	5.45	6.30	109	126	66.0-128			14.5	20
Chlorobenzene	5.00	4.78	5.08	95.6	102	76.0-128			6.09	20
Chlorodibromomethane	5.00	4.76	5.00	95.2	100	74.0-127			4.92	20
Chloroethane	5.00	5.09	5.72	102	114	61.0-134			11.7	20
Chloroform	5.00	5.79	6.49	116	130	72.0-123		J4	11.4	20
Chloromethane	5.00	5.77	6.29	115	126	51.0-138			8.62	20
2-Chlorotoluene	5.00	5.21	5.51	104	110	75.0-124			5.60	20
4-Chlorotoluene	5.00	5.00	5.28	100	106	75.0-124			5.45	20
1,2-Dibromo-3-Chloropropane	5.00	4.23	4.41	84.6	88.2	59.0-130			4.17	20
1,2-Dibromoethane	5.00	4.76	4.74	95.2	94.8	74.0-128			0.421	20
Dibromomethane	5.00	5.63	6.24	113	125	75.0-122		J4	10.3	20
1,2-Dichlorobenzene	5.00	4.40	4.74	88.0	94.8	76.0-124			7.44	20
1,3-Dichlorobenzene	5.00	4.75	4.95	95.0	99.0	76.0-125			4.12	20
1,4-Dichlorobenzene	5.00	4.74	4.74	94.8	94.8	77.0-121			0.000	20
Dichlorodifluoromethane	5.00	5.43	6.62	109	132	43.0-156			19.8	20
1,1-Dichloroethane	5.00	5.26	5.76	105	115	70.0-127			9.07	20
1,2-Dichloroethane	5.00	5.62	6.04	112	121	65.0-131			7.20	20
1,1-Dichloroethene	5.00	5.30	6.23	106	125	65.0-131			16.1	20
cis-1,2-Dichloroethene	5.00	5.21	5.88	104	118	73.0-125			12.1	20
trans-1,2-Dichloroethene	5.00	5.51	6.04	110	121	71.0-125			9.18	20
1,2-Dichloropropane	5.00	4.80	5.45	96.0	109	74.0-125			12.7	20
1,1-Dichloropropene	5.00	5.43	5.97	109	119	73.0-125			9.47	20
1,3-Dichloropropane	5.00	4.73	4.89	94.6	97.8	80.0-125			3.33	20
cis-1,3-Dichloropropene	5.00	4.83	5.35	96.6	107	76.0-127			10.2	20
trans-1,3-Dichloropropene	5.00	4.65	5.08	93.0	102	73.0-127			8.84	20
2,2-Dichloropropane	5.00	4.94	5.40	98.8	108	59.0-135			8.90	20
Di-isopropyl ether	5.00	5.23	5.74	105	115	60.0-136			9.30	20
Ethylbenzene	5.00	4.72	5.05	94.4	101	74.0-126			6.76	20
Hexachloro-1,3-butadiene	5.00	4.04	4.30	80.8	86.0	57.0-150			6.24	20
Isopropylbenzene	5.00	4.31	4.61	86.2	92.2	72.0-127			6.73	20

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

(LCS) R3999488-1 11/11/23 04:17 • (LCSD) R3999488-2 11/11/23 04:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.24	4.65	84.8	93.0	72.0-133			9.22	20
2-Butanone (MEK)	25.0	28.5	28.4	114	114	30.0-160			0.351	24
Methylene Chloride	5.00	5.76	6.00	115	120	68.0-123			4.08	20
4-Methyl-2-pentanone (MIBK)	25.0	26.2	27.0	105	108	56.0-143			3.01	20
Methyl tert-butyl ether	5.00	5.69	5.61	114	112	66.0-132			1.42	20
Naphthalene	5.00	3.20	3.44	64.0	68.8	59.0-130			7.23	20
n-Propylbenzene	5.00	4.94	5.02	98.8	100	74.0-126			1.61	20
Styrene	5.00	4.02	4.24	80.4	84.8	72.0-127			5.33	20
1,1,1,2-Tetrachloroethane	5.00	4.73	4.85	94.6	97.0	74.0-129			2.51	20
1,1,2,2-Tetrachloroethane	5.00	5.09	5.38	102	108	68.0-128			5.54	20
1,1,2-Trichlorotrifluoroethane	5.00	5.20	6.44	104	129	61.0-139		J3	21.3	20
Tetrachloroethene	5.00	4.71	4.83	94.2	96.6	70.0-136			2.52	20
Toluene	5.00	4.81	5.07	96.2	101	75.0-121			5.26	20
1,2,3-Trichlorobenzene	5.00	3.61	3.72	72.2	74.4	59.0-139			3.00	20
1,2,4-Trichlorobenzene	5.00	3.43	3.80	68.6	76.0	62.0-137			10.2	20
1,1,1-Trichloroethane	5.00	5.35	6.02	107	120	69.0-126			11.8	20
1,1,2-Trichloroethane	5.00	4.83	5.02	96.6	100	78.0-123			3.86	20
Trichloroethene	5.00	5.36	6.01	107	120	76.0-126			11.4	20
Trichlorofluoromethane	5.00	5.94	6.58	119	132	61.0-142			10.2	20
1,2,3-Trichloropropane	5.00	5.68	5.92	114	118	67.0-129			4.14	20
1,2,4-Trimethylbenzene	5.00	4.58	4.85	91.6	97.0	70.0-126			5.73	20
1,2,3-Trimethylbenzene	5.00	4.66	4.85	93.2	97.0	74.0-124			4.00	20
1,3,5-Trimethylbenzene	5.00	4.67	4.97	93.4	99.4	73.0-127			6.22	20
Vinyl chloride	5.00	4.72	5.17	94.4	103	63.0-134			9.10	20
Xylenes, Total	15.0	13.5	14.1	90.0	94.0	72.0-127			4.35	20
Ethyl Ether	5.00	5.50	5.99	110	120	64.0-137			8.53	20
Tetrahydrofuran	5.00	6.99	7.21	140	144	37.0-146			3.10	24
Iodomethane	25.0	28.8	32.0	115	128	74.0-134			10.5	20
Allyl chloride	25.0	25.6	29.1	102	116	70.0-131			12.8	20
Trans-1,4-Dichloro-2-butene	5.00	2.62	3.41	52.4	68.2	45.0-143		J3	26.2	20
(S) Toluene-d8				*94.8*	*93.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*93.0*	*93.0*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*108*	*116*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: **American Linen**

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project # **443022-1413001.10.70**

Lab Project # **PESENVSWA-ALP**

Collected by (print): N. Wisdom

Site/Facility ID #

P.O. # 10701
443018-1413001.~~05.601~~

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				
									L2	L2		L2					
MW-127-110623	G	GW	—	11/6/23	1051	3							X				-01
MW-190-110623	↓	GW	—	↓	0900	10	X	X		X	X	X	X				-02
MW120-110623		GW	—		1123	10	X	X		X	X	X	X				-03
MW-9-110623	↓	GW	—	↓	1203	10	X	X		X	X	X	X				-04
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1674499

Tabl B086

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1033818**
PM: **546 - Jared Starkey**
PB: 10/26/23 CAM
Shipped Via:

Remarks | Sample # (lab only)

* 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 # 6643 4313 3264

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Natalie Wisdom	11/6/23	1645	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			9 10

Trip Blank Received: Yes / (No) HCL / MeoH TBR

Temp: DP18°C 2.6+0.3=3.6 Bottles Received: 30

Date: 11-7-23 Time: 9:00

If preser... PH-10BDH4321 TRC-2352362 CR6-20221V ...me

Hold:

Condition: NCF / (OK)

ANALYTICAL REPORT

February 09, 2024

Revised Report

PES Environmental, Inc.- WA

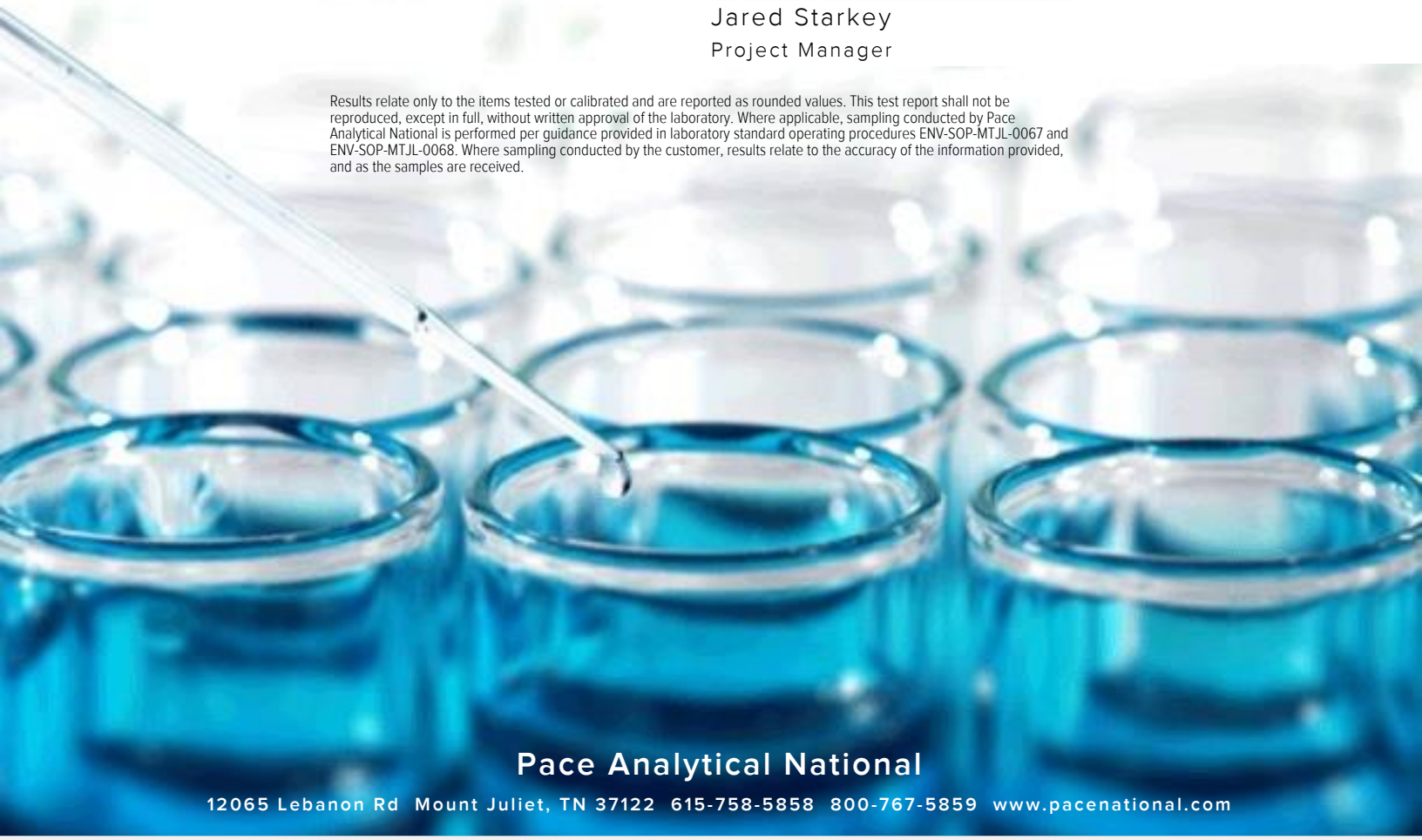
Sample Delivery Group:	L1674504
Samples Received:	11/07/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager

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



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

TABLE OF CONTENTS

MW-156-110623 L1674504-01 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167858	1	11/12/23 10:30	11/12/23 10:30	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 14:25	11/07/23 14:25	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 02:23	11/22/23 02:23	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 16:55	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 11:05	11/14/23 11:05	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	20	11/11/23 11:37	11/11/23 11:37	KSD	Mt. Juliet, TN

MW-158A-110623 L1674504-02 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 07:47	11/11/23 07:47	KSD	Mt. Juliet, TN

MW-161-110623 L1674504-03 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 08:06	11/11/23 08:06	KSD	Mt. Juliet, TN

MW-998-110623 L1674504-04 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 08:25	11/11/23 08:25	KSD	Mt. Juliet, TN

MW-142-110623 L1674504-05 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167858	1	11/12/23 10:33	11/12/23 10:33	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 14:40	11/07/23 14:40	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 02:46	11/22/23 02:46	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 17:06	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 11:12	11/14/23 11:12	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2171051	10	11/14/23 16:09	11/14/23 16:09	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 08:44	11/11/23 08:44	KSD	Mt. Juliet, TN

W-MW-01-110623 L1674504-06 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167858	1	11/12/23 10:37	11/12/23 10:37	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 15:25	11/07/23 15:25	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 03:05	11/22/23 03:05	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 17:37	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 11:19	11/14/23 11:19	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2171051	10	11/14/23 16:16	11/14/23 16:16	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 09:04	11/11/23 09:04	KSD	Mt. Juliet, TN

MW-997-110623 L1674504-07 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2167858	1	11/12/23 10:41	11/12/23 10:41	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2166050	1	11/07/23 15:40	11/07/23 15:40	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175127	1	11/22/23 03:27	11/22/23 03:27	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2166505	1	11/14/23 09:15	11/14/23 17:40	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 11:26	11/14/23 11:26	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2171051	10	11/14/23 16:26	11/14/23 16:26	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 09:23	11/11/23 09:23	KSD	Mt. Juliet, TN

MW102-110623 L1674504-08 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 09:42	11/11/23 09:42	KSD	Mt. Juliet, TN

MW104-110623 L1674504-09 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 10:01	11/11/23 10:01	KSD	Mt. Juliet, TN

TB-110623 L1674504-10 GW

Collected by: NW | Collected date/time: 11/06/23 08:46 | Received date/time: 11/07/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 06:11	11/11/23 06:11	KSD	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/22/23 11:22

Project Narrative

ID Corrections

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	329000		8450	20000	1	11/12/2023 10:30	WG2167858

Sample Narrative:

L1674504-01 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	59200		379	1000	1	11/07/2023 14:25	WG2166050
Nitrate	U		48.0	100	1	11/07/2023 14:25	WG2166050
Sulfate	29700		594	5000	1	11/07/2023 14:25	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6620		102	1000	1	11/22/2023 02:23	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3170		28.1	100	1	11/14/2023 16:55	WG2166505
Manganese	3680		0.704	5.00	1	11/14/2023 16:55	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1730		0.287	0.678	1	11/14/2023 11:05	WG2168264
Ethane	26.0		0.296	1.29	1	11/14/2023 11:05	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 11:05	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	11.0	20.0	20	11/11/2023 11:37	WG2169075
Acrylonitrile	U		1.52	10.0	20	11/11/2023 11:37	WG2169075
Benzene	U		0.320	0.800	20	11/11/2023 11:37	WG2169075
Bromobenzene	U		0.840	10.0	20	11/11/2023 11:37	WG2169075
Bromodichloromethane	U		0.630	2.00	20	11/11/2023 11:37	WG2169075
Bromoform	U		4.78	20.0	20	11/11/2023 11:37	WG2169075
Bromomethane	U		2.96	10.0	20	11/11/2023 11:37	WG2169075
n-Butylbenzene	U	C3	3.06	10.0	20	11/11/2023 11:37	WG2169075
sec-Butylbenzene	U		2.02	10.0	20	11/11/2023 11:37	WG2169075
tert-Butylbenzene	U		1.24	4.00	20	11/11/2023 11:37	WG2169075
Carbon tetrachloride	U		0.864	4.00	20	11/11/2023 11:37	WG2169075
Chlorobenzene	U		0.458	2.00	20	11/11/2023 11:37	WG2169075
Chlorodibromomethane	U		0.360	2.00	20	11/11/2023 11:37	WG2169075
Chloroethane	U		0.864	4.00	20	11/11/2023 11:37	WG2169075
Chloroform	U	J4	0.332	2.00	20	11/11/2023 11:37	WG2169075
Chloromethane	U		1.11	10.0	20	11/11/2023 11:37	WG2169075
2-Chlorotoluene	U		0.736	2.00	20	11/11/2023 11:37	WG2169075
4-Chlorotoluene	U		0.904	4.00	20	11/11/2023 11:37	WG2169075
1,2-Dibromo-3-Chloropropane	U		4.08	20.0	20	11/11/2023 11:37	WG2169075
1,2-Dibromoethane	U		0.420	2.00	20	11/11/2023 11:37	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.800	4.00	20	11/11/2023 11:37	WG2169075
1,2-Dichlorobenzene	U		1.16	4.00	20	11/11/2023 11:37	WG2169075
1,3-Dichlorobenzene	U		1.36	4.00	20	11/11/2023 11:37	WG2169075
1,4-Dichlorobenzene	U		1.58	4.00	20	11/11/2023 11:37	WG2169075
Dichlorodifluoromethane	U		0.654	2.00	20	11/11/2023 11:37	WG2169075
1,1-Dichloroethane	U		0.460	2.00	20	11/11/2023 11:37	WG2169075
1,2-Dichloroethane	U		0.380	2.00	20	11/11/2023 11:37	WG2169075
1,1-Dichloroethene	U		0.400	2.00	20	11/11/2023 11:37	WG2169075
cis-1,2-Dichloroethene	304		0.552	2.00	20	11/11/2023 11:37	WG2169075
trans-1,2-Dichloroethene	1.60	J	1.14	4.00	20	11/11/2023 11:37	WG2169075
1,2-Dichloropropane	U		1.02	4.00	20	11/11/2023 11:37	WG2169075
1,1-Dichloropropene	U		0.560	2.00	20	11/11/2023 11:37	WG2169075
1,3-Dichloropropane	U		1.40	4.00	20	11/11/2023 11:37	WG2169075
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/11/2023 11:37	WG2169075
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/11/2023 11:37	WG2169075
2,2-Dichloropropane	U		0.634	2.00	20	11/11/2023 11:37	WG2169075
Di-isopropyl ether	U		0.280	0.800	20	11/11/2023 11:37	WG2169075
Ethylbenzene	U		0.424	2.00	20	11/11/2023 11:37	WG2169075
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/11/2023 11:37	WG2169075
Isopropylbenzene	U		0.690	2.00	20	11/11/2023 11:37	WG2169075
p-Isopropyltoluene	U		1.86	4.00	20	11/11/2023 11:37	WG2169075
2-Butanone (MEK)	U		10.0	20.0	20	11/11/2023 11:37	WG2169075
Methylene Chloride	U		5.30	20.0	20	11/11/2023 11:37	WG2169075
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/11/2023 11:37	WG2169075
Methyl tert-butyl ether	U		0.236	0.800	20	11/11/2023 11:37	WG2169075
Naphthalene	U	C3	2.48	10.0	20	11/11/2023 11:37	WG2169075
n-Propylbenzene	U		0.944	4.00	20	11/11/2023 11:37	WG2169075
Styrene	U		2.18	10.0	20	11/11/2023 11:37	WG2169075
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/11/2023 11:37	WG2169075
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/11/2023 11:37	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.540	2.00	20	11/11/2023 11:37	WG2169075
Tetrachloroethene	303		0.560	2.00	20	11/11/2023 11:37	WG2169075
Toluene	U		1.00	4.00	20	11/11/2023 11:37	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.500	10.0	20	11/11/2023 11:37	WG2169075
1,2,4-Trichlorobenzene	U	C3	3.86	10.0	20	11/11/2023 11:37	WG2169075
1,1,1-Trichloroethane	U		0.220	2.00	20	11/11/2023 11:37	WG2169075
1,1,2-Trichloroethane	U		0.706	2.00	20	11/11/2023 11:37	WG2169075
Trichloroethene	147		0.320	0.800	20	11/11/2023 11:37	WG2169075
Trichlorofluoromethane	U		0.400	2.00	20	11/11/2023 11:37	WG2169075
1,2,3-Trichloropropane	U		4.08	10.0	20	11/11/2023 11:37	WG2169075
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/11/2023 11:37	WG2169075
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/11/2023 11:37	WG2169075
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/11/2023 11:37	WG2169075
Vinyl chloride	U		0.546	2.00	20	11/11/2023 11:37	WG2169075
Xylenes, Total	U		3.82	5.20	20	11/11/2023 11:37	WG2169075
Ethyl Ether	U		0.340	2.00	20	11/11/2023 11:37	WG2169075
Tetrahydrofuran	U		1.80	10.0	20	11/11/2023 11:37	WG2169075
Iodomethane	U		4.84	10.0	20	11/11/2023 11:37	WG2169075
Allyl chloride	U		11.6	20.0	20	11/11/2023 11:37	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	1.12	4.00	20	11/11/2023 11:37	WG2169075
(S) Toluene-d8	*97.2*			*75.0-131*		*11/11/2023 11:37*	WG2169075
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*11/11/2023 11:37*	WG2169075
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/11/2023 11:37*	WG2169075

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.41	C5 J4	0.548	1.00	1	11/11/2023 07:47	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 07:47	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 07:47	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 07:47	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 07:47	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 07:47	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 07:47	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 07:47	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 07:47	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 07:47	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 07:47	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 07:47	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 07:47	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 07:47	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 07:47	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 07:47	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 07:47	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 07:47	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 07:47	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 07:47	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 07:47	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 07:47	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 07:47	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 07:47	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 07:47	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 07:47	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 07:47	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 07:47	WG2169075
cis-1,2-Dichloroethene	0.384		0.0276	0.100	1	11/11/2023 07:47	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 07:47	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 07:47	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 07:47	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 07:47	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 07:47	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 07:47	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 07:47	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 07:47	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 07:47	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 07:47	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 07:47	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 07:47	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 07:47	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 07:47	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 07:47	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 07:47	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 07:47	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 07:47	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 07:47	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 07:47	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 07:47	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 07:47	WG2169075
Tetrachloroethene	0.403		0.0280	0.100	1	11/11/2023 07:47	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 07:47	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 07:47	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 07:47	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 07:47	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 07:47	WG2169075
Trichloroethene	0.268		0.0160	0.0400	1	11/11/2023 07:47	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 07:47	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 07:47	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 07:47	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 07:47	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 07:47	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 07:47	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 07:47	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 07:47	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 07:47	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 07:47	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 07:47	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 07:47	WG2169075
(S) Toluene-d8	*93.9*			*75.0-131*		*11/11/2023 07:47*	WG2169075
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*11/11/2023 07:47*	WG2169075
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/11/2023 07:47*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.03	C5 J4	0.548	1.00	1	11/11/2023 08:06	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 08:06	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 08:06	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 08:06	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 08:06	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 08:06	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 08:06	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 08:06	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 08:06	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 08:06	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 08:06	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 08:06	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 08:06	WG2169075
Chloroethane	0.356		0.0432	0.200	1	11/11/2023 08:06	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 08:06	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 08:06	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 08:06	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 08:06	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 08:06	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 08:06	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 08:06	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 08:06	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 08:06	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 08:06	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 08:06	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 08:06	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 08:06	WG2169075
1,1-Dichloroethene	1.22		0.0200	0.100	1	11/11/2023 08:06	WG2169075
cis-1,2-Dichloroethene	32.5		0.0276	0.100	1	11/11/2023 08:06	WG2169075
trans-1,2-Dichloroethene	0.465		0.0572	0.200	1	11/11/2023 08:06	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 08:06	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 08:06	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 08:06	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 08:06	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 08:06	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 08:06	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 08:06	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 08:06	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 08:06	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 08:06	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 08:06	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 08:06	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 08:06	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 08:06	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 08:06	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 08:06	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 08:06	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 08:06	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 08:06	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 08:06	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 08:06	WG2169075
Tetrachloroethene	0.227		0.0280	0.100	1	11/11/2023 08:06	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 08:06	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 08:06	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 08:06	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 08:06	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 08:06	WG2169075
Trichloroethene	2.11		0.0160	0.0400	1	11/11/2023 08:06	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 08:06	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 08:06	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 08:06	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 08:06	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 08:06	WG2169075
Vinyl chloride	2.73		0.0273	0.100	1	11/11/2023 08:06	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 08:06	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 08:06	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 08:06	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 08:06	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 08:06	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 08:06	WG2169075
(S) Toluene-d8	*95.4*			*75.0-131*		*11/11/2023 08:06*	WG2169075
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*11/11/2023 08:06*	WG2169075
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/11/2023 08:06*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/11/2023 08:25	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 08:25	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 08:25	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 08:25	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 08:25	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 08:25	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 08:25	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 08:25	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 08:25	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 08:25	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 08:25	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 08:25	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 08:25	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 08:25	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 08:25	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 08:25	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 08:25	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 08:25	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 08:25	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 08:25	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 08:25	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 08:25	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 08:25	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 08:25	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 08:25	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 08:25	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 08:25	WG2169075
1,1-Dichloroethene	1.30		0.0200	0.100	1	11/11/2023 08:25	WG2169075
cis-1,2-Dichloroethene	32.1		0.0276	0.100	1	11/11/2023 08:25	WG2169075
trans-1,2-Dichloroethene	0.469		0.0572	0.200	1	11/11/2023 08:25	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 08:25	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 08:25	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 08:25	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 08:25	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 08:25	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 08:25	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 08:25	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 08:25	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 08:25	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 08:25	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 08:25	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 08:25	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 08:25	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 08:25	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 08:25	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 08:25	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 08:25	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 08:25	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 08:25	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 08:25	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 08:25	WG2169075
Tetrachloroethene	0.202		0.0280	0.100	1	11/11/2023 08:25	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 08:25	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 08:25	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 08:25	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 08:25	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 08:25	WG2169075
Trichloroethene	2.17		0.0160	0.0400	1	11/11/2023 08:25	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 08:25	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 08:25	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 08:25	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 08:25	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 08:25	WG2169075
Vinyl chloride	2.75		0.0273	0.100	1	11/11/2023 08:25	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 08:25	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 08:25	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 08:25	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 08:25	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 08:25	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 08:25	WG2169075
(S) Toluene-d8	*93.6*			*75.0-131*		*11/11/2023 08:25*	WG2169075
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*11/11/2023 08:25*	WG2169075
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/11/2023 08:25*	WG2169075

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1030000		8450	20000	1	11/12/2023 10:33	WG2167858

Sample Narrative:

L1674504-05 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	41000		379	1000	1	11/07/2023 14:40	WG2166050
Nitrate	U		48.0	100	1	11/07/2023 14:40	WG2166050
Sulfate	14400		594	5000	1	11/07/2023 14:40	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16700		102	1000	1	11/22/2023 02:46	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10700		28.1	100	1	11/14/2023 17:06	WG2166505
Manganese	5640		0.704	5.00	1	11/14/2023 17:06	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7970		2.87	6.78	10	11/14/2023 16:09	WG2171051
Ethane	24.4		0.296	1.29	1	11/14/2023 11:12	WG2168264
Ethene	4.38		0.422	1.27	1	11/14/2023 11:12	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J4	0.548	1.00	1	11/11/2023 08:44	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 08:44	WG2169075
Benzene	0.281		0.0160	0.0400	1	11/11/2023 08:44	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 08:44	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 08:44	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 08:44	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 08:44	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 08:44	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 08:44	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 08:44	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 08:44	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 08:44	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 08:44	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 08:44	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 08:44	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 08:44	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 08:44	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 08:44	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 08:44	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 08:44	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 08:44	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 08:44	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 08:44	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 08:44	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 08:44	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 08:44	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 08:44	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 08:44	WG2169075
cis-1,2-Dichloroethene	88.4		0.0276	0.100	1	11/11/2023 08:44	WG2169075
trans-1,2-Dichloroethene	0.680		0.0572	0.200	1	11/11/2023 08:44	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 08:44	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 08:44	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 08:44	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 08:44	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 08:44	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 08:44	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 08:44	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 08:44	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 08:44	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 08:44	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 08:44	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 08:44	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 08:44	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 08:44	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 08:44	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 08:44	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 08:44	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 08:44	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 08:44	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 08:44	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 08:44	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 08:44	WG2169075
Toluene	0.0890	J	0.0500	0.200	1	11/11/2023 08:44	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 08:44	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 08:44	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 08:44	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 08:44	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 08:44	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 08:44	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 08:44	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 08:44	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 08:44	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 08:44	WG2169075
Vinyl chloride	53.8		0.0273	0.100	1	11/11/2023 08:44	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 08:44	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 08:44	WG2169075
Tetrahydrofuran	1.09	C5	0.0900	0.500	1	11/11/2023 08:44	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 08:44	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 08:44	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 08:44	WG2169075
(S) Toluene-d8	*94.8*			*75.0-131*		*11/11/2023 08:44*	WG2169075
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*11/11/2023 08:44*	WG2169075
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/11/2023 08:44*	WG2169075

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1280000		8450	20000	1	11/12/2023 10:37	WG2167858

Sample Narrative:

L1674504-06 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	27500		379	1000	1	11/07/2023 15:25	WG2166050
Nitrate	U		48.0	100	1	11/07/2023 15:25	WG2166050
Sulfate	3330	J	594	5000	1	11/07/2023 15:25	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12200		102	1000	1	11/22/2023 03:05	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14000		28.1	100	1	11/14/2023 17:37	WG2166505
Manganese	3560		0.704	5.00	1	11/14/2023 17:37	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27100		2.87	6.78	10	11/14/2023 16:16	WG2171051
Ethane	4.46		0.296	1.29	1	11/14/2023 11:19	WG2168264
Ethene	2.75		0.422	1.27	1	11/14/2023 11:19	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	6.16	C5 J4	0.548	1.00	1	11/11/2023 09:04	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 09:04	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 09:04	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 09:04	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 09:04	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 09:04	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 09:04	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 09:04	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 09:04	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 09:04	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 09:04	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 09:04	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 09:04	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 09:04	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 09:04	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 09:04	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 09:04	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 09:04	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 09:04	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 09:04	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 09:04	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 09:04	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 09:04	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 09:04	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 09:04	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 09:04	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 09:04	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 09:04	WG2169075
cis-1,2-Dichloroethene	0.264		0.0276	0.100	1	11/11/2023 09:04	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 09:04	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 09:04	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 09:04	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 09:04	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 09:04	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 09:04	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 09:04	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 09:04	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 09:04	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 09:04	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 09:04	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 09:04	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 09:04	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 09:04	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 09:04	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 09:04	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 09:04	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 09:04	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 09:04	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 09:04	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 09:04	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 09:04	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 09:04	WG2169075
Toluene	0.181	J	0.0500	0.200	1	11/11/2023 09:04	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 09:04	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 09:04	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 09:04	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 09:04	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 09:04	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 09:04	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 09:04	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 09:04	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 09:04	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 09:04	WG2169075
Vinyl chloride	1.51		0.0273	0.100	1	11/11/2023 09:04	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 09:04	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 09:04	WG2169075
Tetrahydrofuran	4.91	C5	0.0900	0.500	1	11/11/2023 09:04	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 09:04	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 09:04	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 09:04	WG2169075
(S) Toluene-d8	*93.4*			*75.0-131*		*11/11/2023 09:04*	WG2169075
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*11/11/2023 09:04*	WG2169075
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2023 09:04*	WG2169075

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1020000		8450	20000	1	11/12/2023 10:41	WG2167858

Sample Narrative:

L1674504-07 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	39400		379	1000	1	11/07/2023 15:40	WG2166050
Nitrate	159		48.0	100	1	11/07/2023 15:40	WG2166050
Sulfate	13500		594	5000	1	11/07/2023 15:40	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15500		102	1000	1	11/22/2023 03:27	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10400		28.1	100	1	11/14/2023 17:40	WG2166505
Manganese	5630		0.704	5.00	1	11/14/2023 17:40	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8150		2.87	6.78	10	11/14/2023 16:26	WG2171051
Ethane	24.5		0.296	1.29	1	11/14/2023 11:26	WG2168264
Ethene	4.53		0.422	1.27	1	11/14/2023 11:26	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.53	C5 J4	0.548	1.00	1	11/11/2023 09:23	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 09:23	WG2169075
Benzene	0.261		0.0160	0.0400	1	11/11/2023 09:23	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 09:23	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 09:23	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 09:23	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 09:23	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 09:23	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 09:23	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 09:23	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 09:23	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 09:23	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 09:23	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 09:23	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 09:23	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 09:23	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 09:23	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 09:23	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 09:23	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 09:23	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 09:23	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 09:23	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 09:23	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 09:23	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 09:23	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 09:23	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 09:23	WG2169075
1,1-Dichloroethene	0.233		0.0200	0.100	1	11/11/2023 09:23	WG2169075
cis-1,2-Dichloroethene	92.4		0.0276	0.100	1	11/11/2023 09:23	WG2169075
trans-1,2-Dichloroethene	0.646		0.0572	0.200	1	11/11/2023 09:23	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 09:23	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 09:23	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 09:23	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 09:23	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 09:23	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 09:23	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 09:23	WG2169075
Ethylbenzene	0.0300	J	0.0212	0.100	1	11/11/2023 09:23	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 09:23	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 09:23	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 09:23	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 09:23	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 09:23	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 09:23	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 09:23	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 09:23	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 09:23	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 09:23	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 09:23	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 09:23	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 09:23	WG2169075
Tetrachloroethene	0.0810	J	0.0280	0.100	1	11/11/2023 09:23	WG2169075
Toluene	0.107	J	0.0500	0.200	1	11/11/2023 09:23	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 09:23	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 09:23	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 09:23	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 09:23	WG2169075
Trichloroethene	0.0670		0.0160	0.0400	1	11/11/2023 09:23	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 09:23	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 09:23	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 09:23	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 09:23	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 09:23	WG2169075
Vinyl chloride	53.1		0.0273	0.100	1	11/11/2023 09:23	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 09:23	WG2169075
Ethyl Ether	0.0880	J	0.0170	0.100	1	11/11/2023 09:23	WG2169075
Tetrahydrofuran	1.03	C5	0.0900	0.500	1	11/11/2023 09:23	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 09:23	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 09:23	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 09:23	WG2169075
(S) Toluene-d8	*92.1*			*75.0-131*		*11/11/2023 09:23*	WG2169075
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*11/11/2023 09:23*	WG2169075
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/11/2023 09:23*	WG2169075

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/11/2023 09:42	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 09:42	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 09:42	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 09:42	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 09:42	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 09:42	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 09:42	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 09:42	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 09:42	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 09:42	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 09:42	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 09:42	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 09:42	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 09:42	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 09:42	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 09:42	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 09:42	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 09:42	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 09:42	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 09:42	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 09:42	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 09:42	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 09:42	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 09:42	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 09:42	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 09:42	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 09:42	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 09:42	WG2169075
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 09:42	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 09:42	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 09:42	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 09:42	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 09:42	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 09:42	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 09:42	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 09:42	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 09:42	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 09:42	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 09:42	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 09:42	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 09:42	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 09:42	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 09:42	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 09:42	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 09:42	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 09:42	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 09:42	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 09:42	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 09:42	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 09:42	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 09:42	WG2169075
Tetrachloroethene	0.0690	J	0.0280	0.100	1	11/11/2023 09:42	WG2169075
Toluene	0.377		0.0500	0.200	1	11/11/2023 09:42	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 09:42	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 09:42	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 09:42	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 09:42	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 09:42	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 09:42	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 09:42	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 09:42	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 09:42	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 09:42	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 09:42	WG2169075
Xylenes, Total	0.647		0.191	0.260	1	11/11/2023 09:42	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 09:42	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 09:42	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 09:42	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 09:42	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 09:42	WG2169075
(S) Toluene-d8	*92.9*			*75.0-131*		*11/11/2023 09:42*	WG2169075
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/11/2023 09:42*	WG2169075
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2023 09:42*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	19.6	C5 J4	0.548	1.00	1	11/11/2023 10:01	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 10:01	WG2169075
Benzene	0.0450		0.0160	0.0400	1	11/11/2023 10:01	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 10:01	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 10:01	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 10:01	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 10:01	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 10:01	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 10:01	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 10:01	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 10:01	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 10:01	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 10:01	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 10:01	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 10:01	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 10:01	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 10:01	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 10:01	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 10:01	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 10:01	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 10:01	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 10:01	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 10:01	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 10:01	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 10:01	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 10:01	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 10:01	WG2169075
1,1-Dichloroethene	0.277		0.0200	0.100	1	11/11/2023 10:01	WG2169075
cis-1,2-Dichloroethene	16.9		0.0276	0.100	1	11/11/2023 10:01	WG2169075
trans-1,2-Dichloroethene	0.548		0.0572	0.200	1	11/11/2023 10:01	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 10:01	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 10:01	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 10:01	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 10:01	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 10:01	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 10:01	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 10:01	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 10:01	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 10:01	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 10:01	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 10:01	WG2169075
2-Butanone (MEK)	2.38		0.500	1.00	1	11/11/2023 10:01	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 10:01	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 10:01	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 10:01	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 10:01	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 10:01	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 10:01	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 10:01	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 10:01	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 10:01	WG2169075
Tetrachloroethene	0.0330	J	0.0280	0.100	1	11/11/2023 10:01	WG2169075
Toluene	0.174	J	0.0500	0.200	1	11/11/2023 10:01	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 10:01	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 10:01	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 10:01	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 10:01	WG2169075
Trichloroethene	0.526		0.0160	0.0400	1	11/11/2023 10:01	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 10:01	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 10:01	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 10:01	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 10:01	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 10:01	WG2169075
Vinyl chloride	20.4		0.0273	0.100	1	11/11/2023 10:01	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 10:01	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 10:01	WG2169075
Tetrahydrofuran	16.1	C5	0.0900	0.500	1	11/11/2023 10:01	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 10:01	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 10:01	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 10:01	WG2169075
(S) Toluene-d8	*93.8*			*75.0-131*		*11/11/2023 10:01*	WG2169075
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*11/11/2023 10:01*	WG2169075
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2023 10:01*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.65	C5 J4	0.548	1.00	1	11/11/2023 06:11	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 06:11	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 06:11	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 06:11	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 06:11	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 06:11	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 06:11	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 06:11	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 06:11	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 06:11	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 06:11	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 06:11	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 06:11	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 06:11	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 06:11	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 06:11	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 06:11	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 06:11	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 06:11	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 06:11	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 06:11	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 06:11	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 06:11	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 06:11	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 06:11	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 06:11	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 06:11	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 06:11	WG2169075
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 06:11	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 06:11	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 06:11	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 06:11	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 06:11	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 06:11	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 06:11	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 06:11	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 06:11	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 06:11	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 06:11	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 06:11	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 06:11	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 06:11	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 06:11	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 06:11	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 06:11	WG2169075
Naphthalene	U	C3	0.124	0.500	1	11/11/2023 06:11	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 06:11	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 06:11	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 06:11	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 06:11	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 06:11	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 06:11	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 06:11	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 06:11	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 06:11	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 06:11	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 06:11	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 06:11	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 06:11	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 06:11	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 06:11	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 06:11	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 06:11	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 06:11	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 06:11	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 06:11	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 06:11	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 06:11	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 06:11	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 06:11	WG2169075
(S) Toluene-d8	*92.3*			*75.0-131*		*11/11/2023 06:11*	WG2169075
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*11/11/2023 06:11*	WG2169075
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/11/2023 06:11*	WG2169075

Method Blank (MB)

(MB) R3998753-2 11/12/23 09:59

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1674532-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674532-01 11/12/23 10:12 • (DUP) R3998753-3 11/12/23 10:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	126000	130000	1	3.04		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1674537-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674537-01 11/12/23 11:48 • (DUP) R3998753-4 11/12/23 11:52

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

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3998753-1 11/12/23 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	106000	106	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

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

Method Blank (MB)

(MB) R3997021-1 11/07/23 09:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1674504-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1674504-07 11/07/23 15:40 • (DUP) R3997021-3 11/07/23 15:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	39400	40800	1	3.47		15
Nitrate	159	167	1	5.09		15
Sulfate	13500	14000	1	2.99		15

Laboratory Control Sample (LCS)

(LCS) R3997021-2 11/07/23 09:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39900	99.8	80.0-120	
Nitrate	8000	7800	97.5	80.0-120	
Sulfate	40000	39300	98.3	80.0-120	

L1674504-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674504-07 11/07/23 15:40 • (MS) R3997021-4 11/07/23 16:10 • (MSD) R3997021-5 11/07/23 16:24

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	39400	74800	74900	88.6	88.8	1	80.0-120			0.126	15
Nitrate	8000	159	8290	8380	102	103	1	80.0-120			1.03	15
Sulfate	40000	13500	53200	53200	99.1	99.2	1	80.0-120			0.0478	15

Method Blank (MB)

(MB) R4003292-2 11/21/23 18:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	167	J	102	1000

L1673884-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1673884-05 11/21/23 19:54 • (DUP) R4003292-3 11/21/23 20:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	4400	4140	1	6.16		20

L1673953-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1673953-01 11/21/23 22:37 • (DUP) R4003292-6 11/21/23 22:58

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	8570	8330	1	2.76		20

Laboratory Control Sample (LCS)

(LCS) R4003292-1 11/21/23 18:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24100	96.3	85.0-115	

L1673884-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673884-06 11/21/23 20:25 • (MS) R4003292-4 11/21/23 20:47 • (MSD) R4003292-5 11/21/23 21:09

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	4530	28900	28800	97.3	96.9	1	85.0-115			0.278	20

L1673953-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673953-04 11/21/23 23:41 • (MS) R4003292-7 11/22/23 00:02 • (MSD) R4003292-8 11/22/23 00:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	181	24300	24300	96.6	96.6	1	85.0-115			0.0411	20

Method Blank (MB)

(MB) R3999775-1 11/14/23 16:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3999775-2 11/14/23 16:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1090	109	80.0-120	
Manganese	50.0	55.6	111	80.0-120	

L1674496-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674496-01 11/14/23 17:10 • (MS) R3999775-7 11/14/23 17:16 • (MSD) R3999775-8 11/14/23 17:19

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	1340	2330	2360	99.0	102	1	75.0-125			1.12	20
Manganese	50.0	697	739	736	85.6	79.6	1	75.0-125			0.410	20

Method Blank (MB)

(MB) R3999622-2 11/14/23 10:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1674575-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-04 11/14/23 11:34 • (DUP) R3999622-3 11/14/23 11:54

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	177	178	1	0.563		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1674575-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-07 11/14/23 11:59 • (DUP) R3999622-4 11/14/23 14:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3999622-1 11/14/23 09:58 • (LCSD) R3999622-5 11/14/23 14:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	61.9	63.3	91.3	93.4	85.0-115			2.24	20
Ethane	129	112	115	86.8	89.1	85.0-115			2.64	20
Ethene	127	113	114	89.0	89.8	85.0-115			0.881	20

Method Blank (MB)

(MB) R3999760-2 11/14/23 16:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1674575-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-08 11/14/23 16:31 • (DUP) R3999760-3 11/14/23 17:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	10300	10600	10	2.87		20

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

(LCS) R3999760-1 11/14/23 15:44 • (LCSD) R3999760-4 11/14/23 17:12

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	64.2	71.2	94.7	105	85.0-115			10.3	20

Method Blank (MB)

(MB) R3999488-3 11/11/23 05:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3999488-3 11/11/23 05:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*94.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

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

(LCS) R3999488-1 11/11/23 04:17 • (LCSD) R3999488-2 11/11/23 04:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	56.8	52.3	227	209	10.0-160	J4	J4	8.25	31
Acrylonitrile	25.0	30.3	30.5	121	122	45.0-153			0.658	22
Benzene	5.00	5.21	5.77	104	115	70.0-123			10.2	20
Bromobenzene	5.00	4.95	5.23	99.0	105	73.0-121			5.50	20
Bromodichloromethane	5.00	5.56	5.78	111	116	73.0-121			3.88	20
Bromoform	5.00	4.45	4.34	89.0	86.8	64.0-132			2.50	20
Bromomethane	5.00	5.06	5.90	101	118	56.0-147			15.3	20
n-Butylbenzene	5.00	3.93	4.28	78.6	85.6	68.0-135			8.53	20
sec-Butylbenzene	5.00	4.48	4.77	89.6	95.4	74.0-130			6.27	20
tert-Butylbenzene	5.00	4.21	4.49	84.2	89.8	75.0-127			6.44	20
Carbon tetrachloride	5.00	5.45	6.30	109	126	66.0-128			14.5	20
Chlorobenzene	5.00	4.78	5.08	95.6	102	76.0-128			6.09	20
Chlorodibromomethane	5.00	4.76	5.00	95.2	100	74.0-127			4.92	20
Chloroethane	5.00	5.09	5.72	102	114	61.0-134			11.7	20
Chloroform	5.00	5.79	6.49	116	130	72.0-123		J4	11.4	20
Chloromethane	5.00	5.77	6.29	115	126	51.0-138			8.62	20
2-Chlorotoluene	5.00	5.21	5.51	104	110	75.0-124			5.60	20
4-Chlorotoluene	5.00	5.00	5.28	100	106	75.0-124			5.45	20
1,2-Dibromo-3-Chloropropane	5.00	4.23	4.41	84.6	88.2	59.0-130			4.17	20
1,2-Dibromoethane	5.00	4.76	4.74	95.2	94.8	74.0-128			0.421	20
Dibromomethane	5.00	5.63	6.24	113	125	75.0-122		J4	10.3	20
1,2-Dichlorobenzene	5.00	4.40	4.74	88.0	94.8	76.0-124			7.44	20
1,3-Dichlorobenzene	5.00	4.75	4.95	95.0	99.0	76.0-125			4.12	20
1,4-Dichlorobenzene	5.00	4.74	4.74	94.8	94.8	77.0-121			0.000	20
Dichlorodifluoromethane	5.00	5.43	6.62	109	132	43.0-156			19.8	20
1,1-Dichloroethane	5.00	5.26	5.76	105	115	70.0-127			9.07	20
1,2-Dichloroethane	5.00	5.62	6.04	112	121	65.0-131			7.20	20
1,1-Dichloroethene	5.00	5.30	6.23	106	125	65.0-131			16.1	20
cis-1,2-Dichloroethene	5.00	5.21	5.88	104	118	73.0-125			12.1	20
trans-1,2-Dichloroethene	5.00	5.51	6.04	110	121	71.0-125			9.18	20
1,2-Dichloropropane	5.00	4.80	5.45	96.0	109	74.0-125			12.7	20
1,1-Dichloropropene	5.00	5.43	5.97	109	119	73.0-125			9.47	20
1,3-Dichloropropane	5.00	4.73	4.89	94.6	97.8	80.0-125			3.33	20
cis-1,3-Dichloropropene	5.00	4.83	5.35	96.6	107	76.0-127			10.2	20
trans-1,3-Dichloropropene	5.00	4.65	5.08	93.0	102	73.0-127			8.84	20
2,2-Dichloropropane	5.00	4.94	5.40	98.8	108	59.0-135			8.90	20
Di-isopropyl ether	5.00	5.23	5.74	105	115	60.0-136			9.30	20
Ethylbenzene	5.00	4.72	5.05	94.4	101	74.0-126			6.76	20
Hexachloro-1,3-butadiene	5.00	4.04	4.30	80.8	86.0	57.0-150			6.24	20
Isopropylbenzene	5.00	4.31	4.61	86.2	92.2	72.0-127			6.73	20

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

(LCS) R3999488-1 11/11/23 04:17 • (LCSD) R3999488-2 11/11/23 04:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.24	4.65	84.8	93.0	72.0-133			9.22	20
2-Butanone (MEK)	25.0	28.5	28.4	114	114	30.0-160			0.351	24
Methylene Chloride	5.00	5.76	6.00	115	120	68.0-123			4.08	20
4-Methyl-2-pentanone (MIBK)	25.0	26.2	27.0	105	108	56.0-143			3.01	20
Methyl tert-butyl ether	5.00	5.69	5.61	114	112	66.0-132			1.42	20
Naphthalene	5.00	3.20	3.44	64.0	68.8	59.0-130			7.23	20
n-Propylbenzene	5.00	4.94	5.02	98.8	100	74.0-126			1.61	20
Styrene	5.00	4.02	4.24	80.4	84.8	72.0-127			5.33	20
1,1,1,2-Tetrachloroethane	5.00	4.73	4.85	94.6	97.0	74.0-129			2.51	20
1,1,2,2-Tetrachloroethane	5.00	5.09	5.38	102	108	68.0-128			5.54	20
1,1,2-Trichlorotrifluoroethane	5.00	5.20	6.44	104	129	61.0-139		J3	21.3	20
Tetrachloroethene	5.00	4.71	4.83	94.2	96.6	70.0-136			2.52	20
Toluene	5.00	4.81	5.07	96.2	101	75.0-121			5.26	20
1,2,3-Trichlorobenzene	5.00	3.61	3.72	72.2	74.4	59.0-139			3.00	20
1,2,4-Trichlorobenzene	5.00	3.43	3.80	68.6	76.0	62.0-137			10.2	20
1,1,1-Trichloroethane	5.00	5.35	6.02	107	120	69.0-126			11.8	20
1,1,2-Trichloroethane	5.00	4.83	5.02	96.6	100	78.0-123			3.86	20
Trichloroethene	5.00	5.36	6.01	107	120	76.0-126			11.4	20
Trichlorofluoromethane	5.00	5.94	6.58	119	132	61.0-142			10.2	20
1,2,3-Trichloropropane	5.00	5.68	5.92	114	118	67.0-129			4.14	20
1,2,4-Trimethylbenzene	5.00	4.58	4.85	91.6	97.0	70.0-126			5.73	20
1,2,3-Trimethylbenzene	5.00	4.66	4.85	93.2	97.0	74.0-124			4.00	20
1,3,5-Trimethylbenzene	5.00	4.67	4.97	93.4	99.4	73.0-127			6.22	20
Vinyl chloride	5.00	4.72	5.17	94.4	103	63.0-134			9.10	20
Xylenes, Total	15.0	13.5	14.1	90.0	94.0	72.0-127			4.35	20
Ethyl Ether	5.00	5.50	5.99	110	120	64.0-137			8.53	20
Tetrahydrofuran	5.00	6.99	7.21	140	144	37.0-146			3.10	24
Iodomethane	25.0	28.8	32.0	115	128	74.0-134			10.5	20
Allyl chloride	25.0	25.6	29.1	102	116	70.0-131			12.8	20
Trans-1,4-Dichloro-2-butene	5.00	2.62	3.41	52.4	68.2	45.0-143		J3	26.2	20
(S) Toluene-d8				*94.8*	*93.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*93.0*	*93.0*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*108*	*116*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.

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.

PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: Bill ~~Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: **American Linen**

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project # **443022-1413001.10.70**

Lab Project # **PESENVSWA-ALP**

Collected by (print): N. Wisdom

Site/Facility ID #

P.O. # 10.701
443018-1413001.~~05.601~~

Collected by (signature):

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

Date Results Needed

Quote #

Immediately Packed on Ice N ___ Y ✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				
MW-156-110623	G	GW	—	11/6/23	846	10	X	X		X	X	X	X				-01
MW-158A-110623		GW	—		1000	3							X				-02
MW-161-110623		GW	—		1457	3							X				-03
MW-998-110623		GW	—		1502	3							X				-04
MW-142-110623		GW	—		1423	10	X	X		X	X	X	X				-05
MW-01-110623		GW	—		0957	10	X	X		X	X	X	X				-06
MW-997-110623		GW	—		1200	10	X	X		X	X	X	X				-07
MW102-110623		GW	—		0953	3							X				-08
MW104-110623		GW	—		1524	3							X				-09
TB-110623	↓	GW	—	↓	—	1							X				-10

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via: __ UPS __ FedEx __ Courier _____

Tracking # 6643 4313 3275

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Natalie Wisdom	11/6/23	1645	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for Jab by: (Signature)

Trip Blank Received: Yes / No
1 HCl / MeoH TBR

Temp: DPA °C Bottles Received:
3.8+0=3.8 56

Date: 11/07/23 Time: 0900

If prese PH-10BDH4321 TRC-235236 ime
CR6-20221V

Hold:

Condition: NCF / OK

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

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1674504

H051

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1033818**
PM: **546 - Jared Starkey**
PB: 10/26/23 CAM
Shipped Via:

Remarks | Sample # (lab only)

ANALYTICAL REPORT

November 27, 2023

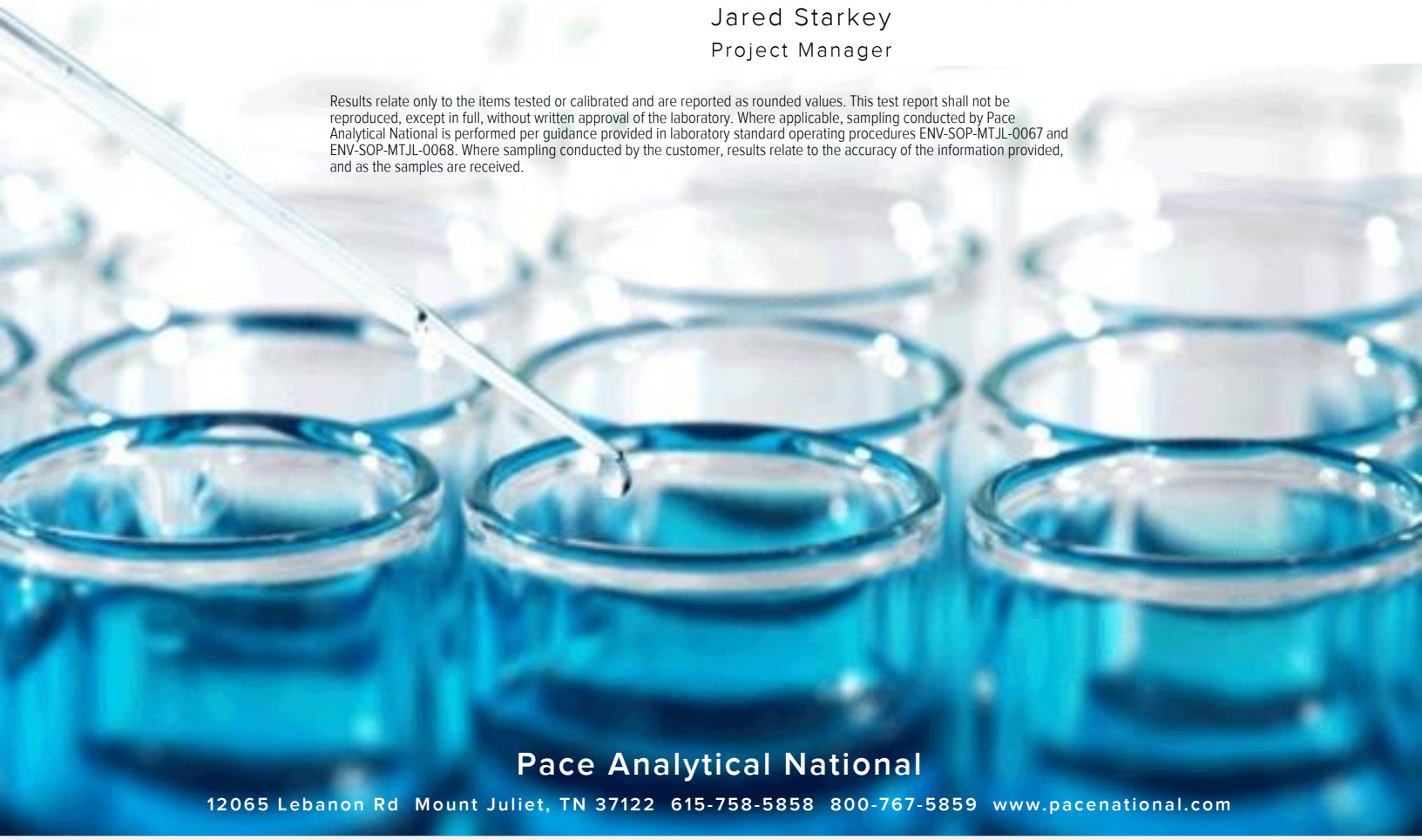
PES Environmental, Inc.- WA

Sample Delivery Group:	L1675140
Samples Received:	11/08/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SCL-MW101-110723 L1675140-01 GW

Collected by: OM | Collected date/time: 11/07/23 12:29 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 10:39	11/11/23 10:39	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2170865	1	11/14/23 22:50	11/14/23 22:50	DWR	Mt. Juliet, TN

MW-309-110723 L1675140-02 GW

Collected by: OM | Collected date/time: 11/07/23 13:51 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 10:58	11/11/23 10:58	KSD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2170865	1	11/14/23 23:10	11/14/23 23:10	DWR	Mt. Juliet, TN

MW-308-110723 L1675140-03 GW

Collected by: OM | Collected date/time: 11/07/23 14:37 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169075	1	11/11/23 11:18	11/11/23 11:18	KSD	Mt. Juliet, TN

MW122-110723 L1675140-04 GW

Collected by: OM | Collected date/time: 11/07/23 15:05 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 00:55	11/12/23 00:55	JAH	Mt. Juliet, TN

MW110-110723 L1675140-05 GW

Collected by: OM | Collected date/time: 11/07/23 10:35 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2169670	1	11/12/23 15:41	11/12/23 15:41	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2167488	1	11/09/23 01:26	11/09/23 01:26	CRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167255	1	11/08/23 22:51	11/08/23 22:51	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175135	1	11/25/23 15:36	11/25/23 15:36	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168468	1	11/14/23 10:33	11/15/23 17:56	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168468	20	11/14/23 10:33	11/15/23 18:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2168264	1	11/14/23 14:21	11/14/23 14:21	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	10	11/12/23 05:03	11/12/23 05:03	JAH	Mt. Juliet, TN

MW-313-110723 L1675140-06 GW

Collected by: OM | Collected date/time: 11/07/23 11:25 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 01:14	11/12/23 01:14	JAH	Mt. Juliet, TN

MW-314-110723 L1675140-07 GW

Collected by: OM | Collected date/time: 11/07/23 12:19 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2169670	1	11/12/23 15:46	11/12/23 15:46	BJM	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2167488	10	11/09/23 01:26	11/09/23 01:26	CRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167255	1	11/08/23 23:31	11/08/23 23:31	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167255	10	11/09/23 04:49	11/09/23 04:49	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175135	1	11/25/23 15:54	11/25/23 15:54	ASH	Mt. Juliet, TN

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

MW-314-110723 L1675140-07 GW

Collected by	Collected date/time	Received date/time
OM	11/07/23 12:19	11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG2168468	5	11/14/23 10:33	11/15/23 18:22	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2170079	1	11/15/23 10:41	11/15/23 10:41	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	20	11/12/23 05:22	11/12/23 05:22	JAH	Mt. Juliet, TN

FMW-141-110723 L1675140-08 GW

Collected by	Collected date/time	Received date/time
OM	11/07/23 13:45	11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	10	11/12/23 05:42	11/12/23 05:42	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171873	1	11/17/23 05:06	11/17/23 05:06	JAH	Mt. Juliet, TN

MW111-110723 L1675140-09 GW

Collected by	Collected date/time	Received date/time
OM	11/07/23 14:52	11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 01:33	11/12/23 01:33	JAH	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.

Jared Starkey
Project Manager

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/11/2023 10:39	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 10:39	WG2169075
Benzene	4.61		0.0160	0.0400	1	11/14/2023 22:50	WG2170865
Bromobenzene	U		0.0420	0.500	1	11/11/2023 10:39	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 10:39	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 10:39	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 10:39	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 10:39	WG2169075
sec-Butylbenzene	8.64		0.101	0.500	1	11/11/2023 10:39	WG2169075
tert-Butylbenzene	0.229		0.0620	0.200	1	11/11/2023 10:39	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 10:39	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 10:39	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 10:39	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 10:39	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 10:39	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 10:39	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 10:39	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 10:39	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 10:39	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 10:39	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 10:39	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 10:39	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 10:39	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 10:39	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 10:39	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 10:39	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 10:39	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 10:39	WG2169075
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 10:39	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 10:39	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 10:39	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 10:39	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 10:39	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 10:39	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 10:39	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 10:39	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 10:39	WG2169075
Ethylbenzene	0.340		0.0212	0.100	1	11/14/2023 22:50	WG2170865
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 10:39	WG2169075
Isopropylbenzene	9.99		0.0345	0.100	1	11/11/2023 10:39	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 10:39	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 10:39	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 10:39	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 10:39	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 10:39	WG2169075
Naphthalene	7.46	C3	0.124	0.500	1	11/11/2023 10:39	WG2169075
n-Propylbenzene	26.0		0.0472	0.200	1	11/11/2023 10:39	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 10:39	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 10:39	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 10:39	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 10:39	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 10:39	WG2169075
Toluene	0.220		0.0500	0.200	1	11/11/2023 10:39	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 10:39	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 10:39	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 10:39	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	0.207		0.0353	0.100	1	11/11/2023 10:39	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 10:39	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 10:39	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 10:39	WG2169075
1,2,4-Trimethylbenzene	0.303		0.0464	0.200	1	11/11/2023 10:39	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 10:39	WG2169075
1,3,5-Trimethylbenzene	0.324		0.0432	0.200	1	11/11/2023 10:39	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 10:39	WG2169075
Xylenes, Total	0.936		0.191	0.260	1	11/14/2023 22:50	WG2170865
Ethyl Ether	0.0350	J	0.0170	0.100	1	11/11/2023 10:39	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 10:39	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 10:39	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 10:39	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 10:39	WG2169075
(S) Toluene-d8	*94.3*			*75.0-131*		*11/11/2023 10:39*	WG2169075
(S) Toluene-d8	*90.2*			*75.0-131*		*11/14/2023 22:50*	WG2170865
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*11/11/2023 10:39*	WG2169075
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/14/2023 22:50*	WG2170865
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/11/2023 10:39*	WG2169075
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*11/14/2023 22:50*	WG2170865

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	0.957	J J4	0.548	1.00	1	11/11/2023 10:58	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 10:58	WG2169075
Benzene	0.274		0.0160	0.0400	1	11/14/2023 23:10	WG2170865
Bromobenzene	U		0.0420	0.500	1	11/11/2023 10:58	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 10:58	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 10:58	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 10:58	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 10:58	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 10:58	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 10:58	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 10:58	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 10:58	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 10:58	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 10:58	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 10:58	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 10:58	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 10:58	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 10:58	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 10:58	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 10:58	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 10:58	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 10:58	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 10:58	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 10:58	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 10:58	WG2169075
1,1-Dichloroethane	0.0430	J	0.0230	0.100	1	11/11/2023 10:58	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 10:58	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 10:58	WG2169075
cis-1,2-Dichloroethene	0.261		0.0276	0.100	1	11/11/2023 10:58	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 10:58	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 10:58	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 10:58	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 10:58	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 10:58	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 10:58	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 10:58	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 10:58	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/14/2023 23:10	WG2170865
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 10:58	WG2169075
Isopropylbenzene	0.100	J	0.0345	0.100	1	11/11/2023 10:58	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 10:58	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 10:58	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 10:58	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 10:58	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 10:58	WG2169075
Naphthalene	0.668	C3	0.124	0.500	1	11/11/2023 10:58	WG2169075
n-Propylbenzene	0.0950	J	0.0472	0.200	1	11/11/2023 10:58	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 10:58	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 10:58	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 10:58	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 10:58	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 10:58	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 10:58	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 10:58	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 10:58	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 10:58	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 10:58	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 10:58	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 10:58	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 10:58	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 10:58	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 10:58	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 10:58	WG2169075
Vinyl chloride	12.0		0.0273	0.100	1	11/11/2023 10:58	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 10:58	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 10:58	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 10:58	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 10:58	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 10:58	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 10:58	WG2169075
(S) Toluene-d8	*97.8*			*75.0-131*		*11/11/2023 10:58*	WG2169075
(S) Toluene-d8	*90.9*			*75.0-131*		*11/14/2023 23:10*	WG2170865
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*11/11/2023 10:58*	WG2169075
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/14/2023 23:10*	WG2170865
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/11/2023 10:58*	WG2169075
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*11/14/2023 23:10*	WG2170865

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.55	C5 J4	0.548	1.00	1	11/11/2023 11:18	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 11:18	WG2169075
Benzene	1.81		0.0160	0.0400	1	11/11/2023 11:18	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 11:18	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 11:18	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 11:18	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 11:18	WG2169075
n-Butylbenzene	U	C3	0.153	0.500	1	11/11/2023 11:18	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 11:18	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 11:18	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 11:18	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 11:18	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 11:18	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 11:18	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 11:18	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 11:18	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 11:18	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 11:18	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 11:18	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 11:18	WG2169075
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 11:18	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 11:18	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 11:18	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 11:18	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 11:18	WG2169075
1,1-Dichloroethane	0.0510	J	0.0230	0.100	1	11/11/2023 11:18	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 11:18	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 11:18	WG2169075
cis-1,2-Dichloroethene	13.9		0.0276	0.100	1	11/11/2023 11:18	WG2169075
trans-1,2-Dichloroethene	0.316		0.0572	0.200	1	11/11/2023 11:18	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 11:18	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 11:18	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 11:18	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 11:18	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 11:18	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 11:18	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 11:18	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 11:18	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 11:18	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 11:18	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 11:18	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 11:18	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 11:18	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 11:18	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 11:18	WG2169075
Naphthalene	0.243	C3 J	0.124	0.500	1	11/11/2023 11:18	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 11:18	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 11:18	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 11:18	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 11:18	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 11:18	WG2169075
Tetrachloroethene	0.0360	J	0.0280	0.100	1	11/11/2023 11:18	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 11:18	WG2169075
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/11/2023 11:18	WG2169075
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/11/2023 11:18	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 11:18	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 11:18	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 11:18	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 11:18	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 11:18	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 11:18	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 11:18	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 11:18	WG2169075
Vinyl chloride	5.25		0.0273	0.100	1	11/11/2023 11:18	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 11:18	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 11:18	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 11:18	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 11:18	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 11:18	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 J3	0.0560	0.200	1	11/11/2023 11:18	WG2169075
(S) Toluene-d8	*93.8*			*75.0-131*		*11/11/2023 11:18*	WG2169075
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*11/11/2023 11:18*	WG2169075
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/11/2023 11:18*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 00:55	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 00:55	WG2169081
Benzene	0.0190	J	0.0160	0.0400	1	11/12/2023 00:55	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:55	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:55	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 00:55	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 00:55	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 00:55	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:55	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:55	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:55	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:55	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:55	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 00:55	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 00:55	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 00:55	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:55	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:55	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 00:55	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:55	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:55	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:55	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:55	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:55	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:55	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:55	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:55	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:55	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:55	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:55	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:55	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:55	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:55	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:55	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:55	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:55	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 00:55	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:55	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:55	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:55	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:55	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:55	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:55	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:55	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:55	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 00:55	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:55	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 00:55	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:55	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:55	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:55	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:55	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 00:55	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 00:55	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 00:55	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:55	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:55	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:55	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:55	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:55	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:55	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:55	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:55	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:55	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:55	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:55	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:55	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 00:55	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:55	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 00:55	WG2169081
(S) Toluene-d8	*98.7*			*75.0-131*		*11/12/2023 00:55*	WG2169081
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*11/12/2023 00:55*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 00:55*	WG2169081

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	428000		8450	20000	1	11/12/2023 15:41	WG2169670

Sample Narrative:
L1675140-05 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	769	T8	15.0	50.0	1	11/09/2023 01:26	WG2167488

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26400		379	1000	1	11/08/2023 22:51	WG2167255
Nitrate	74.4	J	48.0	100	1	11/08/2023 22:51	WG2167255
Sulfate	89200		594	5000	1	11/08/2023 22:51	WG2167255

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3110		102	1000	1	11/25/2023 15:36	WG2175135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1560		28.1	100	1	11/15/2023 17:56	WG2168468
Manganese	3400		14.1	100	20	11/15/2023 18:19	WG2168468

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	5600		0.287	0.678	1	11/14/2023 14:21	WG2168264
Ethane	8.80		0.296	1.29	1	11/14/2023 14:21	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 14:21	WG2168264

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		5.48	10.0	10	11/12/2023 05:03	WG2169081
Acrylonitrile	U		0.760	5.00	10	11/12/2023 05:03	WG2169081
Benzene	U		0.160	0.400	10	11/12/2023 05:03	WG2169081
Bromobenzene	U		0.420	5.00	10	11/12/2023 05:03	WG2169081
Bromodichloromethane	U		0.315	1.00	10	11/12/2023 05:03	WG2169081
Bromoform	U		2.39	10.0	10	11/12/2023 05:03	WG2169081
Bromomethane	U		1.48	5.00	10	11/12/2023 05:03	WG2169081
n-Butylbenzene	U	C3	1.53	5.00	10	11/12/2023 05:03	WG2169081
sec-Butylbenzene	U		1.01	5.00	10	11/12/2023 05:03	WG2169081
tert-Butylbenzene	U		0.620	2.00	10	11/12/2023 05:03	WG2169081
Carbon tetrachloride	U		0.432	2.00	10	11/12/2023 05:03	WG2169081
Chlorobenzene	U		0.229	1.00	10	11/12/2023 05:03	WG2169081
Chlorodibromomethane	U		0.180	1.00	10	11/12/2023 05:03	WG2169081
Chloroethane	U		0.432	2.00	10	11/12/2023 05:03	WG2169081
Chloroform	U		0.166	1.00	10	11/12/2023 05:03	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.556	5.00	10	11/12/2023 05:03	WG2169081
2-Chlorotoluene	U		0.368	1.00	10	11/12/2023 05:03	WG2169081
4-Chlorotoluene	U		0.452	2.00	10	11/12/2023 05:03	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	2.04	10.0	10	11/12/2023 05:03	WG2169081
1,2-Dibromoethane	U		0.210	1.00	10	11/12/2023 05:03	WG2169081
Dibromomethane	U		0.400	2.00	10	11/12/2023 05:03	WG2169081
1,2-Dichlorobenzene	U		0.580	2.00	10	11/12/2023 05:03	WG2169081
1,3-Dichlorobenzene	U		0.680	2.00	10	11/12/2023 05:03	WG2169081
1,4-Dichlorobenzene	U		0.788	2.00	10	11/12/2023 05:03	WG2169081
Dichlorodifluoromethane	U		0.327	1.00	10	11/12/2023 05:03	WG2169081
1,1-Dichloroethane	U		0.230	1.00	10	11/12/2023 05:03	WG2169081
1,2-Dichloroethane	U		0.190	1.00	10	11/12/2023 05:03	WG2169081
1,1-Dichloroethene	1.78		0.200	1.00	10	11/12/2023 05:03	WG2169081
cis-1,2-Dichloroethene	682		0.276	1.00	10	11/12/2023 05:03	WG2169081
trans-1,2-Dichloroethene	6.14		0.572	2.00	10	11/12/2023 05:03	WG2169081
1,2-Dichloropropane	U		0.508	2.00	10	11/12/2023 05:03	WG2169081
1,1-Dichloropropene	U		0.280	1.00	10	11/12/2023 05:03	WG2169081
1,3-Dichloropropane	U		0.700	2.00	10	11/12/2023 05:03	WG2169081
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/12/2023 05:03	WG2169081
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/12/2023 05:03	WG2169081
2,2-Dichloropropane	U		0.317	1.00	10	11/12/2023 05:03	WG2169081
Di-isopropyl ether	U		0.140	0.400	10	11/12/2023 05:03	WG2169081
Ethylbenzene	U		0.212	1.00	10	11/12/2023 05:03	WG2169081
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/12/2023 05:03	WG2169081
Isopropylbenzene	U		0.345	1.00	10	11/12/2023 05:03	WG2169081
p-Isopropyltoluene	U		0.932	2.00	10	11/12/2023 05:03	WG2169081
2-Butanone (MEK)	U		5.00	10.0	10	11/12/2023 05:03	WG2169081
Methylene Chloride	U		2.65	10.0	10	11/12/2023 05:03	WG2169081
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/12/2023 05:03	WG2169081
Methyl tert-butyl ether	U		0.118	0.400	10	11/12/2023 05:03	WG2169081
Naphthalene	U	C3	1.24	5.00	10	11/12/2023 05:03	WG2169081
n-Propylbenzene	U		0.472	2.00	10	11/12/2023 05:03	WG2169081
Styrene	U	C3	1.09	5.00	10	11/12/2023 05:03	WG2169081
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/12/2023 05:03	WG2169081
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/12/2023 05:03	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/12/2023 05:03	WG2169081
Tetrachloroethene	231		0.280	1.00	10	11/12/2023 05:03	WG2169081
Toluene	U		0.500	2.00	10	11/12/2023 05:03	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.250	5.00	10	11/12/2023 05:03	WG2169081
1,2,4-Trichlorobenzene	U	C3	1.93	5.00	10	11/12/2023 05:03	WG2169081
1,1,1-Trichloroethane	U		0.110	1.00	10	11/12/2023 05:03	WG2169081
1,1,2-Trichloroethane	U		0.353	1.00	10	11/12/2023 05:03	WG2169081
Trichloroethene	180		0.160	0.400	10	11/12/2023 05:03	WG2169081
Trichlorofluoromethane	U		0.200	1.00	10	11/12/2023 05:03	WG2169081
1,2,3-Trichloropropane	U		2.04	5.00	10	11/12/2023 05:03	WG2169081
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/12/2023 05:03	WG2169081
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/12/2023 05:03	WG2169081
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/12/2023 05:03	WG2169081
Vinyl chloride	1.40		0.273	1.00	10	11/12/2023 05:03	WG2169081
Xylenes, Total	U		1.91	2.60	10	11/12/2023 05:03	WG2169081
Ethyl Ether	U		0.170	1.00	10	11/12/2023 05:03	WG2169081
Tetrahydrofuran	U		0.900	5.00	10	11/12/2023 05:03	WG2169081
Iodomethane	U		2.42	5.00	10	11/12/2023 05:03	WG2169081
Allyl chloride	U		5.80	10.0	10	11/12/2023 05:03	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/12/2023 05:03	WG2169081
(S) Toluene-d8	*100*			*75.0-131*		*11/12/2023 05:03*	WG2169081

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*84.9*			*67.0-138*		*11/12/2023 05:03*	WG2169081
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2023 05:03*	WG2169081

Sample Narrative:

L1675140-05 WG2169081: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:14	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 01:14	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 01:14	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:14	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:14	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 01:14	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 01:14	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 01:14	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:14	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:14	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:14	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:14	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:14	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 01:14	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 01:14	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 01:14	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:14	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:14	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 01:14	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:14	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:14	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:14	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:14	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:14	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:14	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:14	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:14	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:14	WG2169081
cis-1,2-Dichloroethene	6.49		0.0276	0.100	1	11/12/2023 01:14	WG2169081
trans-1,2-Dichloroethene	0.105	J	0.0572	0.200	1	11/12/2023 01:14	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:14	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:14	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:14	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:14	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:14	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:14	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 01:14	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:14	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:14	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:14	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:14	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:14	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:14	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:14	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:14	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 01:14	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:14	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 01:14	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:14	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:14	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:14	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:14	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 01:14	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 01:14	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 01:14	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:14	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:14	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:14	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:14	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:14	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:14	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:14	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:14	WG2169081
Vinyl chloride	0.0900	J	0.0273	0.100	1	11/12/2023 01:14	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:14	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:14	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:14	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 01:14	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:14	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 01:14	WG2169081
(S) Toluene-d8	*96.2*			*75.0-131*		*11/12/2023 01:14*	WG2169081
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*11/12/2023 01:14*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 01:14*	WG2169081

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	226000		8450	20000	1	11/12/2023 15:46	WG2169670

Sample Narrative:
L1675140-07 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	3400	T8	150	500	10	11/09/2023 01:26	WG2167488

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13900		379	1000	1	11/08/2023 23:31	WG2167255
Nitrate	85.0	J	48.0	100	1	11/08/2023 23:31	WG2167255
Sulfate	238000		5940	50000	10	11/09/2023 04:49	WG2167255

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2140		102	1000	1	11/25/2023 15:54	WG2175135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3720		140	500	5	11/15/2023 18:22	WG2168468
Manganese	678		3.52	25.0	5	11/15/2023 18:22	WG2168468

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1200		0.287	0.678	1	11/15/2023 10:41	WG2170079
Ethane	5.42		0.296	1.29	1	11/15/2023 10:41	WG2170079
Ethene	2.20		0.422	1.27	1	11/15/2023 10:41	WG2170079

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.0	20.0	20	11/12/2023 05:22	WG2169081
Acrylonitrile	U		1.52	10.0	20	11/12/2023 05:22	WG2169081
Benzene	U		0.320	0.800	20	11/12/2023 05:22	WG2169081
Bromobenzene	U		0.840	10.0	20	11/12/2023 05:22	WG2169081
Bromodichloromethane	U		0.630	2.00	20	11/12/2023 05:22	WG2169081
Bromoform	U		4.78	20.0	20	11/12/2023 05:22	WG2169081
Bromomethane	U		2.96	10.0	20	11/12/2023 05:22	WG2169081
n-Butylbenzene	U	C3	3.06	10.0	20	11/12/2023 05:22	WG2169081
sec-Butylbenzene	U		2.02	10.0	20	11/12/2023 05:22	WG2169081
tert-Butylbenzene	U		1.24	4.00	20	11/12/2023 05:22	WG2169081
Carbon tetrachloride	U		0.864	4.00	20	11/12/2023 05:22	WG2169081
Chlorobenzene	U		0.458	2.00	20	11/12/2023 05:22	WG2169081
Chlorodibromomethane	U		0.360	2.00	20	11/12/2023 05:22	WG2169081
Chloroethane	U		0.864	4.00	20	11/12/2023 05:22	WG2169081
Chloroform	U		0.332	2.00	20	11/12/2023 05:22	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		1.11	10.0	20	11/12/2023 05:22	WG2169081
2-Chlorotoluene	U		0.736	2.00	20	11/12/2023 05:22	WG2169081
4-Chlorotoluene	U		0.904	4.00	20	11/12/2023 05:22	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	4.08	20.0	20	11/12/2023 05:22	WG2169081
1,2-Dibromoethane	U		0.420	2.00	20	11/12/2023 05:22	WG2169081
Dibromomethane	U		0.800	4.00	20	11/12/2023 05:22	WG2169081
1,2-Dichlorobenzene	U		1.16	4.00	20	11/12/2023 05:22	WG2169081
1,3-Dichlorobenzene	U		1.36	4.00	20	11/12/2023 05:22	WG2169081
1,4-Dichlorobenzene	U		1.58	4.00	20	11/12/2023 05:22	WG2169081
Dichlorodifluoromethane	U		0.654	2.00	20	11/12/2023 05:22	WG2169081
1,1-Dichloroethane	U		0.460	2.00	20	11/12/2023 05:22	WG2169081
1,2-Dichloroethane	U		0.380	2.00	20	11/12/2023 05:22	WG2169081
1,1-Dichloroethene	1.58	J	0.400	2.00	20	11/12/2023 05:22	WG2169081
cis-1,2-Dichloroethene	429		0.552	2.00	20	11/12/2023 05:22	WG2169081
trans-1,2-Dichloroethene	2.10	J	1.14	4.00	20	11/12/2023 05:22	WG2169081
1,2-Dichloropropane	U		1.02	4.00	20	11/12/2023 05:22	WG2169081
1,1-Dichloropropene	U		0.560	2.00	20	11/12/2023 05:22	WG2169081
1,3-Dichloropropane	U		1.40	4.00	20	11/12/2023 05:22	WG2169081
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/12/2023 05:22	WG2169081
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/12/2023 05:22	WG2169081
2,2-Dichloropropane	U		0.634	2.00	20	11/12/2023 05:22	WG2169081
Di-isopropyl ether	U		0.280	0.800	20	11/12/2023 05:22	WG2169081
Ethylbenzene	U		0.424	2.00	20	11/12/2023 05:22	WG2169081
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/12/2023 05:22	WG2169081
Isopropylbenzene	U		0.690	2.00	20	11/12/2023 05:22	WG2169081
p-Isopropyltoluene	U		1.86	4.00	20	11/12/2023 05:22	WG2169081
2-Butanone (MEK)	U		10.0	20.0	20	11/12/2023 05:22	WG2169081
Methylene Chloride	U		5.30	20.0	20	11/12/2023 05:22	WG2169081
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/12/2023 05:22	WG2169081
Methyl tert-butyl ether	U		0.236	0.800	20	11/12/2023 05:22	WG2169081
Naphthalene	U	C3	2.48	10.0	20	11/12/2023 05:22	WG2169081
n-Propylbenzene	U		0.944	4.00	20	11/12/2023 05:22	WG2169081
Styrene	U	C3	2.18	10.0	20	11/12/2023 05:22	WG2169081
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/12/2023 05:22	WG2169081
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/12/2023 05:22	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	11/12/2023 05:22	WG2169081
Tetrachloroethene	3.68		0.560	2.00	20	11/12/2023 05:22	WG2169081
Toluene	U		1.00	4.00	20	11/12/2023 05:22	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.500	10.0	20	11/12/2023 05:22	WG2169081
1,2,4-Trichlorobenzene	U	C3	3.86	10.0	20	11/12/2023 05:22	WG2169081
1,1,1-Trichloroethane	U		0.220	2.00	20	11/12/2023 05:22	WG2169081
1,1,2-Trichloroethane	U		0.706	2.00	20	11/12/2023 05:22	WG2169081
Trichloroethene	26.8		0.320	0.800	20	11/12/2023 05:22	WG2169081
Trichlorofluoromethane	U		0.400	2.00	20	11/12/2023 05:22	WG2169081
1,2,3-Trichloropropane	U		4.08	10.0	20	11/12/2023 05:22	WG2169081
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/12/2023 05:22	WG2169081
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/12/2023 05:22	WG2169081
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/12/2023 05:22	WG2169081
Vinyl chloride	13.2		0.546	2.00	20	11/12/2023 05:22	WG2169081
Xylenes, Total	U		3.82	5.20	20	11/12/2023 05:22	WG2169081
Ethyl Ether	U		0.340	2.00	20	11/12/2023 05:22	WG2169081
Tetrahydrofuran	U		1.80	10.0	20	11/12/2023 05:22	WG2169081
Iodomethane	U		4.84	10.0	20	11/12/2023 05:22	WG2169081
Allyl chloride	U		11.6	20.0	20	11/12/2023 05:22	WG2169081
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	11/12/2023 05:22	WG2169081
(S) Toluene-d8	*99.9*			*75.0-131*		*11/12/2023 05:22*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*87.9*			*67.0-138*		*11/12/2023 05:22*	WG2169081
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 05:22*	WG2169081

Sample Narrative:

L1675140-07 WG2169081: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/17/2023 05:06	WG2171873
Acrylonitrile	U		0.0760	0.500	1	11/17/2023 05:06	WG2171873
Benzene	U		0.0160	0.0400	1	11/17/2023 05:06	WG2171873
Bromobenzene	U		0.0420	0.500	1	11/17/2023 05:06	WG2171873
Bromodichloromethane	U		0.0315	0.100	1	11/17/2023 05:06	WG2171873
Bromoform	U		0.239	1.00	1	11/17/2023 05:06	WG2171873
Bromomethane	U		0.148	0.500	1	11/17/2023 05:06	WG2171873
n-Butylbenzene	U		0.153	0.500	1	11/17/2023 05:06	WG2171873
sec-Butylbenzene	U		0.101	0.500	1	11/17/2023 05:06	WG2171873
tert-Butylbenzene	U		0.0620	0.200	1	11/17/2023 05:06	WG2171873
Carbon tetrachloride	U		0.0432	0.200	1	11/17/2023 05:06	WG2171873
Chlorobenzene	U		0.0229	0.100	1	11/17/2023 05:06	WG2171873
Chlorodibromomethane	U		0.0180	0.100	1	11/17/2023 05:06	WG2171873
Chloroethane	U		0.0432	0.200	1	11/17/2023 05:06	WG2171873
Chloroform	U		0.0166	0.100	1	11/17/2023 05:06	WG2171873
Chloromethane	U		0.0556	0.500	1	11/17/2023 05:06	WG2171873
2-Chlorotoluene	U		0.0368	0.100	1	11/17/2023 05:06	WG2171873
4-Chlorotoluene	U		0.0452	0.200	1	11/17/2023 05:06	WG2171873
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/17/2023 05:06	WG2171873
1,2-Dibromoethane	U		0.0210	0.100	1	11/17/2023 05:06	WG2171873
Dibromomethane	U		0.0400	0.200	1	11/17/2023 05:06	WG2171873
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/17/2023 05:06	WG2171873
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/17/2023 05:06	WG2171873
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/17/2023 05:06	WG2171873
Dichlorodifluoromethane	U		0.0327	0.100	1	11/17/2023 05:06	WG2171873
1,1-Dichloroethane	U		0.0230	0.100	1	11/17/2023 05:06	WG2171873
1,2-Dichloroethane	U		0.0190	0.100	1	11/17/2023 05:06	WG2171873
1,1-Dichloroethene	0.198		0.0200	0.100	1	11/17/2023 05:06	WG2171873
cis-1,2-Dichloroethene	95.1		0.276	1.00	10	11/12/2023 05:42	WG2169081
trans-1,2-Dichloroethene	0.203		0.0572	0.200	1	11/17/2023 05:06	WG2171873
1,2-Dichloropropane	U		0.0508	0.200	1	11/17/2023 05:06	WG2171873
1,1-Dichloropropene	U		0.0280	0.100	1	11/17/2023 05:06	WG2171873
1,3-Dichloropropane	U		0.0700	0.200	1	11/17/2023 05:06	WG2171873
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/17/2023 05:06	WG2171873
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/17/2023 05:06	WG2171873
2,2-Dichloropropane	U	J3	0.0317	0.100	1	11/17/2023 05:06	WG2171873
Di-isopropyl ether	U		0.0140	0.0400	1	11/17/2023 05:06	WG2171873
Ethylbenzene	U		0.0212	0.100	1	11/17/2023 05:06	WG2171873
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/17/2023 05:06	WG2171873
Isopropylbenzene	U		0.0345	0.100	1	11/17/2023 05:06	WG2171873
p-Isopropyltoluene	U		0.0932	0.200	1	11/17/2023 05:06	WG2171873
2-Butanone (MEK)	U		0.500	1.00	1	11/17/2023 05:06	WG2171873
Methylene Chloride	U		0.265	1.00	1	11/17/2023 05:06	WG2171873
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/17/2023 05:06	WG2171873
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/17/2023 05:06	WG2171873
Naphthalene	U	C3	0.124	0.500	1	11/17/2023 05:06	WG2171873
n-Propylbenzene	U		0.0472	0.200	1	11/17/2023 05:06	WG2171873
Styrene	U	C3	0.109	0.500	1	11/17/2023 05:06	WG2171873
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/17/2023 05:06	WG2171873
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/17/2023 05:06	WG2171873
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/17/2023 05:06	WG2171873
Tetrachloroethene	U		0.0280	0.100	1	11/17/2023 05:06	WG2171873
Toluene	0.0520	J	0.0500	0.200	1	11/17/2023 05:06	WG2171873
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/17/2023 05:06	WG2171873
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/17/2023 05:06	WG2171873
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/17/2023 05:06	WG2171873

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/17/2023 05:06	WG2171873
Trichloroethene	0.376		0.0160	0.0400	1	11/17/2023 05:06	WG2171873
Trichlorofluoromethane	U		0.0200	0.100	1	11/17/2023 05:06	WG2171873
1,2,3-Trichloropropane	U		0.204	0.500	1	11/17/2023 05:06	WG2171873
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/17/2023 05:06	WG2171873
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/17/2023 05:06	WG2171873
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/17/2023 05:06	WG2171873
Vinyl chloride	35.3		0.0273	0.100	1	11/17/2023 05:06	WG2171873
Xylenes, Total	U		0.191	0.260	1	11/17/2023 05:06	WG2171873
Ethyl Ether	0.0460	J	0.0170	0.100	1	11/17/2023 05:06	WG2171873
Tetrahydrofuran	U		0.0900	0.500	1	11/17/2023 05:06	WG2171873
Iodomethane	U		0.242	0.500	1	11/17/2023 05:06	WG2171873
Allyl chloride	U		0.580	1.00	1	11/17/2023 05:06	WG2171873
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/17/2023 05:06	WG2171873
(S) Toluene-d8	*99.4*			*75.0-131*		*11/12/2023 05:42*	WG2169081
(S) Toluene-d8	*103*			*75.0-131*		*11/17/2023 05:06*	WG2171873
(S) 4-Bromofluorobenzene	*85.7*			*67.0-138*		*11/12/2023 05:42*	WG2169081
(S) 4-Bromofluorobenzene	*84.7*			*67.0-138*		*11/17/2023 05:06*	WG2171873
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 05:42*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/17/2023 05:06*	WG2171873

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:33	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 01:33	WG2169081
Benzene	0.0220	J	0.0160	0.0400	1	11/12/2023 01:33	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:33	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:33	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 01:33	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 01:33	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 01:33	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:33	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:33	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:33	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:33	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:33	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 01:33	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 01:33	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 01:33	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:33	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:33	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 01:33	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:33	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:33	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:33	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:33	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:33	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:33	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:33	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:33	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:33	WG2169081
cis-1,2-Dichloroethene	0.996		0.0276	0.100	1	11/12/2023 01:33	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:33	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:33	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:33	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:33	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:33	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:33	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:33	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 01:33	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:33	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:33	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:33	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:33	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:33	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:33	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:33	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:33	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 01:33	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:33	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 01:33	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:33	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:33	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:33	WG2169081
Tetrachloroethene	0.0430	J	0.0280	0.100	1	11/12/2023 01:33	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 01:33	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 01:33	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 01:33	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:33	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:33	WG2169081
Trichloroethene	0.0790		0.0160	0.0400	1	11/12/2023 01:33	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:33	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:33	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:33	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:33	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:33	WG2169081
Vinyl chloride	6.28		0.0273	0.100	1	11/12/2023 01:33	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:33	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:33	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:33	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 01:33	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:33	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 01:33	WG2169081
(S) Toluene-d8	*98.2*			*75.0-131*		*11/12/2023 01:33*	WG2169081
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*11/12/2023 01:33*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 01:33*	WG2169081

Method Blank (MB)

(MB) R3998867-2 11/12/23 14:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1674083-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674083-01 11/12/23 14:18 • (DUP) R3998867-3 11/12/23 14:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	340000	338000	1	0.456		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1675308-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675308-02 11/12/23 16:30 • (DUP) R3998867-4 11/12/23 16:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	541000	557000	1	2.90		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3998867-1 11/12/23 13:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	98100	98.1	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997374-1 11/09/23 01:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ferrous Iron	U		15.0	50.0

L1675140-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1675140-07 11/09/23 01:26 • (DUP) R3997374-8 11/09/23 01:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	3400	3360	10	1.21		20

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

(LCS) R3997374-2 11/09/23 01:19 • (LCSD) R3997374-3 11/09/23 01:19

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Ferrous Iron	1000	922	1050	92.2	105	85.0-115			12.9	20

L1673817-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1673817-01 11/09/23 01:21 • (MS) R3997374-4 11/09/23 01:22 • (MSD) R3997374-5 11/09/23 01:22

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Ferrous Iron	1000	22.0	1030	970	101	94.8	1	80.0-120			6.10	20

L1675063-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675063-05 11/09/23 01:24 • (MS) R3997374-6 11/09/23 01:25 • (MSD) R3997374-7 11/09/23 01:25

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Ferrous Iron	1000	16.0	946	950	93.0	93.4	1	80.0-120			0.422	20

Method Blank (MB)

(MB) R4000368-1 11/08/23 20:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	516	J	379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1675122-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675122-04 11/08/23 22:38 • (DUP) R4000368-3 11/09/23 03:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13700	13500	1	0.984		15
Nitrate	2360	2390	1	1.03		15
Sulfate	78300	78600	1	0.430		15

L1675148-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675148-04 11/09/23 00:36 • (DUP) R4000368-6 11/09/23 05:16

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	39900	39600	1	0.751		15
Nitrate	1250	1260	1	1.21		15
Sulfate	46600	46300	1	0.697		15

Laboratory Control Sample (LCS)

(LCS) R4000368-2 11/08/23 21:03

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	41100	103	80.0-120	
Nitrate	8000	7860	98.3	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1675122-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675122-04 11/08/23 22:38 • (MS) R4000368-4 11/09/23 03:55 • (MSD) R4000368-5 11/09/23 04:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	13700	51500	49800	94.7	90.2	1	80.0-120			3.54	15
Nitrate	8000	2360	9980	9670	95.1	91.3	1	80.0-120			3.13	15
Sulfate	40000	78300	104000	71800	64.6	0.000	1	80.0-120	J6	J3 J6	36.8	15

L1675148-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1675148-04 11/09/23 00:36 • (MS) R4000368-7 11/09/23 05:30

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	39900	73700	84.4	1	80.0-120	
Nitrate	8000	1250	9210	99.6	1	80.0-120	
Sulfate	40000	46600	79500	82.2	1	80.0-120	

Method Blank (MB)

(MB) R4004388-2 11/25/23 06:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	130	J	102	1000

L1674766-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674766-01 11/25/23 07:22 • (DUP) R4004388-3 11/25/23 07:46

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	4750	4790	1	0.775		20

L1674848-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674848-01 11/25/23 12:07 • (DUP) R4004388-6 11/25/23 12:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	3850	3640	1	5.61		20

Laboratory Control Sample (LCS)

(LCS) R4004388-1 11/25/23 06:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24600	98.2	85.0-115	

L1674766-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674766-02 11/25/23 08:10 • (MS) R4004388-4 11/25/23 08:35 • (MSD) R4004388-5 11/25/23 09:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	4400	29100	29400	98.9	100	1	85.0-115			0.923	20

L1675056-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675056-01 11/25/23 13:23 • (MS) R4004388-7 11/25/23 13:48 • (MSD) R4004388-8 11/25/23 14:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	2120	26700	26600	98.3	97.9	1	85.0-115			0.450	20

Method Blank (MB)

(MB) R4000391-1 11/15/23 17:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4000391-2 11/15/23 17:23

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1110	111	80.0-120	
Manganese	50.0	54.1	108	80.0-120	

L1675072-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675072-04 11/15/23 17:26 • (MS) R4000391-4 11/15/23 17:33 • (MSD) R4000391-5 11/15/23 17:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	6870	7630	7720	75.6	84.8	1	75.0-125			1.19	20
Manganese	50.0	249	301	298	105	99.6	1	75.0-125			0.913	20

Method Blank (MB)

(MB) R3999622-2 11/14/23 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1674575-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-04 11/14/23 11:34 • (DUP) R3999622-3 11/14/23 11:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	177	178	1	0.563		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1674575-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1674575-07 11/14/23 11:59 • (DUP) R3999622-4 11/14/23 14:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R3999622-1 11/14/23 09:58 • (LCSD) R3999622-5 11/14/23 14:39

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	61.9	63.3	91.3	93.4	85.0-115			2.24	20
Ethane	129	112	115	86.8	89.1	85.0-115			2.64	20
Ethene	127	113	114	89.0	89.8	85.0-115			0.881	20

Method Blank (MB)

(MB) R4000356-2 11/15/23 10:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1675405-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675405-01 11/15/23 10:37 • (DUP) R4000356-3 11/15/23 13:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1675405-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675405-02 11/15/23 15:13 • (DUP) R4000356-4 11/15/23 17:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4000356-1 11/15/23 09:58 • (LCSD) R4000356-5 11/15/23 17:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	77.3	70.9	114	105	85.0-115			8.64	20
Ethane	129	117	117	90.7	90.7	85.0-115			0.000	20
Ethene	127	117	117	92.1	92.1	85.0-115			0.000	20

Method Blank (MB)

(MB) R3999488-3 11/11/23 05:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3999488-3 11/11/23 05:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*94.8*			*75.0-131*
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

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

(LCS) R3999488-1 11/11/23 04:17 • (LCSD) R3999488-2 11/11/23 04:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	56.8	52.3	227	209	10.0-160	J4	J4	8.25	31
Acrylonitrile	25.0	30.3	30.5	121	122	45.0-153			0.658	22
Benzene	5.00	5.21	5.77	104	115	70.0-123			10.2	20
Bromobenzene	5.00	4.95	5.23	99.0	105	73.0-121			5.50	20
Bromodichloromethane	5.00	5.56	5.78	111	116	73.0-121			3.88	20
Bromoform	5.00	4.45	4.34	89.0	86.8	64.0-132			2.50	20
Bromomethane	5.00	5.06	5.90	101	118	56.0-147			15.3	20
n-Butylbenzene	5.00	3.93	4.28	78.6	85.6	68.0-135			8.53	20
sec-Butylbenzene	5.00	4.48	4.77	89.6	95.4	74.0-130			6.27	20
tert-Butylbenzene	5.00	4.21	4.49	84.2	89.8	75.0-127			6.44	20
Carbon tetrachloride	5.00	5.45	6.30	109	126	66.0-128			14.5	20
Chlorobenzene	5.00	4.78	5.08	95.6	102	76.0-128			6.09	20
Chlorodibromomethane	5.00	4.76	5.00	95.2	100	74.0-127			4.92	20
Chloroethane	5.00	5.09	5.72	102	114	61.0-134			11.7	20
Chloroform	5.00	5.79	6.49	116	130	72.0-123		J4	11.4	20
Chloromethane	5.00	5.77	6.29	115	126	51.0-138			8.62	20
2-Chlorotoluene	5.00	5.21	5.51	104	110	75.0-124			5.60	20
4-Chlorotoluene	5.00	5.00	5.28	100	106	75.0-124			5.45	20
1,2-Dibromo-3-Chloropropane	5.00	4.23	4.41	84.6	88.2	59.0-130			4.17	20
1,2-Dibromoethane	5.00	4.76	4.74	95.2	94.8	74.0-128			0.421	20
Dibromomethane	5.00	5.63	6.24	113	125	75.0-122		J4	10.3	20
1,2-Dichlorobenzene	5.00	4.40	4.74	88.0	94.8	76.0-124			7.44	20
1,3-Dichlorobenzene	5.00	4.75	4.95	95.0	99.0	76.0-125			4.12	20
1,4-Dichlorobenzene	5.00	4.74	4.74	94.8	94.8	77.0-121			0.000	20
Dichlorodifluoromethane	5.00	5.43	6.62	109	132	43.0-156			19.8	20
1,1-Dichloroethane	5.00	5.26	5.76	105	115	70.0-127			9.07	20
1,2-Dichloroethane	5.00	5.62	6.04	112	121	65.0-131			7.20	20
1,1-Dichloroethene	5.00	5.30	6.23	106	125	65.0-131			16.1	20
cis-1,2-Dichloroethene	5.00	5.21	5.88	104	118	73.0-125			12.1	20
trans-1,2-Dichloroethene	5.00	5.51	6.04	110	121	71.0-125			9.18	20
1,2-Dichloropropane	5.00	4.80	5.45	96.0	109	74.0-125			12.7	20
1,1-Dichloropropene	5.00	5.43	5.97	109	119	73.0-125			9.47	20
1,3-Dichloropropane	5.00	4.73	4.89	94.6	97.8	80.0-125			3.33	20
cis-1,3-Dichloropropene	5.00	4.83	5.35	96.6	107	76.0-127			10.2	20
trans-1,3-Dichloropropene	5.00	4.65	5.08	93.0	102	73.0-127			8.84	20
2,2-Dichloropropane	5.00	4.94	5.40	98.8	108	59.0-135			8.90	20
Di-isopropyl ether	5.00	5.23	5.74	105	115	60.0-136			9.30	20
Ethylbenzene	5.00	4.72	5.05	94.4	101	74.0-126			6.76	20
Hexachloro-1,3-butadiene	5.00	4.04	4.30	80.8	86.0	57.0-150			6.24	20
Isopropylbenzene	5.00	4.31	4.61	86.2	92.2	72.0-127			6.73	20

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

(LCS) R3999488-1 11/11/23 04:17 • (LCSD) R3999488-2 11/11/23 04:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.24	4.65	84.8	93.0	72.0-133			9.22	20
2-Butanone (MEK)	25.0	28.5	28.4	114	114	30.0-160			0.351	24
Methylene Chloride	5.00	5.76	6.00	115	120	68.0-123			4.08	20
4-Methyl-2-pentanone (MIBK)	25.0	26.2	27.0	105	108	56.0-143			3.01	20
Methyl tert-butyl ether	5.00	5.69	5.61	114	112	66.0-132			1.42	20
Naphthalene	5.00	3.20	3.44	64.0	68.8	59.0-130			7.23	20
n-Propylbenzene	5.00	4.94	5.02	98.8	100	74.0-126			1.61	20
Styrene	5.00	4.02	4.24	80.4	84.8	72.0-127			5.33	20
1,1,1,2-Tetrachloroethane	5.00	4.73	4.85	94.6	97.0	74.0-129			2.51	20
1,1,2,2-Tetrachloroethane	5.00	5.09	5.38	102	108	68.0-128			5.54	20
1,1,2-Trichlorotrifluoroethane	5.00	5.20	6.44	104	129	61.0-139		J3	21.3	20
Tetrachloroethene	5.00	4.71	4.83	94.2	96.6	70.0-136			2.52	20
Toluene	5.00	4.81	5.07	96.2	101	75.0-121			5.26	20
1,2,3-Trichlorobenzene	5.00	3.61	3.72	72.2	74.4	59.0-139			3.00	20
1,2,4-Trichlorobenzene	5.00	3.43	3.80	68.6	76.0	62.0-137			10.2	20
1,1,1-Trichloroethane	5.00	5.35	6.02	107	120	69.0-126			11.8	20
1,1,2-Trichloroethane	5.00	4.83	5.02	96.6	100	78.0-123			3.86	20
Trichloroethene	5.00	5.36	6.01	107	120	76.0-126			11.4	20
Trichlorofluoromethane	5.00	5.94	6.58	119	132	61.0-142			10.2	20
1,2,3-Trichloropropane	5.00	5.68	5.92	114	118	67.0-129			4.14	20
1,2,4-Trimethylbenzene	5.00	4.58	4.85	91.6	97.0	70.0-126			5.73	20
1,2,3-Trimethylbenzene	5.00	4.66	4.85	93.2	97.0	74.0-124			4.00	20
1,3,5-Trimethylbenzene	5.00	4.67	4.97	93.4	99.4	73.0-127			6.22	20
Vinyl chloride	5.00	4.72	5.17	94.4	103	63.0-134			9.10	20
Xylenes, Total	15.0	13.5	14.1	90.0	94.0	72.0-127			4.35	20
Ethyl Ether	5.00	5.50	5.99	110	120	64.0-137			8.53	20
Tetrahydrofuran	5.00	6.99	7.21	140	144	37.0-146			3.10	24
Iodomethane	25.0	28.8	32.0	115	128	74.0-134			10.5	20
Allyl chloride	25.0	25.6	29.1	102	116	70.0-131			12.8	20
Trans-1,4-Dichloro-2-butene	5.00	2.62	3.41	52.4	68.2	45.0-143		J3	26.2	20
(S) Toluene-d8				*94.8*	*93.6*	*75.0-131*				
(S) 4-Bromofluorobenzene				*93.0*	*93.0*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*108*	*116*	*70.0-130*				

Method Blank (MB)

(MB) R4000327-2 11/12/23 00:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4000327-2 11/12/23 00:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*97.3*			*75.0-131*
(S) 4-Bromofluorobenzene	*93.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4000327-1 11/11/23 23:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	38.4	154	10.0-160	
Acrylonitrile	25.0	24.5	98.0	45.0-153	
Benzene	5.00	4.88	97.6	70.0-123	
Bromobenzene	5.00	5.14	103	73.0-121	
Bromodichloromethane	5.00	5.08	102	73.0-121	
Bromoform	5.00	4.14	82.8	64.0-132	
Bromomethane	5.00	4.29	85.8	56.0-147	
n-Butylbenzene	5.00	3.83	76.6	68.0-135	
sec-Butylbenzene	5.00	4.53	90.6	74.0-130	
tert-Butylbenzene	5.00	4.48	89.6	75.0-127	
Carbon tetrachloride	5.00	5.26	105	66.0-128	
Chlorobenzene	5.00	4.61	92.2	76.0-128	
Chlorodibromomethane	5.00	4.56	91.2	74.0-127	
Chloroethane	5.00	4.85	97.0	61.0-134	
Chloroform	5.00	5.35	107	72.0-123	
Chloromethane	5.00	4.69	93.8	51.0-138	
2-Chlorotoluene	5.00	4.95	99.0	75.0-124	
4-Chlorotoluene	5.00	5.02	100	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	3.65	73.0	59.0-130	
1,2-Dibromoethane	5.00	4.52	90.4	74.0-128	
Dibromomethane	5.00	5.26	105	75.0-122	
1,2-Dichlorobenzene	5.00	4.29	85.8	76.0-124	
1,3-Dichlorobenzene	5.00	4.82	96.4	76.0-125	
1,4-Dichlorobenzene	5.00	4.58	91.6	77.0-121	
Dichlorodifluoromethane	5.00	4.81	96.2	43.0-156	
1,1-Dichloroethane	5.00	4.83	96.6	70.0-127	
1,2-Dichloroethane	5.00	4.92	98.4	65.0-131	
1,1-Dichloroethene	5.00	4.82	96.4	65.0-131	
cis-1,2-Dichloroethene	5.00	5.01	100	73.0-125	
trans-1,2-Dichloroethene	5.00	4.85	97.0	71.0-125	
1,2-Dichloropropane	5.00	4.56	91.2	74.0-125	
1,1-Dichloropropene	5.00	5.11	102	73.0-125	
1,3-Dichloropropane	5.00	4.51	90.2	80.0-125	
cis-1,3-Dichloropropene	5.00	4.55	91.0	76.0-127	
trans-1,3-Dichloropropene	5.00	4.60	92.0	73.0-127	
2,2-Dichloropropane	5.00	4.32	86.4	59.0-135	
Di-isopropyl ether	5.00	4.78	95.6	60.0-136	
Ethylbenzene	5.00	4.60	92.0	74.0-126	
Hexachloro-1,3-butadiene	5.00	4.36	87.2	57.0-150	
Isopropylbenzene	5.00	4.22	84.4	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R4000327-1 11/11/23 23:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.47	89.4	72.0-133	
2-Butanone (MEK)	25.0	33.3	133	30.0-160	
Methylene Chloride	5.00	4.85	97.0	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	23.5	94.0	56.0-143	
Methyl tert-butyl ether	5.00	5.30	106	66.0-132	
Naphthalene	5.00	3.14	62.8	59.0-130	
n-Propylbenzene	5.00	4.98	99.6	74.0-126	
Styrene	5.00	3.80	76.0	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	4.62	92.4	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	4.36	87.2	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	4.98	99.6	61.0-139	
Tetrachloroethene	5.00	4.60	92.0	70.0-136	
Toluene	5.00	4.58	91.6	75.0-121	
1,2,3-Trichlorobenzene	5.00	3.62	72.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	3.57	71.4	62.0-137	
1,1,1-Trichloroethane	5.00	5.17	103	69.0-126	
1,1,2-Trichloroethane	5.00	4.67	93.4	78.0-123	
Trichloroethene	5.00	5.45	109	76.0-126	
Trichlorofluoromethane	5.00	4.44	88.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.34	107	67.0-129	
1,2,4-Trimethylbenzene	5.00	4.50	90.0	70.0-126	
1,2,3-Trimethylbenzene	5.00	4.54	90.8	74.0-124	
1,3,5-Trimethylbenzene	5.00	4.69	93.8	73.0-127	
Vinyl chloride	5.00	4.04	80.8	63.0-134	
Xylenes, Total	15.0	13.0	86.7	72.0-127	
Ethyl Ether	5.00	5.01	100	64.0-137	
Tetrahydrofuran	5.00	5.47	109	37.0-146	
Iodomethane	25.0	27.1	108	74.0-134	
Allyl chloride	25.0	25.4	102	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	4.34	86.8	45.0-143	
(S) Toluene-d8			*96.4*	*75.0-131*	
(S) 4-Bromofluorobenzene			*91.9*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*104*	*70.0-130*	

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

Method Blank (MB)

(MB) R3999940-3 11/14/23 22:31

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0160	0.0400
Ethylbenzene	U		0.0212	0.100
Xylenes, Total	U		0.191	0.260
(S) Toluene-d8	*94.7*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*

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

(LCS) R3999940-1 11/14/23 21:03 • (LCSD) R3999940-2 11/14/23 21:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	5.00	5.50	5.76	110	115	70.0-123			4.62	20
Ethylbenzene	5.00	5.13	5.15	103	103	74.0-126			0.389	20
Xylenes, Total	15.0	16.0	16.7	107	111	72.0-127			4.28	20
(S) Toluene-d8				*92.4*	*91.9*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*98.6*	*98.8*	*70.0-130*				

Method Blank (MB)

(MB) R4001222-3 11/16/23 20:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100
p-Isopropyltoluene	U		0.0932	0.200

Method Blank (MB)

(MB) R4001222-3 11/16/23 20:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*83.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R4001222-1 11/16/23 18:02 • (LCSD) R4001222-2 11/16/23 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	38.8	37.1	155	148	10.0-160			4.48	31
Acrylonitrile	25.0	26.0	23.3	104	93.2	45.0-153			11.0	22
Benzene	5.00	4.93	4.42	98.6	88.4	70.0-123			10.9	20
Bromobenzene	5.00	5.29	5.54	106	111	73.0-121			4.62	20
Bromodichloromethane	5.00	5.18	4.99	104	99.8	73.0-121			3.74	20
Bromoform	5.00	4.47	4.15	89.4	83.0	64.0-132			7.42	20
Bromomethane	5.00	4.69	4.06	93.8	81.2	56.0-147			14.4	20
n-Butylbenzene	5.00	4.16	3.97	83.2	79.4	68.0-135			4.67	20
sec-Butylbenzene	5.00	4.71	4.68	94.2	93.6	74.0-130			0.639	20
tert-Butylbenzene	5.00	4.74	4.79	94.8	95.8	75.0-127			1.05	20
Carbon tetrachloride	5.00	5.09	4.47	102	89.4	66.0-128			13.0	20
Chlorobenzene	5.00	4.69	4.74	93.8	94.8	76.0-128			1.06	20
Chlorodibromomethane	5.00	4.88	4.73	97.6	94.6	74.0-127			3.12	20
Chloroethane	5.00	3.98	3.70	79.6	74.0	61.0-134			7.29	20
Chloroform	5.00	5.29	4.90	106	98.0	72.0-123			7.65	20
Chloromethane	5.00	4.81	4.08	96.2	81.6	51.0-138			16.4	20
2-Chlorotoluene	5.00	5.35	5.22	107	104	75.0-124			2.46	20
4-Chlorotoluene	5.00	5.21	5.39	104	108	75.0-124			3.40	20
1,2-Dibromo-3-Chloropropane	5.00	4.46	4.19	89.2	83.8	59.0-130			6.24	20
1,2-Dibromoethane	5.00	4.74	4.87	94.8	97.4	74.0-128			2.71	20
Dibromomethane	5.00	5.45	4.79	109	95.8	75.0-122			12.9	20
1,2-Dichlorobenzene	5.00	4.51	4.44	90.2	88.8	76.0-124			1.56	20
1,3-Dichlorobenzene	5.00	5.04	4.96	101	99.2	76.0-125			1.60	20
1,4-Dichlorobenzene	5.00	4.68	4.77	93.6	95.4	77.0-121			1.90	20
Dichlorodifluoromethane	5.00	5.06	4.38	101	87.6	43.0-156			14.4	20
1,1-Dichloroethane	5.00	4.81	4.38	96.2	87.6	70.0-127			9.36	20
1,2-Dichloroethane	5.00	4.97	4.81	99.4	96.2	65.0-131			3.27	20
1,1-Dichloroethene	5.00	4.71	4.15	94.2	83.0	65.0-131			12.6	20
trans-1,2-Dichloroethene	5.00	4.88	4.45	97.6	89.0	71.0-125			9.22	20
1,2-Dichloropropane	5.00	4.68	4.44	93.6	88.8	74.0-125			5.26	20
1,1-Dichloropropene	5.00	4.92	4.66	98.4	93.2	73.0-125			5.43	20
1,3-Dichloropropane	5.00	4.80	4.93	96.0	98.6	80.0-125			2.67	20
cis-1,3-Dichloropropene	5.00	4.82	4.91	96.4	98.2	76.0-127			1.85	20
trans-1,3-Dichloropropene	5.00	5.04	4.90	101	98.0	73.0-127			2.82	20
2,2-Dichloropropane	5.00	4.76	3.83	95.2	76.6	59.0-135		J3	21.7	20
Di-isopropyl ether	5.00	4.78	4.43	95.6	88.6	60.0-136			7.60	20
Ethylbenzene	5.00	4.59	4.46	91.8	89.2	74.0-126			2.87	20
Hexachloro-1,3-butadiene	5.00	4.40	4.20	88.0	84.0	57.0-150			4.65	20
Isopropylbenzene	5.00	4.21	3.99	84.2	79.8	72.0-127			5.37	20
p-Isopropyltoluene	5.00	4.47	4.45	89.4	89.0	72.0-133			0.448	20

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

(LCS) R4001222-1 11/16/23 18:02 • (LCSD) R4001222-2 11/16/23 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Butanone (MEK)	25.0	32.5	31.6	130	126	30.0-160			2.81	24
Methylene Chloride	5.00	4.81	4.52	96.2	90.4	68.0-123			6.22	20
4-Methyl-2-pentanone (MIBK)	25.0	27.2	26.5	109	106	56.0-143			2.61	20
Methyl tert-butyl ether	5.00	5.15	4.66	103	93.2	66.0-132			9.99	20
Naphthalene	5.00	3.22	3.21	64.4	64.2	59.0-130			0.311	20
n-Propylbenzene	5.00	5.21	5.26	104	105	74.0-126			0.955	20
Styrene	5.00	3.93	3.87	78.6	77.4	72.0-127			1.54	20
1,1,1,2-Tetrachloroethane	5.00	4.62	4.41	92.4	88.2	74.0-129			4.65	20
1,1,2,2-Tetrachloroethane	5.00	6.02	5.79	120	116	68.0-128			3.90	20
1,1,2-Trichlorotrifluoroethane	5.00	4.89	4.12	97.8	82.4	61.0-139			17.1	20
Tetrachloroethene	5.00	4.78	4.77	95.6	95.4	70.0-136			0.209	20
Toluene	5.00	4.87	4.72	97.4	94.4	75.0-121			3.13	20
1,2,3-Trichlorobenzene	5.00	3.81	3.39	76.2	67.8	59.0-139			11.7	20
1,2,4-Trichlorobenzene	5.00	3.69	3.47	73.8	69.4	62.0-137			6.15	20
1,1,1-Trichloroethane	5.00	4.78	4.63	95.6	92.6	69.0-126			3.19	20
1,1,2-Trichloroethane	5.00	5.03	5.01	101	100	78.0-123			0.398	20
Trichloroethene	5.00	4.99	4.61	99.8	92.2	76.0-126			7.92	20
Trichlorofluoromethane	5.00	5.03	4.80	101	96.0	61.0-142			4.68	20
1,2,3-Trichloropropane	5.00	6.29	5.98	126	120	67.0-129			5.05	20
1,2,4-Trimethylbenzene	5.00	4.87	4.66	97.4	93.2	70.0-126			4.41	20
1,2,3-Trimethylbenzene	5.00	4.58	4.62	91.6	92.4	74.0-124			0.870	20
1,3,5-Trimethylbenzene	5.00	4.83	4.98	96.6	99.6	73.0-127			3.06	20
Vinyl chloride	5.00	4.11	3.67	82.2	73.4	63.0-134			11.3	20
Xylenes, Total	15.0	12.6	12.7	84.0	84.7	72.0-127			0.791	20
Ethyl Ether	5.00	4.89	4.43	97.8	88.6	64.0-137			9.87	20
Tetrahydrofuran	5.00	5.88	5.75	118	115	37.0-146			2.24	24
Iodomethane	25.0	26.2	23.5	105	94.0	74.0-134			10.9	20
Allyl chloride	25.0	25.1	22.4	100	89.6	70.0-131			11.4	20
Trans-1,4-Dichloro-2-butene	5.00	5.57	5.70	111	114	45.0-143			2.31	20
(S) Toluene-d8				*101*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*88.3*	*85.5*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*112*	*102*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
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.

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.

Company Name/Address:	Billing Information:	Pres Chk
PES Environmental, Inc.- WA 2101 Fourth Ave., Suite 1310 Seattle, WA 98121	Attn: Accounts Payable 2101 4th Avenue, Suite 1310 Seattle, WA 98121	

Analysis / Container / Preservative: 22

Chain of Custody

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1675140

H102

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1033818**
PM: 546 - Jared Starkey
PB: 10/26/23 CAM
Shipped Via:

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: **American Linen**

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project #: **443022-1413001.10.70**

Lab Project #: **PESENVSWA-ALP**

Site/Facility ID #:

P.O. #: **443018-1413001.~~05.601~~** 10.701

Collected by (print): Osmin M

Collected by (signature): [signature]

Immediately Packed on Ice N ___ Y ✓

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

Quote #:

Date Results Needed:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
SCL-MW101-110723	Grab	GW	—	11/7/23	1229	3							X		01
MW-309-110723	↓	GW	↓	↓	1351	3							X		02
MW-308-110723	↓	GW	↓	↓	1437	3							X		03
MW122-110723	↓	GW	↓	↓	1505	3							X		04
MW110-110723	↓	GW	↓	↓	1035	10	X	X		X	X	X	X		05
MW-313-110723	↓	GW	↓	↓	1125	3							X		06
MW-314-110723	↓	GW	↓	↓	1219	10	X	X		X	X	X	X		07
FMW-141-110723	↓	GW	↓	↓	1345	10	X	X		X	X	X	X		08
MW111-110723	↓	GW	↓	↓	1452	3							X		09
		GW													

* 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 # 6643 4313 3253

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
[signature]	11/7/23	1700		Temp: DPA 8°C 3.6+0=3.6	Bottles Received: 48
Relinquished by : (Signature)	**Date:**	**Time:**	**Received by: (Signature)**		
Relinquished by : (Signature)	**Date:**	**Time:**	**Received for lab by: (Signature)**	**Date:**	**Time:**
			[signature]	11/8/23	0900

If preservation required by Login: Date/Time

PH-10BDH4321 TRC-2362362
CR6-20221V

Hold:

Condition: NCF / (OK)

Cooler #2

ANALYTICAL REPORT

February 09, 2024

Revised Report

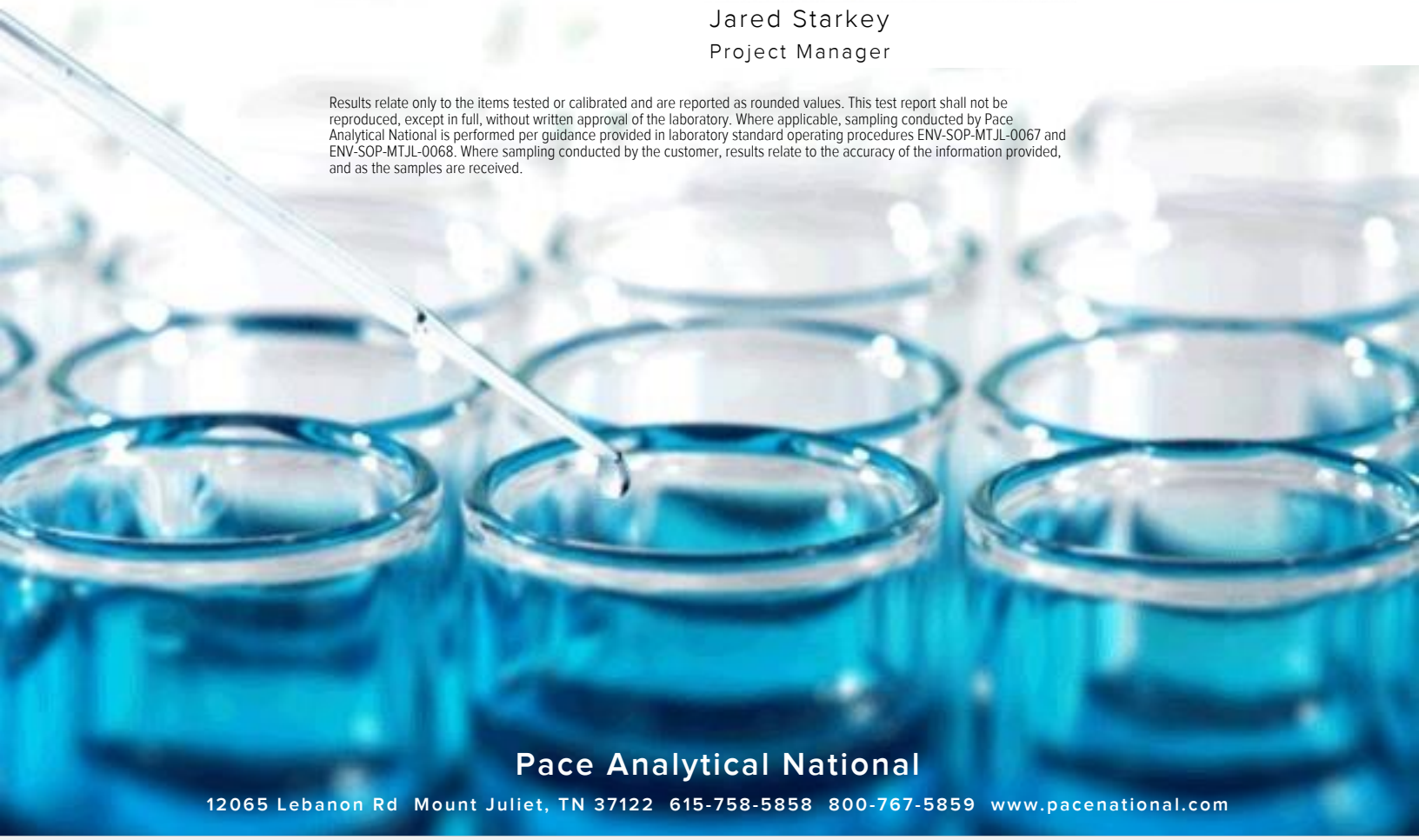
PES Environmental, Inc.- WA

Sample Delivery Group:	L1675231
Samples Received:	11/08/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-331-110723 L1675231-01 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 10:47 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 01:52	11/12/23 01:52	JAH	Mt. Juliet, TN

MW-159-110723 L1675231-02 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 09:45 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 02:11	11/12/23 02:11	JAH	Mt. Juliet, TN

MW-312-110723 L1675231-03 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 13:22 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 02:30	11/12/23 02:30	JAH	Mt. Juliet, TN

MW126-110723 L1675231-04 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 11:44 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 02:49	11/12/23 02:49	JAH	Mt. Juliet, TN

MW103-110723 L1675231-05 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 14:13 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	20	11/12/23 06:01	11/12/23 06:01	JAH	Mt. Juliet, TN

MW109-110723 L1675231-06 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 12:41 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2169670	1	11/12/23 16:03	11/12/23 16:03	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167331	1	11/09/23 02:16	11/09/23 02:16	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175201	1	11/21/23 23:18	11/21/23 23:18	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168469	1	11/15/23 14:25	11/16/23 19:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2170079	1	11/15/23 10:46	11/15/23 10:46	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 03:08	11/12/23 03:08	JAH	Mt. Juliet, TN

MW108-110723 L1675231-07 GW

Collected by: Osmin M. | Collected date/time: 11/07/23 11:20 | Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2169670	1	11/12/23 16:08	11/12/23 16:08	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167331	1	11/09/23 02:29	11/09/23 02:29	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175201	1	11/21/23 23:38	11/21/23 23:38	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168469	1	11/15/23 14:25	11/16/23 20:19	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2170079	1	11/15/23 10:53	11/15/23 10:53	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	20	11/12/23 06:20	11/12/23 06:20	JAH	Mt. Juliet, TN

MW-310-110723 L1675231-08 GW

Collected by: Osmin M.
Collected date/time: 11/07/23 10:48
Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 03:28	11/12/23 03:28	JAH	Mt. Juliet, TN

MW-311-110723 L1675231-09 GW

Collected by: Osmin M.
Collected date/time: 11/07/23 11:58
Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 03:47	11/12/23 03:47	JAH	Mt. Juliet, TN

MW121-110723 L1675231-10 GW

Collected by: Osmin M.
Collected date/time: 11/07/23 09:55
Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2169670	1	11/12/23 16:12	11/12/23 16:12	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167331	1	11/09/23 03:07	11/09/23 03:07	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175201	1	11/22/23 01:23	11/22/23 01:23	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168469	1	11/15/23 14:25	11/16/23 20:23	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2170079	1	11/15/23 11:01	11/15/23 11:01	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 04:06	11/12/23 04:06	JAH	Mt. Juliet, TN

MW-143-110723 L1675231-11 GW

Collected by: Osmin M.
Collected date/time: 11/07/23 09:20
Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2169670	1	11/12/23 16:17	11/12/23 16:17	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2167331	1	11/09/23 03:20	11/09/23 03:20	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2175201	2	11/22/23 01:42	11/22/23 01:42	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168469	1	11/15/23 14:25	11/16/23 20:26	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2170079	1	11/15/23 11:07	11/15/23 11:07	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171873	1	11/17/23 05:25	11/17/23 05:25	JAH	Mt. Juliet, TN

TB-110723 L1675231-12 GW

Collected by: Osmin M.
Collected date/time: 11/07/23 00:00
Received date/time: 11/08/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169081	1	11/12/23 00:36	11/12/23 00:36	JAH	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/22/23 14:31

Project Narrative

ID corrections

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:52	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 01:52	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 01:52	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:52	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:52	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 01:52	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 01:52	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 01:52	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:52	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:52	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:52	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:52	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:52	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 01:52	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 01:52	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 01:52	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:52	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:52	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 01:52	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:52	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:52	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:52	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:52	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:52	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:52	WG2169081
1,1-Dichloroethane	0.818		0.0230	0.100	1	11/12/2023 01:52	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:52	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:52	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:52	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:52	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:52	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:52	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:52	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:52	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:52	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:52	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 01:52	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:52	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:52	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:52	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:52	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:52	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:52	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:52	WG2169081
Methyl tert-butyl ether	0.0150	J	0.0118	0.0400	1	11/12/2023 01:52	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 01:52	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:52	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 01:52	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:52	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:52	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:52	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:52	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 01:52	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 01:52	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 01:52	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:52	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:52	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:52	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:52	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:52	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:52	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:52	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:52	WG2169081
Vinyl chloride	0.222		0.0273	0.100	1	11/12/2023 01:52	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:52	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:52	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:52	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 01:52	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:52	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 01:52	WG2169081
(S) Toluene-d8	*97.2*			*75.0-131*		*11/12/2023 01:52*	WG2169081
(S) 4-Bromofluorobenzene	*92.6*			*67.0-138*		*11/12/2023 01:52*	WG2169081
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 01:52*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.77	C5	0.548	1.00	1	11/12/2023 02:11	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 02:11	WG2169081
Benzene	0.0270	J	0.0160	0.0400	1	11/12/2023 02:11	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:11	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:11	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 02:11	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 02:11	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 02:11	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:11	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:11	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:11	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:11	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:11	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 02:11	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 02:11	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 02:11	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:11	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:11	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 02:11	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:11	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:11	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:11	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:11	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:11	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:11	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:11	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:11	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:11	WG2169081
cis-1,2-Dichloroethene	0.263		0.0276	0.100	1	11/12/2023 02:11	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:11	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:11	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:11	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:11	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:11	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:11	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:11	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 02:11	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:11	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:11	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:11	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:11	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:11	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:11	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:11	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:11	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 02:11	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:11	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 02:11	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:11	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:11	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:11	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:11	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 02:11	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 02:11	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 02:11	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:11	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:11	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:11	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:11	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:11	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:11	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:11	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:11	WG2169081
Vinyl chloride	0.103		0.0273	0.100	1	11/12/2023 02:11	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:11	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:11	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:11	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 02:11	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:11	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 02:11	WG2169081
(S) Toluene-d8	*96.8*			*75.0-131*		*11/12/2023 02:11*	WG2169081
(S) 4-Bromofluorobenzene	*90.2*			*67.0-138*		*11/12/2023 02:11*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 02:11*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:30	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 02:30	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 02:30	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:30	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:30	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 02:30	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 02:30	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 02:30	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:30	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:30	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:30	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:30	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:30	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 02:30	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 02:30	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 02:30	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:30	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:30	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 02:30	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:30	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:30	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:30	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:30	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:30	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:30	WG2169081
1,1-Dichloroethane	0.0310	J	0.0230	0.100	1	11/12/2023 02:30	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:30	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:30	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 02:30	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:30	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:30	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:30	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:30	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:30	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:30	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:30	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 02:30	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:30	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:30	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:30	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:30	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:30	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:30	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:30	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:30	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 02:30	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:30	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 02:30	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:30	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:30	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:30	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:30	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 02:30	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 02:30	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 02:30	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:30	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:30	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:30	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:30	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:30	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:30	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:30	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:30	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 02:30	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:30	WG2169081
Ethyl Ether	0.120		0.0170	0.100	1	11/12/2023 02:30	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:30	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 02:30	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:30	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 02:30	WG2169081
(S) Toluene-d8	*99.6*			*75.0-131*		*11/12/2023 02:30*	WG2169081
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*11/12/2023 02:30*	WG2169081
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/12/2023 02:30*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:49	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 02:49	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 02:49	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:49	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:49	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 02:49	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 02:49	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 02:49	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:49	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:49	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:49	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:49	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:49	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 02:49	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 02:49	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 02:49	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:49	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:49	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 02:49	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:49	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:49	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:49	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:49	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:49	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:49	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:49	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:49	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:49	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 02:49	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:49	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:49	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:49	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:49	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:49	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:49	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:49	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 02:49	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:49	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:49	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:49	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:49	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:49	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:49	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:49	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:49	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 02:49	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:49	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 02:49	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:49	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:49	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:49	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:49	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 02:49	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 02:49	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 02:49	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:49	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:49	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:49	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:49	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:49	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:49	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:49	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:49	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 02:49	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:49	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:49	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:49	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 02:49	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:49	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 02:49	WG2169081
(S) Toluene-d8	*97.8*			*75.0-131*		*11/12/2023 02:49*	WG2169081
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*11/12/2023 02:49*	WG2169081
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/12/2023 02:49*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.0	20.0	20	11/12/2023 06:01	WG2169081
Acrylonitrile	U		1.52	10.0	20	11/12/2023 06:01	WG2169081
Benzene	U		0.320	0.800	20	11/12/2023 06:01	WG2169081
Bromobenzene	U		0.840	10.0	20	11/12/2023 06:01	WG2169081
Bromodichloromethane	U		0.630	2.00	20	11/12/2023 06:01	WG2169081
Bromoform	U		4.78	20.0	20	11/12/2023 06:01	WG2169081
Bromomethane	U		2.96	10.0	20	11/12/2023 06:01	WG2169081
n-Butylbenzene	U	C3	3.06	10.0	20	11/12/2023 06:01	WG2169081
sec-Butylbenzene	U		2.02	10.0	20	11/12/2023 06:01	WG2169081
tert-Butylbenzene	U		1.24	4.00	20	11/12/2023 06:01	WG2169081
Carbon tetrachloride	U		0.864	4.00	20	11/12/2023 06:01	WG2169081
Chlorobenzene	U		0.458	2.00	20	11/12/2023 06:01	WG2169081
Chlorodibromomethane	U		0.360	2.00	20	11/12/2023 06:01	WG2169081
Chloroethane	U		0.864	4.00	20	11/12/2023 06:01	WG2169081
Chloroform	U		0.332	2.00	20	11/12/2023 06:01	WG2169081
Chloromethane	U		1.11	10.0	20	11/12/2023 06:01	WG2169081
2-Chlorotoluene	U		0.736	2.00	20	11/12/2023 06:01	WG2169081
4-Chlorotoluene	U		0.904	4.00	20	11/12/2023 06:01	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	4.08	20.0	20	11/12/2023 06:01	WG2169081
1,2-Dibromoethane	U		0.420	2.00	20	11/12/2023 06:01	WG2169081
Dibromomethane	U		0.800	4.00	20	11/12/2023 06:01	WG2169081
1,2-Dichlorobenzene	U		1.16	4.00	20	11/12/2023 06:01	WG2169081
1,3-Dichlorobenzene	U		1.36	4.00	20	11/12/2023 06:01	WG2169081
1,4-Dichlorobenzene	U		1.58	4.00	20	11/12/2023 06:01	WG2169081
Dichlorodifluoromethane	U		0.654	2.00	20	11/12/2023 06:01	WG2169081
1,1-Dichloroethane	U		0.460	2.00	20	11/12/2023 06:01	WG2169081
1,2-Dichloroethane	U		0.380	2.00	20	11/12/2023 06:01	WG2169081
1,1-Dichloroethene	2.08		0.400	2.00	20	11/12/2023 06:01	WG2169081
cis-1,2-Dichloroethene	322		0.552	2.00	20	11/12/2023 06:01	WG2169081
trans-1,2-Dichloroethene	3.12	J	1.14	4.00	20	11/12/2023 06:01	WG2169081
1,2-Dichloropropane	U		1.02	4.00	20	11/12/2023 06:01	WG2169081
1,1-Dichloropropene	U		0.560	2.00	20	11/12/2023 06:01	WG2169081
1,3-Dichloropropane	U		1.40	4.00	20	11/12/2023 06:01	WG2169081
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/12/2023 06:01	WG2169081
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/12/2023 06:01	WG2169081
2,2-Dichloropropane	U		0.634	2.00	20	11/12/2023 06:01	WG2169081
Di-isopropyl ether	U		0.280	0.800	20	11/12/2023 06:01	WG2169081
Ethylbenzene	U		0.424	2.00	20	11/12/2023 06:01	WG2169081
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/12/2023 06:01	WG2169081
Isopropylbenzene	U		0.690	2.00	20	11/12/2023 06:01	WG2169081
p-Isopropyltoluene	U		1.86	4.00	20	11/12/2023 06:01	WG2169081
2-Butanone (MEK)	U		10.0	20.0	20	11/12/2023 06:01	WG2169081
Methylene Chloride	U		5.30	20.0	20	11/12/2023 06:01	WG2169081
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/12/2023 06:01	WG2169081
Methyl tert-butyl ether	U		0.236	0.800	20	11/12/2023 06:01	WG2169081
Naphthalene	U	C3	2.48	10.0	20	11/12/2023 06:01	WG2169081
n-Propylbenzene	U		0.944	4.00	20	11/12/2023 06:01	WG2169081
Styrene	U	C3	2.18	10.0	20	11/12/2023 06:01	WG2169081
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/12/2023 06:01	WG2169081
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/12/2023 06:01	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	11/12/2023 06:01	WG2169081
Tetrachloroethene	U		0.560	2.00	20	11/12/2023 06:01	WG2169081
Toluene	U		1.00	4.00	20	11/12/2023 06:01	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.500	10.0	20	11/12/2023 06:01	WG2169081
1,2,4-Trichlorobenzene	U	C3	3.86	10.0	20	11/12/2023 06:01	WG2169081
1,1,1-Trichloroethane	U		0.220	2.00	20	11/12/2023 06:01	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.706	2.00	20	11/12/2023 06:01	WG2169081
Trichloroethene	2.00		0.320	0.800	20	11/12/2023 06:01	WG2169081
Trichlorofluoromethane	U		0.400	2.00	20	11/12/2023 06:01	WG2169081
1,2,3-Trichloropropane	U		4.08	10.0	20	11/12/2023 06:01	WG2169081
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/12/2023 06:01	WG2169081
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/12/2023 06:01	WG2169081
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/12/2023 06:01	WG2169081
Vinyl chloride	64.3		0.546	2.00	20	11/12/2023 06:01	WG2169081
Xylenes, Total	U		3.82	5.20	20	11/12/2023 06:01	WG2169081
Ethyl Ether	U		0.340	2.00	20	11/12/2023 06:01	WG2169081
Tetrahydrofuran	U		1.80	10.0	20	11/12/2023 06:01	WG2169081
Iodomethane	U		4.84	10.0	20	11/12/2023 06:01	WG2169081
Allyl chloride	U		11.6	20.0	20	11/12/2023 06:01	WG2169081
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	11/12/2023 06:01	WG2169081
(S) Toluene-d8	*99.9*			*75.0-131*		*11/12/2023 06:01*	WG2169081
(S) 4-Bromofluorobenzene	*87.5*			*67.0-138*		*11/12/2023 06:01*	WG2169081
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 06:01*	WG2169081

Sample Narrative:

L1675231-05 WG2169081: Target compounds too high to run at a lower dilution.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	459000		8450	20000	1	11/12/2023 16:03	WG2169670

Sample Narrative:

L1675231-06 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	3930		379	1000	1	11/09/2023 02:16	WG2167331
Nitrate	88.1	B J	48.0	100	1	11/09/2023 02:16	WG2167331
Sulfate	2260	J	594	5000	1	11/09/2023 02:16	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4500		102	1000	1	11/21/2023 23:18	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8080		28.1	100	1	11/16/2023 19:19	WG2168469
Manganese	2840		0.704	5.00	1	11/16/2023 19:19	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1750		0.287	0.678	1	11/15/2023 10:46	WG2170079
Ethane	3.80		0.296	1.29	1	11/15/2023 10:46	WG2170079
Ethene	U		0.422	1.27	1	11/15/2023 10:46	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/12/2023 03:08	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 03:08	WG2169081
Benzene	0.0220	J	0.0160	0.0400	1	11/12/2023 03:08	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:08	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:08	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 03:08	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 03:08	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 03:08	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:08	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:08	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:08	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:08	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:08	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 03:08	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 03:08	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 03:08	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:08	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:08	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 03:08	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:08	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:08	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:08	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:08	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:08	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:08	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:08	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 03:08	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:08	WG2169081
cis-1,2-Dichloroethene	0.672		0.0276	0.100	1	11/12/2023 03:08	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:08	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:08	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:08	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:08	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:08	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:08	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:08	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 03:08	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:08	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:08	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:08	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:08	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:08	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:08	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:08	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 03:08	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 03:08	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:08	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 03:08	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:08	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:08	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:08	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:08	WG2169081
Toluene	0.0570	J	0.0500	0.200	1	11/12/2023 03:08	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 03:08	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 03:08	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:08	WG2169081
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:08	WG2169081
Trichloroethene	0.0420		0.0160	0.0400	1	11/12/2023 03:08	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:08	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:08	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:08	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:08	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:08	WG2169081
Vinyl chloride	1.01		0.0273	0.100	1	11/12/2023 03:08	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:08	WG2169081
Ethyl Ether	0.161		0.0170	0.100	1	11/12/2023 03:08	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:08	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 03:08	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:08	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 03:08	WG2169081
(S) Toluene-d8	*97.7*			*75.0-131*		*11/12/2023 03:08*	WG2169081
(S) 4-Bromofluorobenzene	*89.4*			*67.0-138*		*11/12/2023 03:08*	WG2169081
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/12/2023 03:08*	WG2169081

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	525000		8450	20000	1	11/12/2023 16:08	WG2169670

Sample Narrative:
L1675231-07 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22600		379	1000	1	11/09/2023 02:29	WG2167331
Nitrate	634	B	48.0	100	1	11/09/2023 02:29	WG2167331
Sulfate	6930		594	5000	1	11/09/2023 02:29	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3850		102	1000	1	11/21/2023 23:38	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11000		28.1	100	1	11/16/2023 20:19	WG2168469
Manganese	1430		0.704	5.00	1	11/16/2023 20:19	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3800		0.287	0.678	1	11/15/2023 10:53	WG2170079
Ethane	23.7		0.296	1.29	1	11/15/2023 10:53	WG2170079
Ethene	9.88		0.422	1.27	1	11/15/2023 10:53	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.0	20.0	20	11/12/2023 06:20	WG2169081
Acrylonitrile	U		1.52	10.0	20	11/12/2023 06:20	WG2169081
Benzene	1.90		0.320	0.800	20	11/12/2023 06:20	WG2169081
Bromobenzene	U		0.840	10.0	20	11/12/2023 06:20	WG2169081
Bromodichloromethane	U		0.630	2.00	20	11/12/2023 06:20	WG2169081
Bromoform	U		4.78	20.0	20	11/12/2023 06:20	WG2169081
Bromomethane	U		2.96	10.0	20	11/12/2023 06:20	WG2169081
n-Butylbenzene	U	C3	3.06	10.0	20	11/12/2023 06:20	WG2169081
sec-Butylbenzene	U		2.02	10.0	20	11/12/2023 06:20	WG2169081
tert-Butylbenzene	U		1.24	4.00	20	11/12/2023 06:20	WG2169081
Carbon tetrachloride	U		0.864	4.00	20	11/12/2023 06:20	WG2169081
Chlorobenzene	U		0.458	2.00	20	11/12/2023 06:20	WG2169081
Chlorodibromomethane	U		0.360	2.00	20	11/12/2023 06:20	WG2169081
Chloroethane	U		0.864	4.00	20	11/12/2023 06:20	WG2169081
Chloroform	U		0.332	2.00	20	11/12/2023 06:20	WG2169081
Chloromethane	U		1.11	10.0	20	11/12/2023 06:20	WG2169081
2-Chlorotoluene	U		0.736	2.00	20	11/12/2023 06:20	WG2169081
4-Chlorotoluene	U		0.904	4.00	20	11/12/2023 06:20	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	4.08	20.0	20	11/12/2023 06:20	WG2169081
1,2-Dibromoethane	U		0.420	2.00	20	11/12/2023 06:20	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.800	4.00	20	11/12/2023 06:20	WG2169081
1,2-Dichlorobenzene	U		1.16	4.00	20	11/12/2023 06:20	WG2169081
1,3-Dichlorobenzene	U		1.36	4.00	20	11/12/2023 06:20	WG2169081
1,4-Dichlorobenzene	U		1.58	4.00	20	11/12/2023 06:20	WG2169081
Dichlorodifluoromethane	U		0.654	2.00	20	11/12/2023 06:20	WG2169081
1,1-Dichloroethane	U		0.460	2.00	20	11/12/2023 06:20	WG2169081
1,2-Dichloroethane	U		0.380	2.00	20	11/12/2023 06:20	WG2169081
1,1-Dichloroethene	U		0.400	2.00	20	11/12/2023 06:20	WG2169081
cis-1,2-Dichloroethene	277		0.552	2.00	20	11/12/2023 06:20	WG2169081
trans-1,2-Dichloroethene	1.24	J	1.14	4.00	20	11/12/2023 06:20	WG2169081
1,2-Dichloropropane	U		1.02	4.00	20	11/12/2023 06:20	WG2169081
1,1-Dichloropropene	U		0.560	2.00	20	11/12/2023 06:20	WG2169081
1,3-Dichloropropane	U		1.40	4.00	20	11/12/2023 06:20	WG2169081
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/12/2023 06:20	WG2169081
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/12/2023 06:20	WG2169081
2,2-Dichloropropane	U		0.634	2.00	20	11/12/2023 06:20	WG2169081
Di-isopropyl ether	U		0.280	0.800	20	11/12/2023 06:20	WG2169081
Ethylbenzene	U		0.424	2.00	20	11/12/2023 06:20	WG2169081
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/12/2023 06:20	WG2169081
Isopropylbenzene	U		0.690	2.00	20	11/12/2023 06:20	WG2169081
p-Isopropyltoluene	U		1.86	4.00	20	11/12/2023 06:20	WG2169081
2-Butanone (MEK)	U		10.0	20.0	20	11/12/2023 06:20	WG2169081
Methylene Chloride	U		5.30	20.0	20	11/12/2023 06:20	WG2169081
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/12/2023 06:20	WG2169081
Methyl tert-butyl ether	U		0.236	0.800	20	11/12/2023 06:20	WG2169081
Naphthalene	U	C3	2.48	10.0	20	11/12/2023 06:20	WG2169081
n-Propylbenzene	U		0.944	4.00	20	11/12/2023 06:20	WG2169081
Styrene	U	C3	2.18	10.0	20	11/12/2023 06:20	WG2169081
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/12/2023 06:20	WG2169081
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/12/2023 06:20	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	11/12/2023 06:20	WG2169081
Tetrachloroethene	4.48		0.560	2.00	20	11/12/2023 06:20	WG2169081
Toluene	U		1.00	4.00	20	11/12/2023 06:20	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.500	10.0	20	11/12/2023 06:20	WG2169081
1,2,4-Trichlorobenzene	U	C3	3.86	10.0	20	11/12/2023 06:20	WG2169081
1,1,1-Trichloroethane	U		0.220	2.00	20	11/12/2023 06:20	WG2169081
1,1,2-Trichloroethane	U		0.706	2.00	20	11/12/2023 06:20	WG2169081
Trichloroethene	4.18		0.320	0.800	20	11/12/2023 06:20	WG2169081
Trichlorofluoromethane	U		0.400	2.00	20	11/12/2023 06:20	WG2169081
1,2,3-Trichloropropane	U		4.08	10.0	20	11/12/2023 06:20	WG2169081
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/12/2023 06:20	WG2169081
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/12/2023 06:20	WG2169081
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/12/2023 06:20	WG2169081
Vinyl chloride	104		0.546	2.00	20	11/12/2023 06:20	WG2169081
Xylenes, Total	U		3.82	5.20	20	11/12/2023 06:20	WG2169081
Ethyl Ether	U		0.340	2.00	20	11/12/2023 06:20	WG2169081
Tetrahydrofuran	U		1.80	10.0	20	11/12/2023 06:20	WG2169081
Iodomethane	U		4.84	10.0	20	11/12/2023 06:20	WG2169081
Allyl chloride	U		11.6	20.0	20	11/12/2023 06:20	WG2169081
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	11/12/2023 06:20	WG2169081
(S) Toluene-d8	*97.9*			*75.0-131*		*11/12/2023 06:20*	WG2169081
(S) 4-Bromofluorobenzene	*86.7*			*67.0-138*		*11/12/2023 06:20*	WG2169081
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 06:20*	WG2169081

Sample Narrative:

L1675231-07 WG2169081: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.32	C5	0.548	1.00	1	11/12/2023 03:28	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 03:28	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 03:28	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:28	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:28	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 03:28	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 03:28	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 03:28	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:28	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:28	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:28	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:28	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:28	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 03:28	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 03:28	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 03:28	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:28	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:28	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 03:28	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:28	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:28	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:28	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:28	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:28	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:28	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:28	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 03:28	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:28	WG2169081
cis-1,2-Dichloroethene	0.147		0.0276	0.100	1	11/12/2023 03:28	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:28	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:28	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:28	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:28	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:28	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:28	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:28	WG2169081
Di-isopropyl ether	0.0450		0.0140	0.0400	1	11/12/2023 03:28	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:28	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:28	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:28	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:28	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:28	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:28	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:28	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 03:28	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 03:28	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:28	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 03:28	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:28	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:28	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:28	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:28	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 03:28	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 03:28	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 03:28	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:28	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:28	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 03:28	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:28	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:28	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:28	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:28	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:28	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 03:28	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:28	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 03:28	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:28	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 03:28	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:28	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 03:28	WG2169081
(S) Toluene-d8	*99.1*			*75.0-131*		*11/12/2023 03:28*	WG2169081
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*11/12/2023 03:28*	WG2169081
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 03:28*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 03:47	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 03:47	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 03:47	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:47	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:47	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 03:47	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 03:47	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 03:47	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:47	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:47	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:47	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:47	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:47	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 03:47	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 03:47	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 03:47	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:47	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:47	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 03:47	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:47	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:47	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:47	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:47	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:47	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:47	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:47	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 03:47	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:47	WG2169081
cis-1,2-Dichloroethene	0.0650	J	0.0276	0.100	1	11/12/2023 03:47	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:47	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:47	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:47	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:47	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:47	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:47	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:47	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 03:47	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:47	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:47	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:47	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:47	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:47	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:47	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:47	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 03:47	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 03:47	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:47	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 03:47	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:47	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:47	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:47	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:47	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 03:47	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 03:47	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 03:47	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:47	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:47	WG2169081
Trichloroethene	0.0690		0.0160	0.0400	1	11/12/2023 03:47	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:47	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:47	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:47	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:47	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:47	WG2169081
Vinyl chloride	0.805		0.0273	0.100	1	11/12/2023 03:47	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:47	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 03:47	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:47	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 03:47	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:47	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 03:47	WG2169081
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 03:47*	WG2169081
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/12/2023 03:47*	WG2169081
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 03:47*	WG2169081

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	635000		8450	20000	1	11/12/2023 16:12	WG2169670

Sample Narrative:

L1675231-10 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22100		379	1000	1	11/09/2023 03:07	WG2167331
Nitrate	860		48.0	100	1	11/09/2023 03:07	WG2167331
Sulfate	70900	J6	594	5000	1	11/09/2023 03:07	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5920		102	1000	1	11/22/2023 01:23	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	257		28.1	100	1	11/16/2023 20:23	WG2168469
Manganese	3640		0.704	5.00	1	11/16/2023 20:23	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	205		0.287	0.678	1	11/15/2023 11:01	WG2170079
Ethane	1.33		0.296	1.29	1	11/15/2023 11:01	WG2170079
Ethene	U		0.422	1.27	1	11/15/2023 11:01	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	62.1	C5	0.548	1.00	1	11/12/2023 04:06	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 04:06	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 04:06	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 04:06	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 04:06	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 04:06	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 04:06	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 04:06	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 04:06	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 04:06	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 04:06	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 04:06	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 04:06	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 04:06	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 04:06	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 04:06	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 04:06	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 04:06	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 04:06	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 04:06	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/12/2023 04:06	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 04:06	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 04:06	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 04:06	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 04:06	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 04:06	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 04:06	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 04:06	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 04:06	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 04:06	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 04:06	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 04:06	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 04:06	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 04:06	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 04:06	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 04:06	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 04:06	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 04:06	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 04:06	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 04:06	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 04:06	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 04:06	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 04:06	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 04:06	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 04:06	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 04:06	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 04:06	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 04:06	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 04:06	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 04:06	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 04:06	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 04:06	WG2169081
Toluene	0.0640	J	0.0500	0.200	1	11/12/2023 04:06	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 04:06	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 04:06	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 04:06	WG2169081
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:06	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 04:06	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:06	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:06	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:06	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:06	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:06	WG2169081
Vinyl chloride	0.698		0.0273	0.100	1	11/12/2023 04:06	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:06	WG2169081
Ethyl Ether	0.0670	J	0.0170	0.100	1	11/12/2023 04:06	WG2169081
Tetrahydrofuran	0.544		0.0900	0.500	1	11/12/2023 04:06	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 04:06	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:06	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 04:06	WG2169081
(S) Toluene-d8	*96.9*			*75.0-131*		*11/12/2023 04:06*	WG2169081
(S) 4-Bromofluorobenzene	*90.2*			*67.0-138*		*11/12/2023 04:06*	WG2169081
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 04:06*	WG2169081

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	613000		8450	20000	1	11/12/2023 16:17	WG2169670

Sample Narrative:

L1675231-11 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	57300		379	1000	1	11/09/2023 03:20	WG2167331
Nitrate	82.8	B J	48.0	100	1	11/09/2023 03:20	WG2167331
Sulfate	5270		594	5000	1	11/09/2023 03:20	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10900		204	2000	2	11/22/2023 01:42	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2520		28.1	100	1	11/16/2023 20:26	WG2168469
Manganese	1760		0.704	5.00	1	11/16/2023 20:26	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	664		0.287	0.678	1	11/15/2023 11:07	WG2170079
Ethane	14.1		0.296	1.29	1	11/15/2023 11:07	WG2170079
Ethene	17.1		0.422	1.27	1	11/15/2023 11:07	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.18	C5	0.548	1.00	1	11/17/2023 05:25	WG2171873
Acrylonitrile	U		0.0760	0.500	1	11/17/2023 05:25	WG2171873
Benzene	U		0.0160	0.0400	1	11/17/2023 05:25	WG2171873
Bromobenzene	U		0.0420	0.500	1	11/17/2023 05:25	WG2171873
Bromodichloromethane	U		0.0315	0.100	1	11/17/2023 05:25	WG2171873
Bromoform	U		0.239	1.00	1	11/17/2023 05:25	WG2171873
Bromomethane	U		0.148	0.500	1	11/17/2023 05:25	WG2171873
n-Butylbenzene	U		0.153	0.500	1	11/17/2023 05:25	WG2171873
sec-Butylbenzene	U		0.101	0.500	1	11/17/2023 05:25	WG2171873
tert-Butylbenzene	U		0.0620	0.200	1	11/17/2023 05:25	WG2171873
Carbon tetrachloride	U		0.0432	0.200	1	11/17/2023 05:25	WG2171873
Chlorobenzene	U		0.0229	0.100	1	11/17/2023 05:25	WG2171873
Chlorodibromomethane	U		0.0180	0.100	1	11/17/2023 05:25	WG2171873
Chloroethane	U		0.0432	0.200	1	11/17/2023 05:25	WG2171873
Chloroform	U		0.0166	0.100	1	11/17/2023 05:25	WG2171873
Chloromethane	U		0.0556	0.500	1	11/17/2023 05:25	WG2171873
2-Chlorotoluene	U		0.0368	0.100	1	11/17/2023 05:25	WG2171873
4-Chlorotoluene	U		0.0452	0.200	1	11/17/2023 05:25	WG2171873
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/17/2023 05:25	WG2171873
1,2-Dibromoethane	U		0.0210	0.100	1	11/17/2023 05:25	WG2171873

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/17/2023 05:25	WG2171873
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/17/2023 05:25	WG2171873
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/17/2023 05:25	WG2171873
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/17/2023 05:25	WG2171873
Dichlorodifluoromethane	U		0.0327	0.100	1	11/17/2023 05:25	WG2171873
1,1-Dichloroethane	U		0.0230	0.100	1	11/17/2023 05:25	WG2171873
1,2-Dichloroethane	U		0.0190	0.100	1	11/17/2023 05:25	WG2171873
1,1-Dichloroethene	U		0.0200	0.100	1	11/17/2023 05:25	WG2171873
cis-1,2-Dichloroethene	4.12		0.0276	0.100	1	11/17/2023 05:25	WG2171873
trans-1,2-Dichloroethene	0.126	J	0.0572	0.200	1	11/17/2023 05:25	WG2171873
1,2-Dichloropropane	U		0.0508	0.200	1	11/17/2023 05:25	WG2171873
1,1-Dichloropropene	U		0.0280	0.100	1	11/17/2023 05:25	WG2171873
1,3-Dichloropropane	U		0.0700	0.200	1	11/17/2023 05:25	WG2171873
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/17/2023 05:25	WG2171873
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/17/2023 05:25	WG2171873
2,2-Dichloropropane	U	J3	0.0317	0.100	1	11/17/2023 05:25	WG2171873
Di-isopropyl ether	U		0.0140	0.0400	1	11/17/2023 05:25	WG2171873
Ethylbenzene	0.0710	J	0.0212	0.100	1	11/17/2023 05:25	WG2171873
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/17/2023 05:25	WG2171873
Isopropylbenzene	U		0.0345	0.100	1	11/17/2023 05:25	WG2171873
p-Isopropyltoluene	U		0.0932	0.200	1	11/17/2023 05:25	WG2171873
2-Butanone (MEK)	U		0.500	1.00	1	11/17/2023 05:25	WG2171873
Methylene Chloride	U		0.265	1.00	1	11/17/2023 05:25	WG2171873
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/17/2023 05:25	WG2171873
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/17/2023 05:25	WG2171873
Naphthalene	U	C3	0.124	0.500	1	11/17/2023 05:25	WG2171873
n-Propylbenzene	U		0.0472	0.200	1	11/17/2023 05:25	WG2171873
Styrene	U	C3	0.109	0.500	1	11/17/2023 05:25	WG2171873
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/17/2023 05:25	WG2171873
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/17/2023 05:25	WG2171873
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/17/2023 05:25	WG2171873
Tetrachloroethene	U		0.0280	0.100	1	11/17/2023 05:25	WG2171873
Toluene	0.281		0.0500	0.200	1	11/17/2023 05:25	WG2171873
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/17/2023 05:25	WG2171873
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/17/2023 05:25	WG2171873
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/17/2023 05:25	WG2171873
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/17/2023 05:25	WG2171873
Trichloroethene	0.111		0.0160	0.0400	1	11/17/2023 05:25	WG2171873
Trichlorofluoromethane	U		0.0200	0.100	1	11/17/2023 05:25	WG2171873
1,2,3-Trichloropropane	U		0.204	0.500	1	11/17/2023 05:25	WG2171873
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/17/2023 05:25	WG2171873
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/17/2023 05:25	WG2171873
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/17/2023 05:25	WG2171873
Vinyl chloride	3.50		0.0273	0.100	1	11/17/2023 05:25	WG2171873
Xylenes, Total	0.421		0.191	0.260	1	11/17/2023 05:25	WG2171873
Ethyl Ether	U		0.0170	0.100	1	11/17/2023 05:25	WG2171873
Tetrahydrofuran	U		0.0900	0.500	1	11/17/2023 05:25	WG2171873
Iodomethane	U		0.242	0.500	1	11/17/2023 05:25	WG2171873
Allyl chloride	U		0.580	1.00	1	11/17/2023 05:25	WG2171873
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/17/2023 05:25	WG2171873
(S) Toluene-d8	*103*			*75.0-131*		*11/17/2023 05:25*	WG2171873
(S) 4-Bromofluorobenzene	*83.4*			*67.0-138*		*11/17/2023 05:25*	WG2171873
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/17/2023 05:25*	WG2171873

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.77	C5	0.548	1.00	1	11/12/2023 00:36	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 00:36	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 00:36	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:36	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:36	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 00:36	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 00:36	WG2169081
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 00:36	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:36	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:36	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:36	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:36	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:36	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 00:36	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 00:36	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 00:36	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:36	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:36	WG2169081
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 00:36	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:36	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:36	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:36	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:36	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:36	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:36	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:36	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:36	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:36	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:36	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:36	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:36	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:36	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:36	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:36	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:36	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:36	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 00:36	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:36	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:36	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:36	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:36	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:36	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:36	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:36	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:36	WG2169081
Naphthalene	U	C3	0.124	0.500	1	11/12/2023 00:36	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:36	WG2169081
Styrene	U	C3	0.109	0.500	1	11/12/2023 00:36	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:36	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:36	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:36	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:36	WG2169081
Toluene	0.0570	J	0.0500	0.200	1	11/12/2023 00:36	WG2169081
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 00:36	WG2169081
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 00:36	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:36	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:36	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:36	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:36	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:36	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:36	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:36	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:36	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:36	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:36	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:36	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:36	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 00:36	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:36	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 00:36	WG2169081
(S) Toluene-d8	*96.8*			*75.0-131*		*11/12/2023 00:36*	WG2169081
(S) 4-Bromofluorobenzene	*88.4*			*67.0-138*		*11/12/2023 00:36*	WG2169081
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2023 00:36*	WG2169081

Method Blank (MB)

(MB) R3998867-2 11/12/23 14:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1674083-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1674083-01 11/12/23 14:18 • (DUP) R3998867-3 11/12/23 14:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	340000	338000	1	0.456		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1675308-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675308-02 11/12/23 16:30 • (DUP) R3998867-4 11/12/23 16:35

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	541000	557000	1	2.90		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3998867-1 11/12/23 13:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	98100	98.1	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3999799-1 11/09/23 00:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	85.0	J	48.0	100
Sulfate	U		594	5000

L1675201-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1675201-06 11/09/23 01:00 • (DUP) R3999799-3 11/09/23 06:05

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	103000	103000	1	0.413		15
Nitrate	2140	2110	1	1.44		15
Sulfate	891	902	1	0.000		15

L1675231-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1675231-10 11/09/23 03:07 • (DUP) R3999799-6 11/09/23 06:44

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	22100	22300	1	1.13		15
Nitrate	860	853	1	0.759		15
Sulfate	70900	71000	1	0.0924		15

Laboratory Control Sample (LCS)

(LCS) R3999799-2 11/09/23 00:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	38700	96.9	80.0-120	
Nitrate	8000	7410	92.7	80.0-120	
Sulfate	40000	38700	96.6	80.0-120	

L1675201-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675201-06 11/09/23 01:00 • (MS) R3999799-4 11/09/23 06:18 • (MSD) R3999799-5 11/09/23 06:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	103000	123000	122000	49.0	48.1	1	80.0-120	J6	J6	0.281	15
Nitrate	8000	2140	9440	9690	91.3	94.3	1	80.0-120			2.52	15
Sulfate	40000	891	39100	38800	95.6	94.8	1	80.0-120			0.792	15

L1675231-10 Original Sample (OS) • Matrix Spike (MS)

(OS) L1675231-10 11/09/23 03:07 • (MS) R3999799-7 11/09/23 06:56

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	22100	58800	91.9	1	80.0-120	
Nitrate	8000	860	8230	92.1	1	80.0-120	
Sulfate	40000	70900	96800	64.6	1	80.0-120	J6

Method Blank (MB)

(MB) R4003361-2 11/21/23 17:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	126	J	102	1000

L1675201-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1675201-03 11/21/23 18:35 • (DUP) R4003361-3 11/21/23 18:52

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1050	955	1	9.71		20

L1675201-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1675201-09 11/21/23 22:03 • (DUP) R4003361-6 11/21/23 22:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	3230	3380	1	4.48		20

Laboratory Control Sample (LCS)

(LCS) R4003361-1 11/21/23 17:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23700	94.7	85.0-115	

L1675201-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675201-07 11/21/23 20:01 • (MS) R4003361-4 11/21/23 20:23 • (MSD) R4003361-5 11/21/23 20:47

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	1070	23900	24900	91.4	95.3	1	85.0-115			3.97	20

L1675231-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675231-07 11/21/23 23:38 • (MS) R4003361-7 11/22/23 00:01 • (MSD) R4003361-8 11/22/23 00:23

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	3850	26300	27400	90.0	94.0	1	85.0-115			3.76	20

Method Blank (MB)

(MB) R4001193-1 11/16/23 19:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4001193-2 11/16/23 19:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1020	102	80.0-120	
Manganese	50.0	50.6	101	80.0-120	

L1675231-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675231-06 11/16/23 19:19 • (MS) R4001193-4 11/16/23 19:25 • (MSD) R4001193-5 11/16/23 19:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	8080	9230	9100	115	102	1	75.0-125			1.43	20
Manganese	50.0	2840	2880	2920	85.8	150	1	75.0-125		V	1.10	20

Method Blank (MB)

(MB) R4000356-2 11/15/23 10:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1675405-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675405-01 11/15/23 10:37 • (DUP) R4000356-3 11/15/23 13:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1675405-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675405-02 11/15/23 15:13 • (DUP) R4000356-4 11/15/23 17:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4000356-1 11/15/23 09:58 • (LCSD) R4000356-5 11/15/23 17:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	77.3	70.9	114	105	85.0-115			8.64	20
Ethane	129	117	117	90.7	90.7	85.0-115			0.000	20
Ethene	127	117	117	92.1	92.1	85.0-115			0.000	20

Method Blank (MB)

(MB) R4000327-2 11/12/23 00:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4000327-2 11/12/23 00:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*97.3*			*75.0-131*
(S) 4-Bromofluorobenzene	*93.2*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4000327-1 11/11/23 23:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	38.4	154	10.0-160	
Acrylonitrile	25.0	24.5	98.0	45.0-153	
Benzene	5.00	4.88	97.6	70.0-123	
Bromobenzene	5.00	5.14	103	73.0-121	
Bromodichloromethane	5.00	5.08	102	73.0-121	
Bromoform	5.00	4.14	82.8	64.0-132	
Bromomethane	5.00	4.29	85.8	56.0-147	
n-Butylbenzene	5.00	3.83	76.6	68.0-135	
sec-Butylbenzene	5.00	4.53	90.6	74.0-130	
tert-Butylbenzene	5.00	4.48	89.6	75.0-127	
Carbon tetrachloride	5.00	5.26	105	66.0-128	
Chlorobenzene	5.00	4.61	92.2	76.0-128	
Chlorodibromomethane	5.00	4.56	91.2	74.0-127	
Chloroethane	5.00	4.85	97.0	61.0-134	
Chloroform	5.00	5.35	107	72.0-123	
Chloromethane	5.00	4.69	93.8	51.0-138	
2-Chlorotoluene	5.00	4.95	99.0	75.0-124	
4-Chlorotoluene	5.00	5.02	100	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	3.65	73.0	59.0-130	
1,2-Dibromoethane	5.00	4.52	90.4	74.0-128	
Dibromomethane	5.00	5.26	105	75.0-122	
1,2-Dichlorobenzene	5.00	4.29	85.8	76.0-124	
1,3-Dichlorobenzene	5.00	4.82	96.4	76.0-125	
1,4-Dichlorobenzene	5.00	4.58	91.6	77.0-121	
Dichlorodifluoromethane	5.00	4.81	96.2	43.0-156	
1,1-Dichloroethane	5.00	4.83	96.6	70.0-127	
1,2-Dichloroethane	5.00	4.92	98.4	65.0-131	
1,1-Dichloroethene	5.00	4.82	96.4	65.0-131	
cis-1,2-Dichloroethene	5.00	5.01	100	73.0-125	
trans-1,2-Dichloroethene	5.00	4.85	97.0	71.0-125	
1,2-Dichloropropane	5.00	4.56	91.2	74.0-125	
1,1-Dichloropropene	5.00	5.11	102	73.0-125	
1,3-Dichloropropane	5.00	4.51	90.2	80.0-125	
cis-1,3-Dichloropropene	5.00	4.55	91.0	76.0-127	
trans-1,3-Dichloropropene	5.00	4.60	92.0	73.0-127	
2,2-Dichloropropane	5.00	4.32	86.4	59.0-135	
Di-isopropyl ether	5.00	4.78	95.6	60.0-136	
Ethylbenzene	5.00	4.60	92.0	74.0-126	
Hexachloro-1,3-butadiene	5.00	4.36	87.2	57.0-150	
Isopropylbenzene	5.00	4.22	84.4	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R4000327-1 11/11/23 23:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.47	89.4	72.0-133	
2-Butanone (MEK)	25.0	33.3	133	30.0-160	
Methylene Chloride	5.00	4.85	97.0	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	23.5	94.0	56.0-143	
Methyl tert-butyl ether	5.00	5.30	106	66.0-132	
Naphthalene	5.00	3.14	62.8	59.0-130	
n-Propylbenzene	5.00	4.98	99.6	74.0-126	
Styrene	5.00	3.80	76.0	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	4.62	92.4	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	4.36	87.2	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	4.98	99.6	61.0-139	
Tetrachloroethene	5.00	4.60	92.0	70.0-136	
Toluene	5.00	4.58	91.6	75.0-121	
1,2,3-Trichlorobenzene	5.00	3.62	72.4	59.0-139	
1,2,4-Trichlorobenzene	5.00	3.57	71.4	62.0-137	
1,1,1-Trichloroethane	5.00	5.17	103	69.0-126	
1,1,2-Trichloroethane	5.00	4.67	93.4	78.0-123	
Trichloroethene	5.00	5.45	109	76.0-126	
Trichlorofluoromethane	5.00	4.44	88.8	61.0-142	
1,2,3-Trichloropropane	5.00	5.34	107	67.0-129	
1,2,4-Trimethylbenzene	5.00	4.50	90.0	70.0-126	
1,2,3-Trimethylbenzene	5.00	4.54	90.8	74.0-124	
1,3,5-Trimethylbenzene	5.00	4.69	93.8	73.0-127	
Vinyl chloride	5.00	4.04	80.8	63.0-134	
Xylenes, Total	15.0	13.0	86.7	72.0-127	
Ethyl Ether	5.00	5.01	100	64.0-137	
Tetrahydrofuran	5.00	5.47	109	37.0-146	
Iodomethane	25.0	27.1	108	74.0-134	
Allyl chloride	25.0	25.4	102	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	4.34	86.8	45.0-143	
(S) Toluene-d8			*96.4*	*75.0-131*	
(S) 4-Bromofluorobenzene			*91.9*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*104*	*70.0-130*	

Method Blank (MB)

(MB) R4001222-3 11/16/23 20:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4001222-3 11/16/23 20:51

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*83.4*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*

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

(LCS) R4001222-1 11/16/23 18:02 • (LCSD) R4001222-2 11/16/23 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	38.8	37.1	155	148	10.0-160			4.48	31
Acrylonitrile	25.0	26.0	23.3	104	93.2	45.0-153			11.0	22
Benzene	5.00	4.93	4.42	98.6	88.4	70.0-123			10.9	20
Bromobenzene	5.00	5.29	5.54	106	111	73.0-121			4.62	20
Bromodichloromethane	5.00	5.18	4.99	104	99.8	73.0-121			3.74	20
Bromoform	5.00	4.47	4.15	89.4	83.0	64.0-132			7.42	20
Bromomethane	5.00	4.69	4.06	93.8	81.2	56.0-147			14.4	20
n-Butylbenzene	5.00	4.16	3.97	83.2	79.4	68.0-135			4.67	20
sec-Butylbenzene	5.00	4.71	4.68	94.2	93.6	74.0-130			0.639	20
tert-Butylbenzene	5.00	4.74	4.79	94.8	95.8	75.0-127			1.05	20
Carbon tetrachloride	5.00	5.09	4.47	102	89.4	66.0-128			13.0	20
Chlorobenzene	5.00	4.69	4.74	93.8	94.8	76.0-128			1.06	20
Chlorodibromomethane	5.00	4.88	4.73	97.6	94.6	74.0-127			3.12	20
Chloroethane	5.00	3.98	3.70	79.6	74.0	61.0-134			7.29	20
Chloroform	5.00	5.29	4.90	106	98.0	72.0-123			7.65	20
Chloromethane	5.00	4.81	4.08	96.2	81.6	51.0-138			16.4	20
2-Chlorotoluene	5.00	5.35	5.22	107	104	75.0-124			2.46	20
4-Chlorotoluene	5.00	5.21	5.39	104	108	75.0-124			3.40	20
1,2-Dibromo-3-Chloropropane	5.00	4.46	4.19	89.2	83.8	59.0-130			6.24	20
1,2-Dibromoethane	5.00	4.74	4.87	94.8	97.4	74.0-128			2.71	20
Dibromomethane	5.00	5.45	4.79	109	95.8	75.0-122			12.9	20
1,2-Dichlorobenzene	5.00	4.51	4.44	90.2	88.8	76.0-124			1.56	20
1,3-Dichlorobenzene	5.00	5.04	4.96	101	99.2	76.0-125			1.60	20
1,4-Dichlorobenzene	5.00	4.68	4.77	93.6	95.4	77.0-121			1.90	20
Dichlorodifluoromethane	5.00	5.06	4.38	101	87.6	43.0-156			14.4	20
1,1-Dichloroethane	5.00	4.81	4.38	96.2	87.6	70.0-127			9.36	20
1,2-Dichloroethane	5.00	4.97	4.81	99.4	96.2	65.0-131			3.27	20
1,1-Dichloroethene	5.00	4.71	4.15	94.2	83.0	65.0-131			12.6	20
cis-1,2-Dichloroethene	5.00	4.89	4.50	97.8	90.0	73.0-125			8.31	20
trans-1,2-Dichloroethene	5.00	4.88	4.45	97.6	89.0	71.0-125			9.22	20
1,2-Dichloropropane	5.00	4.68	4.44	93.6	88.8	74.0-125			5.26	20
1,1-Dichloropropene	5.00	4.92	4.66	98.4	93.2	73.0-125			5.43	20
1,3-Dichloropropane	5.00	4.80	4.93	96.0	98.6	80.0-125			2.67	20
cis-1,3-Dichloropropene	5.00	4.82	4.91	96.4	98.2	76.0-127			1.85	20
trans-1,3-Dichloropropene	5.00	5.04	4.90	101	98.0	73.0-127			2.82	20
2,2-Dichloropropane	5.00	4.76	3.83	95.2	76.6	59.0-135		J3	21.7	20
Di-isopropyl ether	5.00	4.78	4.43	95.6	88.6	60.0-136			7.60	20
Ethylbenzene	5.00	4.59	4.46	91.8	89.2	74.0-126			2.87	20
Hexachloro-1,3-butadiene	5.00	4.40	4.20	88.0	84.0	57.0-150			4.65	20
Isopropylbenzene	5.00	4.21	3.99	84.2	79.8	72.0-127			5.37	20

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

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

(LCS) R4001222-1 11/16/23 18:02 • (LCSD) R4001222-2 11/16/23 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.47	4.45	89.4	89.0	72.0-133			0.448	20
2-Butanone (MEK)	25.0	32.5	31.6	130	126	30.0-160			2.81	24
Methylene Chloride	5.00	4.81	4.52	96.2	90.4	68.0-123			6.22	20
4-Methyl-2-pentanone (MIBK)	25.0	27.2	26.5	109	106	56.0-143			2.61	20
Methyl tert-butyl ether	5.00	5.15	4.66	103	93.2	66.0-132			9.99	20
Naphthalene	5.00	3.22	3.21	64.4	64.2	59.0-130			0.311	20
n-Propylbenzene	5.00	5.21	5.26	104	105	74.0-126			0.955	20
Styrene	5.00	3.93	3.87	78.6	77.4	72.0-127			1.54	20
1,1,1,2-Tetrachloroethane	5.00	4.62	4.41	92.4	88.2	74.0-129			4.65	20
1,1,2,2-Tetrachloroethane	5.00	6.02	5.79	120	116	68.0-128			3.90	20
1,1,2-Trichlorotrifluoroethane	5.00	4.89	4.12	97.8	82.4	61.0-139			17.1	20
Tetrachloroethene	5.00	4.78	4.77	95.6	95.4	70.0-136			0.209	20
Toluene	5.00	4.87	4.72	97.4	94.4	75.0-121			3.13	20
1,2,3-Trichlorobenzene	5.00	3.81	3.39	76.2	67.8	59.0-139			11.7	20
1,2,4-Trichlorobenzene	5.00	3.69	3.47	73.8	69.4	62.0-137			6.15	20
1,1,1-Trichloroethane	5.00	4.78	4.63	95.6	92.6	69.0-126			3.19	20
1,1,2-Trichloroethane	5.00	5.03	5.01	101	100	78.0-123			0.398	20
Trichloroethene	5.00	4.99	4.61	99.8	92.2	76.0-126			7.92	20
Trichlorofluoromethane	5.00	5.03	4.80	101	96.0	61.0-142			4.68	20
1,2,3-Trichloropropane	5.00	6.29	5.98	126	120	67.0-129			5.05	20
1,2,4-Trimethylbenzene	5.00	4.87	4.66	97.4	93.2	70.0-126			4.41	20
1,2,3-Trimethylbenzene	5.00	4.58	4.62	91.6	92.4	74.0-124			0.870	20
1,3,5-Trimethylbenzene	5.00	4.83	4.98	96.6	99.6	73.0-127			3.06	20
Vinyl chloride	5.00	4.11	3.67	82.2	73.4	63.0-134			11.3	20
Xylenes, Total	15.0	12.6	12.7	84.0	84.7	72.0-127			0.791	20
Ethyl Ether	5.00	4.89	4.43	97.8	88.6	64.0-137			9.87	20
Tetrahydrofuran	5.00	5.88	5.75	118	115	37.0-146			2.24	24
Iodomethane	25.0	26.2	23.5	105	94.0	74.0-134			10.9	20
Allyl chloride	25.0	25.1	22.4	100	89.6	70.0-131			11.4	20
Trans-1,4-Dichloro-2-butene	5.00	5.57	5.70	111	114	45.0-143			2.31	20
(S) Toluene-d8				*101*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*88.3*	*85.5*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*112*	*102*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project # 443022-1413001.10.70

Lab Project # PESENVSWA-ALP

Collected by (print): Osmin M.

Site/Facility ID #

P.O. # 10.701
443018-1413001.~~05.601~~

Collected by (signature):

Immediately Packed on Ice N___ Y✓

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1175231
G112

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 CAM

Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				Remarks	Sample # (lab only)
MW-331-110723	Grab	GW	—	11/7/23	1047	3							X					-01
MW-159-110723		GW			0945	3							X					-02
MW-312-110723		GW			1322	3							X					-03
MW126-110723		GW			1144	3							X					-04
MW103-110723		GW			1413	3							X					-05
MW109-110723		GW			1241	10	X	X		X	X	X	X					-06
MW108-110723		GW			1120	10	X	X		X	X	X	X					-07
MW-310-110723		GW			1048	3							X					-08
MW-311-110723		GW			1158	3							X					-09
MW121-110723	↓	GW	↓	↓	0955	10	X	X		X	X	X	X					-10

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

Remarks:

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 6643 4313 3242

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
	11/7/23	1700		1
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: DPA 8°C 4.7+0=4.7 Bottles Received: 61
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Ei' Dawn 17	Date: 11-8-23 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

PH-10BDH4321 TRC-2352362
CR6-20221V
PH-10BDH4321 TRC-2332362

Cooler #1

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to:
~~Bill Haldeman~~ Erik Hedberg

Email To:
jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description:
American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project #
443022-1413001.10.70

Lab Project #
PESENVSWA-ALP

Collected by (print):
Osmin M.

Site/Facility ID #

P.O. #
443018-1413001.05.601

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				
										27							
MW-143-110723	Grab	GW	—	11/7/23	0920	10	X	X		X	X	X	X				-11
TB-110723	—	GW	—	11/7/23	—	1							X				-12
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															
		GW															

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1675231

Table #

Acctnum: PESENVSWA

Template: T240736

Prelogin: P1033818

PM: 546 - Jared Starkey

PB: 10/26/23 cam

Shipped Via:

Remarks | Sample # (lab only)

* 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 # 6643 4313 3242

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR	
	11/7/23	1760		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: DPA8C 4.7+0=4.7	Bottles Received: 61
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Ei Doom 17	Date: 11-8-23	Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF (OK)

ANALYTICAL REPORT

November 27, 2023

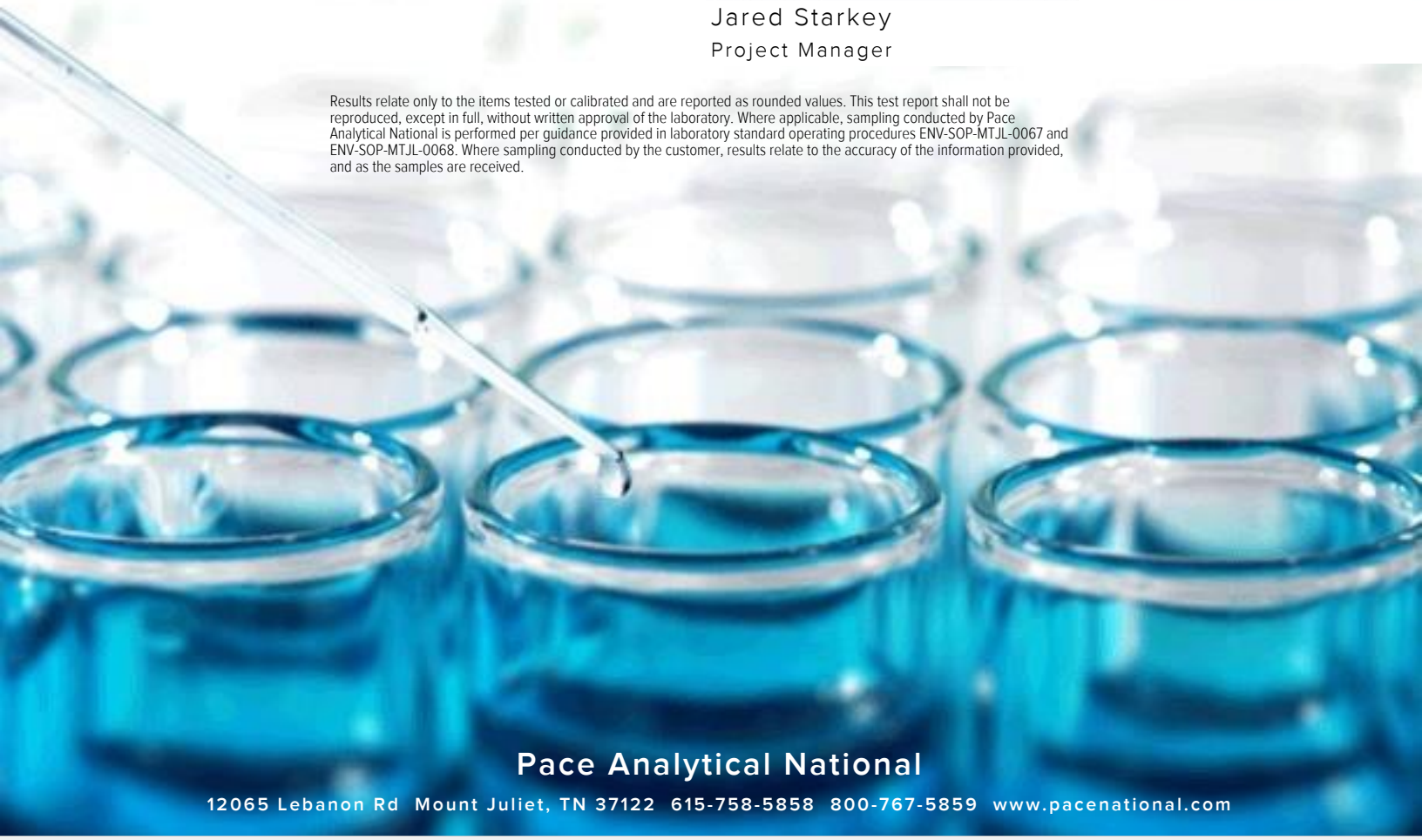
PES Environmental, Inc.- WA

Sample Delivery Group:	L1675715
Samples Received:	11/09/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-145R-110823 L1675715-01 GW

Collected by: OM | Collected date/time: 11/08/23 09:30 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2170180	1	11/14/23 09:07	11/14/23 09:07	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2168182	1	11/09/23 17:21	11/09/23 17:21	ARV	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168164	1	11/09/23 23:46	11/09/23 23:46	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2176775	1	11/24/23 10:51	11/24/23 10:51	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168470	1	11/13/23 00:14	11/13/23 22:59	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168470	5	11/13/23 00:14	11/13/23 23:13	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2172256	1	11/17/23 13:36	11/17/23 13:36	OK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/11/23 23:32	11/11/23 23:32	JAH	Mt. Juliet, TN

MW-346-110823 L1675715-02 GW

Collected by: OM | Collected date/time: 11/08/23 10:45 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2170180	1	11/14/23 09:24	11/14/23 09:24	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2168182	1	11/09/23 17:21	11/09/23 17:21	ARV	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168191	1	11/10/23 03:57	11/10/23 03:57	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2176775	1	11/24/23 11:09	11/24/23 11:09	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168470	1	11/13/23 00:14	11/13/23 23:02	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2172256	1	11/17/23 13:40	11/17/23 13:40	OK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/11/23 23:52	11/11/23 23:52	JAH	Mt. Juliet, TN

GEI-MW-1-110823 L1675715-03 GW

Collected by: OM | Collected date/time: 11/08/23 11:52 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 00:11	11/12/23 00:11	JAH	Mt. Juliet, TN

MW-316-11083 L1675715-04 GW

Collected by: OM | Collected date/time: 11/08/23 12:56 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 00:29	11/12/23 00:29	JAH	Mt. Juliet, TN

MW-315-11083 L1675715-05 GW

Collected by: OM | Collected date/time: 11/08/23 13:58 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 00:48	11/12/23 00:48	JAH	Mt. Juliet, TN

MW-338-11083 L1675715-06 GW

Collected by: OM | Collected date/time: 11/08/23 15:10 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 01:06	11/12/23 01:06	JAH	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.

Jared Starkey
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	294000		8450	20000	1	11/14/2023 09:07	WG2170180

Sample Narrative:

L1675715-01 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	594	T8	15.0	50.0	1	11/09/2023 17:21	WG2168182

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28500		379	1000	1	11/09/2023 23:46	WG2168164
Nitrate	86.7	J	48.0	100	1	11/09/2023 23:46	WG2168164
Sulfate	25100		594	5000	1	11/09/2023 23:46	WG2168164

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2420		102	1000	1	11/24/2023 10:51	WG2176775

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	510		28.1	100	1	11/13/2023 22:59	WG2168470
Manganese	315		3.52	25.0	5	11/13/2023 23:13	WG2168470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1350		0.287	0.678	1	11/17/2023 13:36	WG2172256
Ethane	4.03		0.296	1.29	1	11/17/2023 13:36	WG2172256
Ethene	U		0.422	1.27	1	11/17/2023 13:36	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 23:32	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/11/2023 23:32	WG2169502
Benzene	U		0.0160	0.0400	1	11/11/2023 23:32	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/11/2023 23:32	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 23:32	WG2169502
Bromoform	U		0.239	1.00	1	11/11/2023 23:32	WG2169502
Bromomethane	U		0.148	0.500	1	11/11/2023 23:32	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 23:32	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 23:32	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 23:32	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 23:32	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 23:32	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 23:32	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/11/2023 23:32	WG2169502
Chloroform	U		0.0166	0.100	1	11/11/2023 23:32	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U	C3	0.0556	0.500	1	11/11/2023 23:32	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 23:32	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 23:32	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 23:32	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 23:32	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 23:32	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 23:32	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 23:32	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 23:32	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 23:32	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 23:32	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 23:32	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 23:32	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 23:32	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 23:32	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 23:32	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 23:32	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 23:32	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/11/2023 23:32	WG2169502
Ethylbenzene	0.0940	J	0.0212	0.100	1	11/11/2023 23:32	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 23:32	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 23:32	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 23:32	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 23:32	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/11/2023 23:32	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 23:32	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 23:32	WG2169502
Naphthalene	U		0.124	0.500	1	11/11/2023 23:32	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 23:32	WG2169502
Styrene	U		0.109	0.500	1	11/11/2023 23:32	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 23:32	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 23:32	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 23:32	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 23:32	WG2169502
Toluene	U		0.0500	0.200	1	11/11/2023 23:32	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/11/2023 23:32	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/11/2023 23:32	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 23:32	WG2169502
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 23:32	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 23:32	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 23:32	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 23:32	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 23:32	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 23:32	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 23:32	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 23:32	WG2169502
Xylenes, Total	0.273		0.191	0.260	1	11/11/2023 23:32	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 23:32	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 23:32	WG2169502
Iodomethane	U		0.242	0.500	1	11/11/2023 23:32	WG2169502
Allyl chloride	U		0.580	1.00	1	11/11/2023 23:32	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/11/2023 23:32	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/11/2023 23:32*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/11/2023 23:32*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/11/2023 23:32*	WG2169502

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	126000		8450	20000	1	11/14/2023 09:24	WG2170180

Sample Narrative:
L1675715-02 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	1080	T8	15.0	50.0	1	11/09/2023 17:21	WG2168182

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	15700		379	1000	1	11/10/2023 03:57	WG2168191
Nitrate	310		48.0	100	1	11/10/2023 03:57	WG2168191
Sulfate	43800		594	5000	1	11/10/2023 03:57	WG2168191

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1470	B	102	1000	1	11/24/2023 11:09	WG2176775

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1720		28.1	100	1	11/13/2023 23:02	WG2168470
Manganese	107		0.704	5.00	1	11/13/2023 23:02	WG2168470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	40.2		0.287	0.678	1	11/17/2023 13:40	WG2172256
Ethane	U		0.296	1.29	1	11/17/2023 13:40	WG2172256
Ethene	1.25	J	0.422	1.27	1	11/17/2023 13:40	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 23:52	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/11/2023 23:52	WG2169502
Benzene	0.0480		0.0160	0.0400	1	11/11/2023 23:52	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/11/2023 23:52	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 23:52	WG2169502
Bromoform	U		0.239	1.00	1	11/11/2023 23:52	WG2169502
Bromomethane	U		0.148	0.500	1	11/11/2023 23:52	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 23:52	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 23:52	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 23:52	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 23:52	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 23:52	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 23:52	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/11/2023 23:52	WG2169502
Chloroform	U		0.0166	0.100	1	11/11/2023 23:52	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U	C3	0.0556	0.500	1	11/11/2023 23:52	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 23:52	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 23:52	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 23:52	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 23:52	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 23:52	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 23:52	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 23:52	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 23:52	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 23:52	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 23:52	WG2169502
cis-1,2-Dichloroethene	1.82		0.0276	0.100	1	11/11/2023 23:52	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 23:52	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 23:52	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 23:52	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 23:52	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 23:52	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 23:52	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/11/2023 23:52	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 23:52	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 23:52	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 23:52	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 23:52	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 23:52	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/11/2023 23:52	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 23:52	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 23:52	WG2169502
Naphthalene	U		0.124	0.500	1	11/11/2023 23:52	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 23:52	WG2169502
Styrene	U		0.109	0.500	1	11/11/2023 23:52	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 23:52	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 23:52	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 23:52	WG2169502
Tetrachloroethene	0.0710	J	0.0280	0.100	1	11/11/2023 23:52	WG2169502
Toluene	0.140	J	0.0500	0.200	1	11/11/2023 23:52	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/11/2023 23:52	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/11/2023 23:52	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 23:52	WG2169502
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 23:52	WG2169502
Trichloroethene	0.319		0.0160	0.0400	1	11/11/2023 23:52	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 23:52	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 23:52	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 23:52	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 23:52	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 23:52	WG2169502
Vinyl chloride	0.423		0.0273	0.100	1	11/11/2023 23:52	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/11/2023 23:52	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 23:52	WG2169502
Tetrahydrofuran	0.505		0.0900	0.500	1	11/11/2023 23:52	WG2169502
Iodomethane	U		0.242	0.500	1	11/11/2023 23:52	WG2169502
Allyl chloride	U		0.580	1.00	1	11/11/2023 23:52	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/11/2023 23:52	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/11/2023 23:52*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/11/2023 23:52*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*11/11/2023 23:52*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.74		0.548	1.00	1	11/12/2023 00:11	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 00:11	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:11	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:11	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:11	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:11	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:11	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:11	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:11	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:11	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:11	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:11	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:11	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 00:11	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:11	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 00:11	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:11	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:11	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:11	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:11	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:11	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:11	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:11	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:11	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:11	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:11	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:11	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
cis-1,2-Dichloroethene	0.0340	J	0.0276	0.100	1	11/12/2023 00:11	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:11	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:11	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:11	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:11	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:11	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:11	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:11	WG2169502
Di-isopropyl ether	0.0830	C3	0.0140	0.0400	1	11/12/2023 00:11	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:11	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:11	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:11	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:11	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:11	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:11	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:11	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:11	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:11	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:11	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:11	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:11	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:11	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:11	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:11	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:11	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:11	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:11	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:11	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:11	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:11	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:11	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:11	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:11	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:11	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:11	WG2169502
Ethyl Ether	0.267		0.0170	0.100	1	11/12/2023 00:11	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:11	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:11	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:11	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 00:11	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 00:11*	WG2169502
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 00:11*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*11/12/2023 00:11*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.67		0.548	1.00	1	11/12/2023 00:29	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 00:29	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:29	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:29	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:29	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:29	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:29	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:29	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:29	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:29	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:29	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:29	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:29	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 00:29	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:29	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 00:29	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:29	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:29	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:29	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:29	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:29	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:29	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:29	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:29	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:29	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:29	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:29	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:29	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:29	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:29	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:29	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:29	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 00:29	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:29	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:29	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:29	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:29	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:29	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:29	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:29	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:29	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:29	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:29	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:29	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:29	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:29	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:29	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:29	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:29	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:29	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:29	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:29	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:29	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:29	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:29	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:29	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:29	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:29	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:29	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:29	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:29	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:29	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:29	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 00:29	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 00:29*	WG2169502
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/12/2023 00:29*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*11/12/2023 00:29*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.01		0.548	1.00	1	11/12/2023 00:48	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 00:48	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:48	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:48	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:48	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:48	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:48	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:48	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:48	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:48	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:48	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:48	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:48	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 00:48	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:48	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 00:48	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:48	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:48	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:48	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:48	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:48	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:48	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:48	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:48	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:48	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:48	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:48	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:48	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:48	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:48	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:48	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:48	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 00:48	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:48	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:48	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:48	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:48	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:48	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:48	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:48	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:48	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:48	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:48	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:48	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:48	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:48	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:48	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:48	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:48	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:48	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:48	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:48	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:48	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:48	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:48	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:48	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:48	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:48	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:48	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:48	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:48	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:48	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:48	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 00:48	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 00:48*	WG2169502
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/12/2023 00:48*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/12/2023 00:48*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91		0.548	1.00	1	11/12/2023 01:06	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 01:06	WG2169502
Benzene	0.0210	J	0.0160	0.0400	1	11/12/2023 01:06	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:06	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:06	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:06	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:06	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:06	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:06	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:06	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:06	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:06	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:06	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 01:06	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:06	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 01:06	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:06	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:06	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:06	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:06	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:06	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:06	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:06	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:06	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:06	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:06	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:06	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:06	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:06	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:06	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:06	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:06	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 01:06	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:06	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:06	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:06	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:06	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:06	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:06	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:06	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:06	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:06	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:06	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:06	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:06	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:06	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:06	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:06	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:06	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:06	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:06	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:06	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:06	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:06	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:06	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:06	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:06	WG2169502
Vinyl chloride	0.0840	J	0.0273	0.100	1	11/12/2023 01:06	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:06	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:06	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:06	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 01:06	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:06	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 01:06	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 01:06*	WG2169502
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2023 01:06*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*11/12/2023 01:06*	WG2169502

Method Blank (MB)

(MB) R4000024-2 11/14/23 08:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:
BLANK: Endpoint pH 4.5

L1675428-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1675428-06 11/14/23 08:33 • (DUP) R4000024-4 11/14/23 08:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	59700	61900	1	3.58		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

L1675908-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675908-04 11/14/23 10:17 • (DUP) R4000024-6 11/14/23 10:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	786000	788000	1	0.275		20

Sample Narrative:
OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4000024-1 11/14/23 08:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	109000	109	90.0-110	

Sample Narrative:
LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997921-1 11/09/23 17:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ferrous Iron	U		15.0	50.0

L1675689-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675689-01 11/09/23 17:11 • (DUP) R3997921-3 11/09/23 17:12

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	81.0	78.0	1	3.77		20

L1675715-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675715-02 11/09/23 17:21 • (DUP) R3997921-6 11/09/23 17:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	1080	1050	1	2.34		20

Laboratory Control Sample (LCS)

(LCS) R3997921-2 11/09/23 17:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Ferrous Iron	1000	1010	101	85.0-115	

L1675689-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675689-05 11/09/23 17:15 • (MS) R3997921-4 11/09/23 17:16 • (MSD) R3997921-5 11/09/23 17:16

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Ferrous Iron	1000	34.0	947	948	91.3	91.4	1	80.0-120			0.106	20

Method Blank (MB)

(MB) R4000635-1 11/09/23 13:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1675662-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675662-01 11/09/23 20:47 • (DUP) R4000635-3 11/10/23 02:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	101000	99800	1	1.42		15
Nitrate	125	121	1	3.25		15
Sulfate	3990	3880	1	2.90	J	15

L1675689-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1675689-05 11/09/23 22:37 • (DUP) R4000635-5 11/10/23 02:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	954000	973000	10	2.00		15
Nitrate	24700	26100	10	5.68		15
Sulfate	942000	954000	10	1.25		15

Laboratory Control Sample (LCS)

(LCS) R4000635-2 11/09/23 13:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40600	101	80.0-120	
Nitrate	8000	7790	97.3	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1675662-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1675662-01 11/09/23 20:47 • (MS) R4000635-4 11/10/23 02:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	101000	121000	50.4	1	80.0-120	J6
Nitrate	8000	125	7590	93.3	1	80.0-120	
Sulfate	40000	3990	43200	98.1	1	80.0-120	

L1675689-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675689-05 11/09/23 22:37 • (MS) R4000635-6 11/10/23 02:44 • (MSD) R4000635-7 11/10/23 03:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	954000	778000	792000	0.000	0.000	10	80.0-120	V	V	1.77	15
Nitrate	8000	24700	25800	27400	14.0	33.8	10	80.0-120	J6	J6	5.95	15
Sulfate	40000	942000	781000	792000	0.000	0.000	10	80.0-120	V	V	1.38	15

Method Blank (MB)

(MB) R4000586-1 11/09/23 23:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1675651-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675651-01 11/10/23 02:02 • (DUP) R4000586-3 11/10/23 06:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	9650	9790	1	1.38		15
Nitrate	611	765	1	22.3	J3	15
Sulfate	23800	24300	1	2.31		15

L1675722-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1675722-09 11/10/23 05:38 • (DUP) R4000586-5 11/10/23 07:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	74300	73500	1	1.10		15
Nitrate	3750	3730	1	0.348		15
Sulfate	115000	114000	1	0.738		15

Laboratory Control Sample (LCS)

(LCS) R4000586-2 11/10/23 00:07

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40700	102	80.0-120	
Nitrate	8000	7930	99.1	80.0-120	
Sulfate	40000	40000	100	80.0-120	

L1675651-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1675651-01 11/10/23 02:02 • (MS) R4000586-4 11/10/23 06:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	9650	49000	98.4	1	80.0-120	
Nitrate	8000	611	8740	102	1	80.0-120	
Sulfate	40000	23800	61000	93.0	1	80.0-120	

L1675977-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675977-02 11/10/23 01:11 • (MS) R4000586-6 11/10/23 08:09 • (MSD) R4000586-7 11/10/23 08:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	27600	62800	59200	88.1	79.0	10	80.0-120		J6	5.95	15
Nitrate	8000	2740	10100	12500	92.0	123	10	80.0-120		J3 J5	21.6	15
Sulfate	40000	2660000	2140000	2160000	0.000	0.000	10	80.0-120	E V	E V	0.714	15

QUALITY CONTROL SUMMARY

L1675715-01,02

Method Blank (MB)

(MB) R4003994-2 11/23/23 23:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	166	J	102	1000

L1675715-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1675715-02 11/24/23 11:09 • (DUP) R4003994-5 11/24/23 11:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1470	1390	1	5.54		20

L1675716-28 Original Sample (OS) • Duplicate (DUP)

(OS) L1675716-28 11/24/23 14:32 • (DUP) R4003994-8 11/24/23 14:53

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	3580	3780	1	5.22		20

Laboratory Control Sample (LCS)

(LCS) R4003994-1 11/23/23 23:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24100	96.4	85.0-115	

L1675714-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675714-07 11/24/23 09:43 • (MS) R4003994-3 11/24/23 10:08 • (MSD) R4003994-4 11/24/23 10:31

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	678	25000	24700	97.3	96.0	1	85.0-115			1.25	20

L1675716-15 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675716-15 11/24/23 13:23 • (MS) R4003994-6 11/24/23 13:47 • (MSD) R4003994-7 11/24/23 14:12

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	3920	28000	28400	96.2	97.8	1	85.0-115			1.42	20

Method Blank (MB)

(MB) R3999284-1 11/13/23 20:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R3999284-2 11/13/23 20:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1050	105	80.0-120	
Manganese	50.0	53.2	106	80.0-120	

L1675330-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675330-01 11/13/23 20:18 • (MS) R3999284-4 11/13/23 20:24 • (MSD) R3999284-5 11/13/23 20:27

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	U	1030	1020	103	102	1	75.0-125			0.701	20
Manganese	50.0	159	213	226	109	135	1	75.0-125		J5	6.00	20

L1675330-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675330-02 11/13/23 20:31 • (MS) R3999284-6 11/13/23 20:34 • (MSD) R3999284-7 11/13/23 20:37

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	94.7	1170	1200	108	111	1	75.0-125			2.50	20
Manganese	50.0	7680	7460	7760	0.000	161	1	75.0-125	V	V	4.01	20

Method Blank (MB)

(MB) R4001442-2 11/17/23 12:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1675689-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675689-04 11/17/23 12:22 • (DUP) R4001442-3 11/17/23 13:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1675716-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1675716-14 11/17/23 13:59 • (DUP) R4001442-4 11/17/23 14:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4001442-1 11/17/23 12:12 • (LCSD) R4001442-7 11/17/23 15:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.7	64.6	95.4	95.3	85.0-115			0.155	20
Ethane	129	118	119	91.5	92.2	85.0-115			0.844	20
Ethene	127	119	120	93.7	94.5	85.0-115			0.837	20

L1675689-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675689-05 11/17/23 12:27 • (MS) R4001442-5 11/17/23 14:51 • (MSD) R4001442-6 11/17/23 14:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methane	67.8	1.38	48.0	94.8	70.8	140	1	85.0-115	J6	J3 J5	65.5	20
Ethane	129	U	64.0	153	49.6	119	1	85.0-115	J6	J3 J5	82.0	20
Ethene	127	U	63.5	154	50.0	121	1	85.0-115	J6	J3 J5	83.2	20

Method Blank (MB)

(MB) R4000204-2 11/11/23 23:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4000204-2 11/11/23 23:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*108*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4000204-1 11/11/23 21:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	23.3	93.2	10.0-160	
Acrylonitrile	25.0	16.1	64.4	45.0-153	
Benzene	5.00	4.84	96.8	70.0-123	
Bromobenzene	5.00	4.97	99.4	73.0-121	
Bromodichloromethane	5.00	4.61	92.2	73.0-121	
Bromoform	5.00	4.53	90.6	64.0-132	
Bromomethane	5.00	4.76	95.2	56.0-147	
n-Butylbenzene	5.00	4.38	87.6	68.0-135	
sec-Butylbenzene	5.00	4.48	89.6	74.0-130	
tert-Butylbenzene	5.00	5.17	103	75.0-127	
Carbon tetrachloride	5.00	5.39	108	66.0-128	
Chlorobenzene	5.00	4.94	98.8	76.0-128	
Chlorodibromomethane	5.00	5.30	106	74.0-127	
Chloroethane	5.00	3.88	77.6	61.0-134	
Chloroform	5.00	4.54	90.8	72.0-123	
Chloromethane	5.00	3.00	60.0	51.0-138	
2-Chlorotoluene	5.00	4.78	95.6	75.0-124	
4-Chlorotoluene	5.00	4.64	92.8	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	4.05	81.0	59.0-130	
1,2-Dibromoethane	5.00	4.63	92.6	74.0-128	
Dibromomethane	5.00	5.00	100	75.0-122	
1,2-Dichlorobenzene	5.00	4.52	90.4	76.0-124	
1,3-Dichlorobenzene	5.00	4.45	89.0	76.0-125	
1,4-Dichlorobenzene	5.00	4.94	98.8	77.0-121	
Dichlorodifluoromethane	5.00	4.62	92.4	43.0-156	
1,1-Dichloroethane	5.00	4.59	91.8	70.0-127	
1,2-Dichloroethane	5.00	4.39	87.8	65.0-131	
1,1-Dichloroethene	5.00	5.16	103	65.0-131	
cis-1,2-Dichloroethene	5.00	4.87	97.4	73.0-125	
trans-1,2-Dichloroethene	5.00	4.85	97.0	71.0-125	
1,2-Dichloropropane	5.00	4.08	81.6	74.0-125	
1,1-Dichloropropene	5.00	5.05	101	73.0-125	
1,3-Dichloropropane	5.00	4.57	91.4	80.0-125	
cis-1,3-Dichloropropene	5.00	4.85	97.0	76.0-127	
trans-1,3-Dichloropropene	5.00	5.07	101	73.0-127	
2,2-Dichloropropane	5.00	4.71	94.2	59.0-135	
Di-isopropyl ether	5.00	3.64	72.8	60.0-136	
Ethylbenzene	5.00	5.02	100	74.0-126	
Hexachloro-1,3-butadiene	5.00	4.89	97.8	57.0-150	
Isopropylbenzene	5.00	4.89	97.8	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R4000204-1 11/11/23 21:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.70	94.0	72.0-133	
2-Butanone (MEK)	25.0	27.4	110	30.0-160	
Methylene Chloride	5.00	5.49	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	24.0	96.0	56.0-143	
Methyl tert-butyl ether	5.00	4.96	99.2	66.0-132	
Naphthalene	5.00	4.23	84.6	59.0-130	
n-Propylbenzene	5.00	4.56	91.2	74.0-126	
Styrene	5.00	4.94	98.8	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.11	102	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	4.60	92.0	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	4.99	99.8	61.0-139	
Tetrachloroethene	5.00	5.48	110	70.0-136	
Toluene	5.00	4.80	96.0	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.46	89.2	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.34	86.8	62.0-137	
1,1,1-Trichloroethane	5.00	5.54	111	69.0-126	
1,1,2-Trichloroethane	5.00	4.99	99.8	78.0-123	
Trichloroethene	5.00	4.96	99.2	76.0-126	
Trichlorofluoromethane	5.00	5.36	107	61.0-142	
1,2,3-Trichloropropane	5.00	4.69	93.8	67.0-129	
1,2,4-Trimethylbenzene	5.00	4.60	92.0	70.0-126	
1,2,3-Trimethylbenzene	5.00	4.96	99.2	74.0-124	
1,3,5-Trimethylbenzene	5.00	4.67	93.4	73.0-127	
Vinyl chloride	5.00	4.36	87.2	63.0-134	
Xylenes, Total	15.0	14.8	98.7	72.0-127	
Ethyl Ether	5.00	4.38	87.6	64.0-137	
Tetrahydrofuran	5.00	5.15	103	37.0-146	
Iodomethane	25.0	28.6	114	74.0-134	
Allyl chloride	25.0	24.3	97.2	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	3.54	70.8	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*103*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*93.1*	*70.0-130*	

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
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.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: ~~Bill Haldeman~~ Erik H.

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: **American Linen**

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project # **443022-1413001.10.70**

Lab Project # **PESENVSWA-ALP**

Collected by (print): Osmin Monroy

Site/Facility ID #

P.O. # 10.701 **443018-1413001.05.601**

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3 (L2)	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-145R-110923	G	GW	—	11/8/23	930	10	X	X		X	X	X	X		01
MW-346-110923		GW	—		1045	10	X	X		X	X	X	X		02
GEI-MW-1-110823		GW	—		1152	3							X		03
MW-316-110823		GW	—		1256	3							X		04
MW-315-110923		GW	—		1358	3							X		05
MW-335-110823		GW	—		510	3							X		06
		GW													
		GW													
		GW													
		GW													

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1675715

H145

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1033818**
PM: **546 - Jared Starkey**
PB: 10/26/23 CAM
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 # 6727 1895 1414

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

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
	11/8/23	1700	
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			(18)

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: 0.4+0=0.4 °C Bottles Received: 32

Date: 11/9/23 Time: 0900

If prese... PH-10BDH4321 TRC-235236 ...Time
CR6-20221V

Hold:

Condition: NCF / ~~OK~~

ANALYTICAL REPORT

February 09, 2024

Revised Report

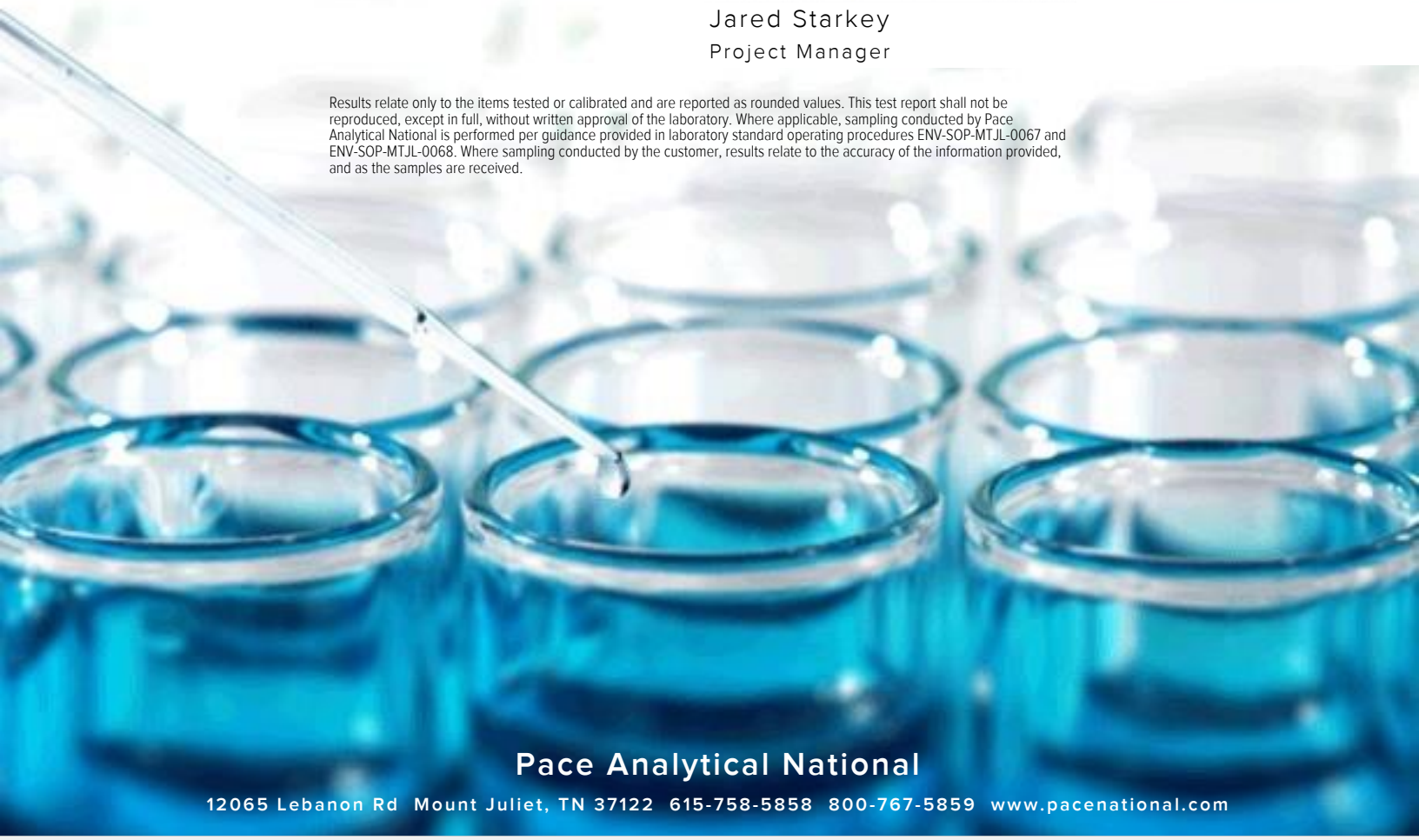
PES Environmental, Inc.- WA

Sample Delivery Group:	L1675773
Samples Received:	11/09/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-332-110823 L1675773-01 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 15:21 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 01:26	11/12/23 01:26	JAH	Mt. Juliet, TN

MW-323-110823 L1675773-02 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 14:45 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 01:45	11/12/23 01:45	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171758	20	11/16/23 04:50	11/16/23 04:50	JAH	Mt. Juliet, TN

MW113-110823 L1675773-03 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 14:00 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169946	5	11/13/23 08:05	11/13/23 08:05	DWR	Mt. Juliet, TN

MW116-110823 L1675773-04 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 13:24 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 02:03	11/12/23 02:03	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171758	1	11/16/23 05:09	11/16/23 05:09	JAH	Mt. Juliet, TN

MW-322-110823 L1675773-05 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 12:40 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2170180	1	11/14/23 09:29	11/14/23 09:29	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2168318	20	11/09/23 21:34	11/09/23 21:34	ARV	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168191	1	11/10/23 05:51	11/10/23 05:51	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2176951	1	11/24/23 23:11	11/24/23 23:11	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168476	1	11/16/23 09:56	11/16/23 20:12	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2172256	1	11/17/23 14:38	11/17/23 14:38	OK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 02:22	11/12/23 02:22	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171758	20	11/16/23 05:28	11/16/23 05:28	JAH	Mt. Juliet, TN

MW-319-110823 L1675773-06 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 11:21 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 02:40	11/12/23 02:40	JAH	Mt. Juliet, TN

MW-994-110823 L1675773-07 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 12:00 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 02:59	11/12/23 02:59	JAH	Mt. Juliet, TN

MW-318-110823 L1675773-08 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 10:47 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 03:18	11/12/23 03:18	JAH	Mt. Juliet, TN

MW-317-110823 L1675773-09 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 10:18 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 03:36	11/12/23 03:36	JAH	Mt. Juliet, TN

MW-144R-110823 L1675773-10 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 08:54 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2170180	1	11/14/23 09:32	11/14/23 09:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 3500Fe B-2011	WG2168318	5	11/09/23 21:36	11/09/23 21:36	ARV	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168164	10	11/10/23 01:08	11/10/23 01:08	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2176951	1	11/24/23 23:31	11/24/23 23:31	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2168476	1	11/16/23 09:56	11/16/23 20:15	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2172256	1	11/17/23 14:42	11/17/23 14:42	OK	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2179195	10	11/30/23 11:59	11/30/23 11:59	OK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 03:55	11/12/23 03:55	JAH	Mt. Juliet, TN

MW-324-110823 L1675773-11 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 10:33 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 04:14	11/12/23 04:14	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171758	50	11/16/23 05:46	11/16/23 05:46	JAH	Mt. Juliet, TN

FMW-142-110823 L1675773-12 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 11:23 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 04:33	11/12/23 04:33	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2171758	1	11/16/23 06:05	11/16/23 06:05	JAH	Mt. Juliet, TN

MW119-110823 L1675773-13 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 13:07 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 04:52	11/12/23 04:52	JAH	Mt. Juliet, TN

MW-996-110823 L1675773-14 GW

Collected by: Osmin Monroy | Collected date/time: 11/08/23 11:11 | Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 05:11	11/12/23 05:11	JAH	Mt. Juliet, TN

SAMPLE SUMMARY

MW115-110823 L1675773-15 GW

Collected by: Osmin Monroy
Collected date/time: 11/08/23 14:49
Received date/time: 11/09/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169502	1	11/12/23 05:29	11/12/23 05:29	JAH	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/30/23 14:24

Project Narrative

ID Corrections

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:26	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 01:26	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 01:26	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:26	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:26	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:26	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:26	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:26	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:26	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:26	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:26	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:26	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:26	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 01:26	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:26	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 01:26	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:26	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:26	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:26	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:26	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:26	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:26	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:26	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:26	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:26	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:26	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:26	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:26	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:26	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:26	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:26	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:26	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:26	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:26	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:26	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:26	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 01:26	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:26	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:26	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:26	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:26	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:26	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:26	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:26	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:26	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:26	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:26	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:26	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:26	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:26	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:26	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:26	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:26	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:26	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:26	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:26	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:26	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:26	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:26	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:26	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:26	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:26	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:26	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 01:26	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:26	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:26	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:26	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 01:26	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:26	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 01:26	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2023 01:26*	WG2169502
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 01:26*	WG2169502
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*11/12/2023 01:26*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:45	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 01:45	WG2169502
Benzene	0.0540		0.0160	0.0400	1	11/12/2023 01:45	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:45	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:45	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:45	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:45	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:45	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:45	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:45	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:45	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:45	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:45	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 01:45	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:45	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 01:45	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:45	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:45	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:45	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:45	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:45	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:45	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:45	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:45	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:45	WG2169502
1,1-Dichloroethane	0.118		0.0230	0.100	1	11/12/2023 01:45	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:45	WG2169502
1,1-Dichloroethene	2.64		0.0200	0.100	1	11/12/2023 01:45	WG2169502
cis-1,2-Dichloroethene	522		0.552	2.00	20	11/16/2023 04:50	WG2171758
trans-1,2-Dichloroethene	0.611		0.0572	0.200	1	11/12/2023 01:45	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:45	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:45	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:45	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:45	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:45	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:45	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 01:45	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:45	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:45	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:45	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:45	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:45	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:45	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:45	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:45	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:45	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:45	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:45	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:45	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:45	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:45	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:45	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:45	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:45	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:45	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:45	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:45	WG2169502
Trichloroethene	0.0800		0.0160	0.0400	1	11/12/2023 01:45	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:45	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:45	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:45	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:45	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:45	WG2169502
Vinyl chloride	50.0		0.0273	0.100	1	11/12/2023 01:45	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:45	WG2169502
Ethyl Ether	0.0530	J	0.0170	0.100	1	11/12/2023 01:45	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:45	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 01:45	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:45	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 01:45	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 01:45*	WG2169502
(S) Toluene-d8	*106*			*75.0-131*		*11/16/2023 04:50*	WG2171758
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/12/2023 01:45*	WG2169502
(S) 4-Bromofluorobenzene	*99.3*			*67.0-138*		*11/16/2023 04:50*	WG2171758
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*11/12/2023 01:45*	WG2169502
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/16/2023 04:50*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		2.74	5.00	5	11/13/2023 08:05	WG2169946
Acrylonitrile	U		0.380	2.50	5	11/13/2023 08:05	WG2169946
Benzene	U		0.0800	0.200	5	11/13/2023 08:05	WG2169946
Bromobenzene	U		0.210	2.50	5	11/13/2023 08:05	WG2169946
Bromodichloromethane	U		0.158	0.500	5	11/13/2023 08:05	WG2169946
Bromoform	U		1.20	5.00	5	11/13/2023 08:05	WG2169946
Bromomethane	U		0.740	2.50	5	11/13/2023 08:05	WG2169946
n-Butylbenzene	U		0.765	2.50	5	11/13/2023 08:05	WG2169946
sec-Butylbenzene	U		0.505	2.50	5	11/13/2023 08:05	WG2169946
tert-Butylbenzene	U		0.310	1.00	5	11/13/2023 08:05	WG2169946
Carbon tetrachloride	U		0.216	1.00	5	11/13/2023 08:05	WG2169946
Chlorobenzene	U		0.115	0.500	5	11/13/2023 08:05	WG2169946
Chlorodibromomethane	U		0.0900	0.500	5	11/13/2023 08:05	WG2169946
Chloroethane	U		0.216	1.00	5	11/13/2023 08:05	WG2169946
Chloroform	U		0.0830	0.500	5	11/13/2023 08:05	WG2169946
Chloromethane	U		0.278	2.50	5	11/13/2023 08:05	WG2169946
2-Chlorotoluene	U		0.184	0.500	5	11/13/2023 08:05	WG2169946
4-Chlorotoluene	U		0.226	1.00	5	11/13/2023 08:05	WG2169946
1,2-Dibromo-3-Chloropropane	U		1.02	5.00	5	11/13/2023 08:05	WG2169946
1,2-Dibromoethane	U		0.105	0.500	5	11/13/2023 08:05	WG2169946
Dibromomethane	U		0.200	1.00	5	11/13/2023 08:05	WG2169946
1,2-Dichlorobenzene	U		0.290	1.00	5	11/13/2023 08:05	WG2169946
1,3-Dichlorobenzene	U		0.340	1.00	5	11/13/2023 08:05	WG2169946
1,4-Dichlorobenzene	U		0.394	1.00	5	11/13/2023 08:05	WG2169946
Dichlorodifluoromethane	U		0.164	0.500	5	11/13/2023 08:05	WG2169946
1,1-Dichloroethane	U		0.115	0.500	5	11/13/2023 08:05	WG2169946
1,2-Dichloroethane	U		0.0950	0.500	5	11/13/2023 08:05	WG2169946
1,1-Dichloroethene	U		0.100	0.500	5	11/13/2023 08:05	WG2169946
cis-1,2-Dichloroethene	14.1		0.138	0.500	5	11/13/2023 08:05	WG2169946
trans-1,2-Dichloroethene	U		0.286	1.00	5	11/13/2023 08:05	WG2169946
1,2-Dichloropropane	U		0.254	1.00	5	11/13/2023 08:05	WG2169946
1,1-Dichloropropene	U		0.140	0.500	5	11/13/2023 08:05	WG2169946
1,3-Dichloropropane	U		0.350	1.00	5	11/13/2023 08:05	WG2169946
cis-1,3-Dichloropropene	U		0.136	0.500	5	11/13/2023 08:05	WG2169946
trans-1,3-Dichloropropene	U		0.306	1.00	5	11/13/2023 08:05	WG2169946
2,2-Dichloropropane	U		0.159	0.500	5	11/13/2023 08:05	WG2169946
Di-isopropyl ether	U		0.0700	0.200	5	11/13/2023 08:05	WG2169946
Ethylbenzene	U		0.106	0.500	5	11/13/2023 08:05	WG2169946
Hexachloro-1,3-butadiene	U		2.54	5.00	5	11/13/2023 08:05	WG2169946
Isopropylbenzene	U		0.173	0.500	5	11/13/2023 08:05	WG2169946
p-Isopropyltoluene	U		0.466	1.00	5	11/13/2023 08:05	WG2169946
2-Butanone (MEK)	U		2.50	5.00	5	11/13/2023 08:05	WG2169946
Methylene Chloride	U		1.33	5.00	5	11/13/2023 08:05	WG2169946
4-Methyl-2-pentanone (MIBK)	U		2.00	5.00	5	11/13/2023 08:05	WG2169946
Methyl tert-butyl ether	U		0.0590	0.200	5	11/13/2023 08:05	WG2169946
Naphthalene	U		0.620	2.50	5	11/13/2023 08:05	WG2169946
n-Propylbenzene	U		0.236	1.00	5	11/13/2023 08:05	WG2169946
Styrene	U		0.545	2.50	5	11/13/2023 08:05	WG2169946
1,1,1,2-Tetrachloroethane	U		0.100	0.500	5	11/13/2023 08:05	WG2169946
1,1,2,2-Tetrachloroethane	U		0.0780	0.500	5	11/13/2023 08:05	WG2169946
1,1,2-Trichlorotrifluoroethane	U		0.135	0.500	5	11/13/2023 08:05	WG2169946
Tetrachloroethene	0.980		0.140	0.500	5	11/13/2023 08:05	WG2169946
Toluene	U		0.250	1.00	5	11/13/2023 08:05	WG2169946
1,2,3-Trichlorobenzene	U		0.125	2.50	5	11/13/2023 08:05	WG2169946
1,2,4-Trichlorobenzene	U		0.965	2.50	5	11/13/2023 08:05	WG2169946
1,1,1-Trichloroethane	U		0.0550	0.500	5	11/13/2023 08:05	WG2169946

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.177	0.500	5	11/13/2023 08:05	WG2169946
Trichloroethene	2.05		0.0800	0.200	5	11/13/2023 08:05	WG2169946
Trichlorofluoromethane	U		0.100	0.500	5	11/13/2023 08:05	WG2169946
1,2,3-Trichloropropane	U		1.02	2.50	5	11/13/2023 08:05	WG2169946
1,2,4-Trimethylbenzene	U		0.232	1.00	5	11/13/2023 08:05	WG2169946
1,2,3-Trimethylbenzene	U		0.230	1.00	5	11/13/2023 08:05	WG2169946
1,3,5-Trimethylbenzene	U		0.216	1.00	5	11/13/2023 08:05	WG2169946
Vinyl chloride	4.53		0.137	0.500	5	11/13/2023 08:05	WG2169946
Xylenes, Total	U		0.955	1.30	5	11/13/2023 08:05	WG2169946
Ethyl Ether	U		0.0850	0.500	5	11/13/2023 08:05	WG2169946
Tetrahydrofuran	U		0.450	2.50	5	11/13/2023 08:05	WG2169946
Iodomethane	U		1.21	2.50	5	11/13/2023 08:05	WG2169946
Allyl chloride	U		2.90	5.00	5	11/13/2023 08:05	WG2169946
Trans-1,4-Dichloro-2-butene	U		0.280	1.00	5	11/13/2023 08:05	WG2169946
(S) Toluene-d8	*92.9*			*75.0-131*		*11/13/2023 08:05*	WG2169946
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/13/2023 08:05*	WG2169946
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*11/13/2023 08:05*	WG2169946

Sample Narrative:

L1675773-03 WG2169946: Lowest possible dilution due to sample foaming.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:03	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 02:03	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 02:03	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:03	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:03	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:03	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:03	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:03	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:03	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:03	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:03	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:03	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:03	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 02:03	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:03	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 02:03	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:03	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:03	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:03	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:03	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:03	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:03	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:03	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:03	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:03	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:03	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:03	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:03	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/16/2023 05:09	WG2171758
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:03	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:03	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:03	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:03	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:03	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:03	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:03	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 02:03	WG2169502
Ethylbenzene	0.0680	J	0.0212	0.100	1	11/12/2023 02:03	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:03	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:03	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:03	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:03	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:03	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:03	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:03	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 02:03	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:03	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 02:03	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:03	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:03	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:03	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:03	WG2169502
Toluene	0.153	J	0.0500	0.200	1	11/12/2023 02:03	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:03	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:03	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:03	WG2169502

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:03	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:03	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:03	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:03	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:03	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:03	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:03	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 02:03	WG2169502
Xylenes, Total	0.257	J	0.191	0.260	1	11/12/2023 02:03	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:03	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:03	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 02:03	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:03	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 02:03	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2023 02:03*	WG2169502
(S) Toluene-d8	*106*			*75.0-131*		*11/16/2023 05:09*	WG2171758
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 02:03*	WG2169502
(S) 4-Bromofluorobenzene	*97.7*			*67.0-138*		*11/16/2023 05:09*	WG2171758
(S) 1,2-Dichloroethane-d4	*94.3*			*70.0-130*		*11/12/2023 02:03*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/16/2023 05:09*	WG2171758

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	732000		8450	20000	1	11/14/2023 09:29	WG2170180

Sample Narrative:

L1675773-05 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	17400	T8	300	1000	20	11/09/2023 21:34	WG2168318

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20900		379	1000	1	11/10/2023 05:51	WG2168191
Nitrate	50.3	J	48.0	100	1	11/10/2023 05:51	WG2168191
Sulfate	28700		594	5000	1	11/10/2023 05:51	WG2168191

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	13400		102	1000	1	11/24/2023 23:11	WG2176951

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	16900		28.1	100	1	11/16/2023 20:12	WG2168476
Manganese	1980		0.704	5.00	1	11/16/2023 20:12	WG2168476

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1600		0.287	0.678	1	11/17/2023 14:38	WG2172256
Ethane	39.3		0.296	1.29	1	11/17/2023 14:38	WG2172256
Ethene	7.54		0.422	1.27	1	11/17/2023 14:38	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:22	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 02:22	WG2169502
Benzene	4.19		0.0160	0.0400	1	11/12/2023 02:22	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:22	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:22	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:22	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:22	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:22	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:22	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:22	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:22	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:22	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:22	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 02:22	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:22	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 02:22	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:22	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:22	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:22	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:22	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:22	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:22	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:22	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:22	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:22	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:22	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:22	WG2169502
1,1-Dichloroethene	2.05		0.0200	0.100	1	11/12/2023 02:22	WG2169502
cis-1,2-Dichloroethene	622		0.552	2.00	20	11/16/2023 05:28	WG2171758
trans-1,2-Dichloroethene	3.76		0.0572	0.200	1	11/12/2023 02:22	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:22	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:22	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:22	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:22	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:22	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:22	WG2169502
Di-isopropyl ether	0.0830	C3	0.0140	0.0400	1	11/12/2023 02:22	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:22	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:22	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:22	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:22	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:22	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:22	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:22	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:22	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 02:22	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:22	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 02:22	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:22	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:22	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:22	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:22	WG2169502
Toluene	0.0940	J	0.0500	0.200	1	11/12/2023 02:22	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:22	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:22	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:22	WG2169502
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:22	WG2169502
Trichloroethene	0.512		0.0160	0.0400	1	11/12/2023 02:22	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:22	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:22	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:22	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:22	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:22	WG2169502
Vinyl chloride	43.0		0.0273	0.100	1	11/12/2023 02:22	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:22	WG2169502
Ethyl Ether	0.292		0.0170	0.100	1	11/12/2023 02:22	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:22	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 02:22	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:22	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 02:22	WG2169502
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 02:22*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) Toluene-d8	*102*			*75.0-131*		*11/16/2023 05:28*	WG2171758
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/12/2023 02:22*	WG2169502
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*11/16/2023 05:28*	WG2171758
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*11/12/2023 02:22*	WG2169502
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*		*11/16/2023 05:28*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:40	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 02:40	WG2169502
Benzene	0.0360	J	0.0160	0.0400	1	11/12/2023 02:40	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:40	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:40	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:40	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:40	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:40	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:40	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:40	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:40	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:40	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:40	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 02:40	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:40	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 02:40	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:40	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:40	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:40	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:40	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:40	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:40	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:40	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:40	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:40	WG2169502
1,1-Dichloroethane	0.459		0.0230	0.100	1	11/12/2023 02:40	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:40	WG2169502
1,1-Dichloroethene	0.324		0.0200	0.100	1	11/12/2023 02:40	WG2169502
cis-1,2-Dichloroethene	65.2		0.0276	0.100	1	11/12/2023 02:40	WG2169502
trans-1,2-Dichloroethene	0.142	J	0.0572	0.200	1	11/12/2023 02:40	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:40	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:40	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:40	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:40	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:40	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:40	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 02:40	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:40	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:40	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:40	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:40	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:40	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:40	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:40	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:40	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 02:40	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:40	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 02:40	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:40	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:40	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:40	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:40	WG2169502
Toluene	0.0560	J	0.0500	0.200	1	11/12/2023 02:40	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:40	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:40	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:40	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:40	WG2169502
Trichloroethene	1.03		0.0160	0.0400	1	11/12/2023 02:40	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:40	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:40	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:40	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:40	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:40	WG2169502
Vinyl chloride	3.96		0.0273	0.100	1	11/12/2023 02:40	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:40	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:40	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:40	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 02:40	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:40	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 02:40	WG2169502
(S) Toluene-d8	*96.5*			*75.0-131*		*11/12/2023 02:40*	WG2169502
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 02:40*	WG2169502
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2023 02:40*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:59	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 02:59	WG2169502
Benzene	0.0410		0.0160	0.0400	1	11/12/2023 02:59	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:59	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:59	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:59	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:59	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:59	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:59	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:59	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:59	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:59	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:59	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 02:59	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:59	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 02:59	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:59	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:59	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:59	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:59	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:59	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:59	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:59	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:59	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:59	WG2169502
1,1-Dichloroethane	0.425		0.0230	0.100	1	11/12/2023 02:59	WG2169502
1,2-Dichloroethane	0.181		0.0190	0.100	1	11/12/2023 02:59	WG2169502
1,1-Dichloroethene	0.321		0.0200	0.100	1	11/12/2023 02:59	WG2169502
cis-1,2-Dichloroethene	64.9		0.0276	0.100	1	11/12/2023 02:59	WG2169502
trans-1,2-Dichloroethene	0.116	J	0.0572	0.200	1	11/12/2023 02:59	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:59	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:59	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:59	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:59	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:59	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:59	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 02:59	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:59	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:59	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:59	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:59	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:59	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:59	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:59	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:59	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 02:59	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:59	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 02:59	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:59	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:59	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:59	WG2169502
Tetrachloroethene	0.0460	J	0.0280	0.100	1	11/12/2023 02:59	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 02:59	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:59	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:59	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:59	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:59	WG2169502
Trichloroethene	1.07		0.0160	0.0400	1	11/12/2023 02:59	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:59	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:59	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:59	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:59	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:59	WG2169502
Vinyl chloride	3.82		0.0273	0.100	1	11/12/2023 02:59	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:59	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:59	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:59	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 02:59	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:59	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 02:59	WG2169502
(S) Toluene-d8	*99.6*			*75.0-131*		*11/12/2023 02:59*	WG2169502
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2023 02:59*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/12/2023 02:59*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 03:18	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 03:18	WG2169502
Benzene	42.2		0.0160	0.0400	1	11/12/2023 03:18	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:18	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:18	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 03:18	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 03:18	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 03:18	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:18	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:18	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:18	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:18	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:18	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 03:18	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 03:18	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 03:18	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:18	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:18	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 03:18	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:18	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:18	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:18	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:18	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:18	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:18	WG2169502
1,1-Dichloroethane	0.323		0.0230	0.100	1	11/12/2023 03:18	WG2169502
1,2-Dichloroethane	0.930		0.0190	0.100	1	11/12/2023 03:18	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:18	WG2169502
cis-1,2-Dichloroethene	3.20		0.0276	0.100	1	11/12/2023 03:18	WG2169502
trans-1,2-Dichloroethene	0.0610	J	0.0572	0.200	1	11/12/2023 03:18	WG2169502
1,2-Dichloropropane	0.309		0.0508	0.200	1	11/12/2023 03:18	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:18	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:18	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:18	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:18	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:18	WG2169502
Di-isopropyl ether	0.180	C3	0.0140	0.0400	1	11/12/2023 03:18	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:18	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:18	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:18	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:18	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:18	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:18	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:18	WG2169502
Methyl tert-butyl ether	0.155		0.0118	0.0400	1	11/12/2023 03:18	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 03:18	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:18	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 03:18	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:18	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:18	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:18	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:18	WG2169502
Toluene	0.179	J	0.0500	0.200	1	11/12/2023 03:18	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 03:18	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 03:18	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:18	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:18	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 03:18	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:18	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:18	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:18	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:18	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:18	WG2169502
Vinyl chloride	18.7		0.0273	0.100	1	11/12/2023 03:18	WG2169502
Xylenes, Total	0.243	J	0.191	0.260	1	11/12/2023 03:18	WG2169502
Ethyl Ether	0.196		0.0170	0.100	1	11/12/2023 03:18	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:18	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 03:18	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:18	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 03:18	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2023 03:18*	WG2169502
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2023 03:18*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*11/12/2023 03:18*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.16		0.548	1.00	1	11/12/2023 03:36	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 03:36	WG2169502
Benzene	0.0350	J	0.0160	0.0400	1	11/12/2023 03:36	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:36	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:36	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 03:36	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 03:36	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 03:36	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:36	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:36	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:36	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:36	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:36	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 03:36	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 03:36	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 03:36	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:36	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:36	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 03:36	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:36	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:36	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:36	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:36	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:36	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:36	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:36	WG2169502
1,2-Dichloroethane	0.0380	J	0.0190	0.100	1	11/12/2023 03:36	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:36	WG2169502
cis-1,2-Dichloroethene	0.0760	J	0.0276	0.100	1	11/12/2023 03:36	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:36	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:36	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:36	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:36	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:36	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:36	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:36	WG2169502
Di-isopropyl ether	0.135	C3	0.0140	0.0400	1	11/12/2023 03:36	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:36	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:36	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:36	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:36	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:36	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:36	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:36	WG2169502
Methyl tert-butyl ether	0.0910		0.0118	0.0400	1	11/12/2023 03:36	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 03:36	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:36	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 03:36	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:36	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:36	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:36	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:36	WG2169502
Toluene	0.0560	J	0.0500	0.200	1	11/12/2023 03:36	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 03:36	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 03:36	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:36	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:36	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 03:36	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:36	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:36	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:36	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:36	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:36	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 03:36	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:36	WG2169502
Ethyl Ether	0.0590	J	0.0170	0.100	1	11/12/2023 03:36	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:36	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 03:36	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:36	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 03:36	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 03:36*	WG2169502
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2023 03:36*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/12/2023 03:36*	WG2169502

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	921000		8450	20000	1	11/14/2023 09:32	WG2170180

Sample Narrative:

L1675773-10 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	5800	T8	75.0	250	5	11/09/2023 21:36	WG2168318

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1020000		3790	10000	10	11/10/2023 01:08	WG2168164
Nitrate	483	J	480	1000	10	11/10/2023 01:08	WG2168164
Sulfate	13200	J	5940	50000	10	11/10/2023 01:08	WG2168164

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5300		102	1000	1	11/24/2023 23:31	WG2176951

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	6600		28.1	100	1	11/16/2023 20:15	WG2168476
Manganese	1580		0.704	5.00	1	11/16/2023 20:15	WG2168476

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10900	Q	2.87	6.78	10	11/30/2023 11:59	WG2179195
Ethane	111		0.296	1.29	1	11/17/2023 14:42	WG2172256
Ethene	7.07		0.422	1.27	1	11/17/2023 14:42	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.78		0.548	1.00	1	11/12/2023 03:55	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 03:55	WG2169502
Benzene	0.0220	J	0.0160	0.0400	1	11/12/2023 03:55	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:55	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:55	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 03:55	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 03:55	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 03:55	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:55	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:55	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:55	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:55	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:55	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 03:55	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 03:55	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 03:55	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:55	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:55	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 03:55	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:55	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:55	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:55	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:55	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:55	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:55	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:55	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 03:55	WG2169502
1,1-Dichloroethene	0.184		0.0200	0.100	1	11/12/2023 03:55	WG2169502
cis-1,2-Dichloroethene	0.267		0.0276	0.100	1	11/12/2023 03:55	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:55	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:55	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:55	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:55	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:55	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:55	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:55	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 03:55	WG2169502
Ethylbenzene	0.0300	J	0.0212	0.100	1	11/12/2023 03:55	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:55	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:55	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:55	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:55	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:55	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:55	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 03:55	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 03:55	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:55	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 03:55	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:55	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:55	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:55	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:55	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 03:55	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 03:55	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 03:55	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:55	WG2169502
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:55	WG2169502
Trichloroethene	0.0690		0.0160	0.0400	1	11/12/2023 03:55	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:55	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:55	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:55	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:55	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:55	WG2169502
Vinyl chloride	0.211		0.0273	0.100	1	11/12/2023 03:55	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:55	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 03:55	WG2169502
Tetrahydrofuran	0.685		0.0900	0.500	1	11/12/2023 03:55	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 03:55	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:55	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 03:55	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2023 03:55*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 03:55*	WG2169502
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*11/12/2023 03:55*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 04:14	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 04:14	WG2169502
Benzene	0.654		0.0160	0.0400	1	11/12/2023 04:14	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 04:14	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 04:14	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 04:14	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 04:14	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 04:14	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 04:14	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 04:14	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 04:14	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 04:14	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 04:14	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 04:14	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 04:14	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 04:14	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 04:14	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 04:14	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 04:14	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 04:14	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 04:14	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 04:14	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 04:14	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 04:14	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 04:14	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 04:14	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 04:14	WG2169502
1,1-Dichloroethene	2.43		0.0200	0.100	1	11/12/2023 04:14	WG2169502
cis-1,2-Dichloroethene	895		1.38	5.00	50	11/16/2023 05:46	WG2171758
trans-1,2-Dichloroethene	4.44		0.0572	0.200	1	11/12/2023 04:14	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 04:14	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 04:14	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 04:14	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 04:14	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 04:14	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 04:14	WG2169502
Di-isopropyl ether	0.0420	C3	0.0140	0.0400	1	11/12/2023 04:14	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 04:14	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 04:14	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 04:14	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 04:14	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 04:14	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 04:14	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 04:14	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 04:14	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 04:14	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 04:14	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 04:14	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 04:14	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 04:14	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 04:14	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 04:14	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 04:14	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 04:14	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 04:14	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 04:14	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:14	WG2169502
Trichloroethene	0.0930		0.0160	0.0400	1	11/12/2023 04:14	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:14	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:14	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:14	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:14	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:14	WG2169502
Vinyl chloride	40.6		0.0273	0.100	1	11/12/2023 04:14	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:14	WG2169502
Ethyl Ether	0.141		0.0170	0.100	1	11/12/2023 04:14	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 04:14	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 04:14	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:14	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 04:14	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 04:14*	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/16/2023 05:46*	WG2171758
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 04:14*	WG2169502
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*11/16/2023 05:46*	WG2171758
(S) 1,2-Dichloroethane-d4	*95.5*			*70.0-130*		*11/12/2023 04:14*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/16/2023 05:46*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 04:33	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 04:33	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 04:33	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 04:33	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 04:33	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 04:33	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 04:33	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 04:33	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 04:33	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 04:33	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 04:33	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 04:33	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 04:33	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 04:33	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 04:33	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 04:33	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 04:33	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 04:33	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 04:33	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 04:33	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 04:33	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 04:33	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 04:33	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 04:33	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 04:33	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 04:33	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 04:33	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 04:33	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/16/2023 06:05	WG2171758
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 04:33	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 04:33	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 04:33	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 04:33	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 04:33	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 04:33	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 04:33	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 04:33	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 04:33	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 04:33	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 04:33	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 04:33	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 04:33	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 04:33	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 04:33	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 04:33	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 04:33	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 04:33	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 04:33	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 04:33	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 04:33	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 04:33	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 04:33	WG2169502
Toluene	0.106	J	0.0500	0.200	1	11/12/2023 04:33	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 04:33	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 04:33	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 04:33	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:33	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 04:33	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:33	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:33	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:33	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:33	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:33	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 04:33	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:33	WG2169502
Ethyl Ether	0.0620	J	0.0170	0.100	1	11/12/2023 04:33	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 04:33	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 04:33	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:33	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 04:33	WG2169502
(S) Toluene-d8	*99.4*			*75.0-131*		*11/12/2023 04:33*	WG2169502
(S) Toluene-d8	*106*			*75.0-131*		*11/16/2023 06:05*	WG2171758
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 04:33*	WG2169502
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*11/16/2023 06:05*	WG2171758
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2023 04:33*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/16/2023 06:05*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 04:52	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 04:52	WG2169502
Benzene	0.0330	J	0.0160	0.0400	1	11/12/2023 04:52	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 04:52	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 04:52	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 04:52	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 04:52	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 04:52	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 04:52	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 04:52	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 04:52	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 04:52	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 04:52	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 04:52	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 04:52	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 04:52	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 04:52	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 04:52	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 04:52	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 04:52	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 04:52	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 04:52	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 04:52	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 04:52	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 04:52	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 04:52	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 04:52	WG2169502
1,1-Dichloroethene	0.0410	J	0.0200	0.100	1	11/12/2023 04:52	WG2169502
cis-1,2-Dichloroethene	9.92		0.0276	0.100	1	11/12/2023 04:52	WG2169502
trans-1,2-Dichloroethene	0.0860	J	0.0572	0.200	1	11/12/2023 04:52	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 04:52	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 04:52	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 04:52	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 04:52	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 04:52	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 04:52	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 04:52	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 04:52	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 04:52	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 04:52	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 04:52	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 04:52	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 04:52	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 04:52	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 04:52	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 04:52	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 04:52	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 04:52	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 04:52	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 04:52	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 04:52	WG2169502
Tetrachloroethene	2.06		0.0280	0.100	1	11/12/2023 04:52	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 04:52	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 04:52	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 04:52	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 04:52	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:52	WG2169502
Trichloroethene	4.17		0.0160	0.0400	1	11/12/2023 04:52	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:52	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:52	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:52	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:52	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:52	WG2169502
Vinyl chloride	0.0810	J	0.0273	0.100	1	11/12/2023 04:52	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:52	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 04:52	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 04:52	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 04:52	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:52	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 04:52	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 04:52*	WG2169502
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/12/2023 04:52*	WG2169502
(S) 1,2-Dichloroethane-d4	*96.8*			*70.0-130*		*11/12/2023 04:52*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 05:11	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 05:11	WG2169502
Benzene	0.0360	J	0.0160	0.0400	1	11/12/2023 05:11	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 05:11	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 05:11	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 05:11	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 05:11	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 05:11	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 05:11	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 05:11	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 05:11	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 05:11	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 05:11	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 05:11	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 05:11	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 05:11	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 05:11	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 05:11	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 05:11	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 05:11	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 05:11	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 05:11	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 05:11	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 05:11	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 05:11	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 05:11	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 05:11	WG2169502
1,1-Dichloroethene	0.0740	J	0.0200	0.100	1	11/12/2023 05:11	WG2169502
cis-1,2-Dichloroethene	10.1		0.0276	0.100	1	11/12/2023 05:11	WG2169502
trans-1,2-Dichloroethene	0.120	J	0.0572	0.200	1	11/12/2023 05:11	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 05:11	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 05:11	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 05:11	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 05:11	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 05:11	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 05:11	WG2169502
Di-isopropyl ether	0.0480	C3	0.0140	0.0400	1	11/12/2023 05:11	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 05:11	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 05:11	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 05:11	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 05:11	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 05:11	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 05:11	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 05:11	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 05:11	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 05:11	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 05:11	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 05:11	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 05:11	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 05:11	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 05:11	WG2169502
Tetrachloroethene	2.23		0.0280	0.100	1	11/12/2023 05:11	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 05:11	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 05:11	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 05:11	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 05:11	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 05:11	WG2169502
Trichloroethene	4.27		0.0160	0.0400	1	11/12/2023 05:11	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 05:11	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 05:11	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 05:11	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 05:11	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 05:11	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 05:11	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 05:11	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 05:11	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 05:11	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 05:11	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 05:11	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 05:11	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 05:11*	WG2169502
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 05:11*	WG2169502
(S) 1,2-Dichloroethane-d4	*93.4*			*70.0-130*		*11/12/2023 05:11*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 05:29	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 05:29	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 05:29	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 05:29	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 05:29	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 05:29	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 05:29	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 05:29	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 05:29	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 05:29	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 05:29	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 05:29	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 05:29	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 05:29	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 05:29	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 05:29	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 05:29	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 05:29	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 05:29	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 05:29	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 05:29	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 05:29	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 05:29	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 05:29	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 05:29	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 05:29	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 05:29	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 05:29	WG2169502
cis-1,2-Dichloroethene	0.360		0.0276	0.100	1	11/12/2023 05:29	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 05:29	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 05:29	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 05:29	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 05:29	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 05:29	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 05:29	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 05:29	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 05:29	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 05:29	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 05:29	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 05:29	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 05:29	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 05:29	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 05:29	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 05:29	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 05:29	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 05:29	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 05:29	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 05:29	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 05:29	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 05:29	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 05:29	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 05:29	WG2169502
Toluene	0.0580	J	0.0500	0.200	1	11/12/2023 05:29	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 05:29	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 05:29	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 05:29	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 05:29	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 05:29	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 05:29	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 05:29	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 05:29	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 05:29	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 05:29	WG2169502
Vinyl chloride	1.10		0.0273	0.100	1	11/12/2023 05:29	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 05:29	WG2169502
Ethyl Ether	0.186		0.0170	0.100	1	11/12/2023 05:29	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 05:29	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 05:29	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 05:29	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 05:29	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 05:29*	WG2169502
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 05:29*	WG2169502
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*11/12/2023 05:29*	WG2169502

Method Blank (MB)

(MB) R4000024-2 11/14/23 08:21

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1675428-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1675428-06 11/14/23 08:33 • (DUP) R4000024-4 11/14/23 08:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	59700	61900	1	3.58		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1675908-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675908-04 11/14/23 10:17 • (DUP) R4000024-6 11/14/23 10:21

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	786000	788000	1	0.275		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4000024-1 11/14/23 08:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	109000	109	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R3997971-1 11/09/23 21:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ferrous Iron	U		15.0	50.0

L1675773-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1675773-05 11/09/23 21:34 • (DUP) R3997971-3 11/09/23 21:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ferrous Iron	17400	18000	20	3.58		20

Laboratory Control Sample (LCS)

(LCS) R3997971-2 11/09/23 21:34

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Ferrous Iron	1000	1010	101	85.0-115	

L1675773-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675773-10 11/09/23 21:36 • (MS) R3997971-4 11/09/23 21:36 • (MSD) R3997971-5 11/09/23 21:36

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Ferrous Iron	5000	5800	10300	10200	89.0	87.8	5	80.0-120			0.606	20

Method Blank (MB)

(MB) R4000635-1 11/09/23 13:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1675662-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675662-01 11/09/23 20:47 • (DUP) R4000635-3 11/10/23 02:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	101000	99800	1	1.42		15
Nitrate	125	121	1	3.25		15
Sulfate	3990	3880	1	2.90	J	15

L1675689-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1675689-05 11/09/23 22:37 • (DUP) R4000635-5 11/10/23 02:30

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	954000	973000	10	2.00		15
Nitrate	24700	26100	10	5.68		15
Sulfate	942000	954000	10	1.25		15

Laboratory Control Sample (LCS)

(LCS) R4000635-2 11/09/23 13:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40600	101	80.0-120	
Nitrate	8000	7790	97.3	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1675662-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1675662-01 11/09/23 20:47 • (MS) R4000635-4 11/10/23 02:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	101000	121000	50.4	1	80.0-120	J6
Nitrate	8000	125	7590	93.3	1	80.0-120	
Sulfate	40000	3990	43200	98.1	1	80.0-120	

L1675689-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675689-05 11/09/23 22:37 • (MS) R4000635-6 11/10/23 02:44 • (MSD) R4000635-7 11/10/23 03:25

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	954000	778000	792000	0.000	0.000	10	80.0-120	V	V	1.77	15
Nitrate	8000	24700	25800	27400	14.0	33.8	10	80.0-120	J6	J6	5.95	15
Sulfate	40000	942000	781000	792000	0.000	0.000	10	80.0-120	V	V	1.38	15

Method Blank (MB)

(MB) R4000586-1 11/09/23 23:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1675651-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675651-01 11/10/23 02:02 • (DUP) R4000586-3 11/10/23 06:03

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	9650	9790	1	1.38		15
Nitrate	611	765	1	22.3	J3	15
Sulfate	23800	24300	1	2.31		15

L1675722-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1675722-09 11/10/23 05:38 • (DUP) R4000586-5 11/10/23 07:57

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	74300	73500	1	1.10		15
Nitrate	3750	3730	1	0.348		15
Sulfate	115000	114000	1	0.738		15

Laboratory Control Sample (LCS)

(LCS) R4000586-2 11/10/23 00:07

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40700	102	80.0-120	
Nitrate	8000	7930	99.1	80.0-120	
Sulfate	40000	40000	100	80.0-120	

L1675651-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1675651-01 11/10/23 02:02 • (MS) R4000586-4 11/10/23 06:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	9650	49000	98.4	1	80.0-120	
Nitrate	8000	611	8740	102	1	80.0-120	
Sulfate	40000	23800	61000	93.0	1	80.0-120	

L1675977-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675977-02 11/10/23 01:11 • (MS) R4000586-6 11/10/23 08:09 • (MSD) R4000586-7 11/10/23 08:22

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	27600	62800	59200	88.1	79.0	10	80.0-120		J6	5.95	15
Nitrate	8000	2740	10100	12500	92.0	123	10	80.0-120		J3 J5	21.6	15
Sulfate	40000	2660000	2140000	2160000	0.000	0.000	10	80.0-120	E V	E V	0.714	15

QUALITY CONTROL SUMMARY

L1675773-05,10

Method Blank (MB)

(MB) R4004387-2 11/24/23 18:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	U		102	1000

L1675738-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1675738-08 11/24/23 22:30 • (DUP) R4004387-5 11/24/23 22:47

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	479	454	1	5.53	J	20

L1675977-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675977-01 11/25/23 00:11 • (DUP) R4004387-6 11/25/23 00:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	3740	3790	1	1.22		20

Laboratory Control Sample (LCS)

(LCS) R4004387-1 11/24/23 17:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24100	96.3	85.0-115	

L1675716-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675716-31 11/24/23 19:11 • (MS) R4004387-3 11/24/23 19:35 • (MSD) R4004387-4 11/24/23 20:00

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	3050	27400	27300	97.3	97.1	1	85.0-115			0.219	20

L1675977-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675977-02 11/25/23 00:50 • (MS) R4004387-7 11/25/23 01:13 • (MSD) R4004387-8 11/25/23 02:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	3150	28100	27900	99.6	99.0	1	85.0-115			0.536	20

Method Blank (MB)

(MB) R4001018-7 11/16/23 21:52

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	52.3	J	28.1	100
Manganese	3.45	J	0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4001018-8 11/16/23 21:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1090	109	80.0-120	
Manganese	50.0	53.7	107	80.0-120	

L1675977-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675977-02 11/16/23 21:58 • (MS) R4001018-10 11/16/23 22:05 • (MSD) R4001018-11 11/16/23 22:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	125	1140	1150	102	102	1	75.0-125			0.276	20
Manganese	50.0	21.6	71.3	71.3	99.4	99.3	1	75.0-125			0.0619	20

Method Blank (MB)

(MB) R4001442-2 11/17/23 12:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1675689-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1675689-04 11/17/23 12:22 • (DUP) R4001442-3 11/17/23 13:50

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1675716-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1675716-14 11/17/23 13:59 • (DUP) R4001442-4 11/17/23 14:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4001442-1 11/17/23 12:12 • (LCSD) R4001442-7 11/17/23 15:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.7	64.6	95.4	95.3	85.0-115			0.155	20
Ethane	129	118	119	91.5	92.2	85.0-115			0.844	20
Ethene	127	119	120	93.7	94.5	85.0-115			0.837	20

L1675689-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1675689-05 11/17/23 12:27 • (MS) R4001442-5 11/17/23 14:51 • (MSD) R4001442-6 11/17/23 14:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methane	67.8	1.38	48.0	94.8	70.8	140	1	85.0-115	J6	J3 J5	65.5	20
Ethane	129	U	64.0	153	49.6	119	1	85.0-115	J6	J3 J5	82.0	20
Ethene	127	U	63.5	154	50.0	121	1	85.0-115	J6	J3 J5	83.2	20

Method Blank (MB)

(MB) R4006482-3 11/30/23 11:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678

L1679174-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1679174-01 11/30/23 12:05 • (DUP) R4006482-4 11/30/23 12:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20

L1679720-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1679720-02 11/30/23 12:51 • (DUP) R4006482-5 11/30/23 13:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	6380	6380	1	0.000		20

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

(LCS) R4006482-1 11/30/23 11:18 • (LCSD) R4006482-2 11/30/23 11:42

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	74.3	74.8	110	110	85.0-115			0.671	20

L1679293-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1679293-04 11/30/23 12:18 • (MS) R4006482-6 11/30/23 13:10 • (MSD) R4006482-7 11/30/23 13:14

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Methane	67.8	7.14	113	24.7	156	25.9	1	85.0-115	J5	J3 J6	128	20

Method Blank (MB)

(MB) R4000204-2 11/11/23 23:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4000204-2 11/11/23 23:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*108*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*97.6*			*70.0-130*

Laboratory Control Sample (LCS)

(LCS) R4000204-1 11/11/23 21:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	25.0	23.3	93.2	10.0-160	
Acrylonitrile	25.0	16.1	64.4	45.0-153	
Benzene	5.00	4.84	96.8	70.0-123	
Bromobenzene	5.00	4.97	99.4	73.0-121	
Bromodichloromethane	5.00	4.61	92.2	73.0-121	
Bromoform	5.00	4.53	90.6	64.0-132	
Bromomethane	5.00	4.76	95.2	56.0-147	
n-Butylbenzene	5.00	4.38	87.6	68.0-135	
sec-Butylbenzene	5.00	4.48	89.6	74.0-130	
tert-Butylbenzene	5.00	5.17	103	75.0-127	
Carbon tetrachloride	5.00	5.39	108	66.0-128	
Chlorobenzene	5.00	4.94	98.8	76.0-128	
Chlorodibromomethane	5.00	5.30	106	74.0-127	
Chloroethane	5.00	3.88	77.6	61.0-134	
Chloroform	5.00	4.54	90.8	72.0-123	
Chloromethane	5.00	3.00	60.0	51.0-138	
2-Chlorotoluene	5.00	4.78	95.6	75.0-124	
4-Chlorotoluene	5.00	4.64	92.8	75.0-124	
1,2-Dibromo-3-Chloropropane	5.00	4.05	81.0	59.0-130	
1,2-Dibromoethane	5.00	4.63	92.6	74.0-128	
Dibromomethane	5.00	5.00	100	75.0-122	
1,2-Dichlorobenzene	5.00	4.52	90.4	76.0-124	
1,3-Dichlorobenzene	5.00	4.45	89.0	76.0-125	
1,4-Dichlorobenzene	5.00	4.94	98.8	77.0-121	
Dichlorodifluoromethane	5.00	4.62	92.4	43.0-156	
1,1-Dichloroethane	5.00	4.59	91.8	70.0-127	
1,2-Dichloroethane	5.00	4.39	87.8	65.0-131	
1,1-Dichloroethene	5.00	5.16	103	65.0-131	
cis-1,2-Dichloroethene	5.00	4.87	97.4	73.0-125	
trans-1,2-Dichloroethene	5.00	4.85	97.0	71.0-125	
1,2-Dichloropropane	5.00	4.08	81.6	74.0-125	
1,1-Dichloropropene	5.00	5.05	101	73.0-125	
1,3-Dichloropropane	5.00	4.57	91.4	80.0-125	
cis-1,3-Dichloropropene	5.00	4.85	97.0	76.0-127	
trans-1,3-Dichloropropene	5.00	5.07	101	73.0-127	
2,2-Dichloropropane	5.00	4.71	94.2	59.0-135	
Di-isopropyl ether	5.00	3.64	72.8	60.0-136	
Ethylbenzene	5.00	5.02	100	74.0-126	
Hexachloro-1,3-butadiene	5.00	4.89	97.8	57.0-150	
Isopropylbenzene	5.00	4.89	97.8	72.0-127	

Laboratory Control Sample (LCS)

(LCS) R4000204-1 11/11/23 21:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
p-Isopropyltoluene	5.00	4.70	94.0	72.0-133	
2-Butanone (MEK)	25.0	27.4	110	30.0-160	
Methylene Chloride	5.00	5.49	110	68.0-123	
4-Methyl-2-pentanone (MIBK)	25.0	24.0	96.0	56.0-143	
Methyl tert-butyl ether	5.00	4.96	99.2	66.0-132	
Naphthalene	5.00	4.23	84.6	59.0-130	
n-Propylbenzene	5.00	4.56	91.2	74.0-126	
Styrene	5.00	4.94	98.8	72.0-127	
1,1,1,2-Tetrachloroethane	5.00	5.11	102	74.0-129	
1,1,2,2-Tetrachloroethane	5.00	4.60	92.0	68.0-128	
1,1,2-Trichlorotrifluoroethane	5.00	4.99	99.8	61.0-139	
Tetrachloroethene	5.00	5.48	110	70.0-136	
Toluene	5.00	4.80	96.0	75.0-121	
1,2,3-Trichlorobenzene	5.00	4.46	89.2	59.0-139	
1,2,4-Trichlorobenzene	5.00	4.34	86.8	62.0-137	
1,1,1-Trichloroethane	5.00	5.54	111	69.0-126	
1,1,2-Trichloroethane	5.00	4.99	99.8	78.0-123	
Trichloroethene	5.00	4.96	99.2	76.0-126	
Trichlorofluoromethane	5.00	5.36	107	61.0-142	
1,2,3-Trichloropropane	5.00	4.69	93.8	67.0-129	
1,2,4-Trimethylbenzene	5.00	4.60	92.0	70.0-126	
1,2,3-Trimethylbenzene	5.00	4.96	99.2	74.0-124	
1,3,5-Trimethylbenzene	5.00	4.67	93.4	73.0-127	
Vinyl chloride	5.00	4.36	87.2	63.0-134	
Xylenes, Total	15.0	14.8	98.7	72.0-127	
Ethyl Ether	5.00	4.38	87.6	64.0-137	
Tetrahydrofuran	5.00	5.15	103	37.0-146	
Iodomethane	25.0	28.6	114	74.0-134	
Allyl chloride	25.0	24.3	97.2	70.0-131	
Trans-1,4-Dichloro-2-butene	5.00	3.54	70.8	45.0-143	
(S) Toluene-d8			*103*	*75.0-131*	
(S) 4-Bromofluorobenzene			*103*	*67.0-138*	
(S) 1,2-Dichloroethane-d4			*93.1*	*70.0-130*	

Method Blank (MB)

(MB) R3999147-3 11/13/23 01:09

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R3999147-3 11/13/23 01:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*96.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*99.1*			*70.0-130*

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

(LCS) R3999147-1 11/12/23 23:50 • (LCSD) R3999147-2 11/13/23 00:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	20.1	21.1	80.4	84.4	10.0-160			4.85	31
Acrylonitrile	25.0	32.0	31.8	128	127	45.0-153			0.627	22
Benzene	5.00	5.63	5.34	113	107	70.0-123			5.29	20
Bromobenzene	5.00	5.22	4.89	104	97.8	73.0-121			6.53	20
Bromodichloromethane	5.00	5.61	5.60	112	112	73.0-121			0.178	20
Bromoform	5.00	5.17	4.91	103	98.2	64.0-132			5.16	20
Bromomethane	5.00	4.41	4.42	88.2	88.4	56.0-147			0.227	20
n-Butylbenzene	5.00	4.50	4.61	90.0	92.2	68.0-135			2.41	20
sec-Butylbenzene	5.00	5.61	5.26	112	105	74.0-130			6.44	20
tert-Butylbenzene	5.00	5.45	5.27	109	105	75.0-127			3.36	20
Carbon tetrachloride	5.00	5.47	5.33	109	107	66.0-128			2.59	20
Chlorobenzene	5.00	5.31	5.02	106	100	76.0-128			5.61	20
Chlorodibromomethane	5.00	5.34	5.18	107	104	74.0-127			3.04	20
Chloroethane	5.00	4.16	4.26	83.2	85.2	61.0-134			2.38	20
Chloroform	5.00	5.37	5.05	107	101	72.0-123			6.14	20
Chloromethane	5.00	4.90	4.73	98.0	94.6	51.0-138			3.53	20
2-Chlorotoluene	5.00	5.02	5.45	100	109	75.0-124			8.21	20
4-Chlorotoluene	5.00	5.42	5.27	108	105	75.0-124			2.81	20
1,2-Dibromo-3-Chloropropane	5.00	4.85	4.67	97.0	93.4	59.0-130			3.78	20
1,2-Dibromoethane	5.00	4.94	4.89	98.8	97.8	74.0-128			1.02	20
Dibromomethane	5.00	5.32	5.41	106	108	75.0-122			1.68	20
1,2-Dichlorobenzene	5.00	5.05	5.08	101	102	76.0-124			0.592	20
1,3-Dichlorobenzene	5.00	5.17	5.00	103	100	76.0-125			3.34	20
1,4-Dichlorobenzene	5.00	4.90	4.65	98.0	93.0	77.0-121			5.24	20
Dichlorodifluoromethane	5.00	5.01	5.29	100	106	43.0-156			5.44	20
1,1-Dichloroethane	5.00	5.43	5.33	109	107	70.0-127			1.86	20
1,2-Dichloroethane	5.00	5.35	5.26	107	105	65.0-131			1.70	20
1,1-Dichloroethene	5.00	5.38	5.29	108	106	65.0-131			1.69	20
cis-1,2-Dichloroethene	5.00	5.68	5.40	114	108	73.0-125			5.05	20
trans-1,2-Dichloroethene	5.00	5.06	4.86	101	97.2	71.0-125			4.03	20
1,2-Dichloropropane	5.00	5.83	5.82	117	116	74.0-125			0.172	20
1,1-Dichloropropene	5.00	5.73	5.67	115	113	73.0-125			1.05	20
1,3-Dichloropropane	5.00	5.31	5.22	106	104	80.0-125			1.71	20
cis-1,3-Dichloropropene	5.00	5.88	5.63	118	113	76.0-127			4.34	20
trans-1,3-Dichloropropene	5.00	4.96	4.82	99.2	96.4	73.0-127			2.86	20
2,2-Dichloropropane	5.00	5.48	5.35	110	107	59.0-135			2.40	20
Di-isopropyl ether	5.00	5.71	5.58	114	112	60.0-136			2.30	20
Ethylbenzene	5.00	5.43	5.13	109	103	74.0-126			5.68	20
Hexachloro-1,3-butadiene	5.00	5.01	4.92	100	98.4	57.0-150			1.81	20
Isopropylbenzene	5.00	5.76	5.47	115	109	72.0-127			5.16	20

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

(LCS) R3999147-1 11/12/23 23:50 • (LCSD) R3999147-2 11/13/23 00:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	5.66	5.45	113	109	72.0-133			3.78	20
2-Butanone (MEK)	25.0	22.2	22.7	88.8	90.8	30.0-160			2.23	24
Methylene Chloride	5.00	4.45	4.56	89.0	91.2	68.0-123			2.44	20
4-Methyl-2-pentanone (MIBK)	25.0	28.9	28.1	116	112	56.0-143			2.81	20
Methyl tert-butyl ether	5.00	5.54	5.46	111	109	66.0-132			1.45	20
Naphthalene	5.00	5.39	5.21	108	104	59.0-130			3.40	20
n-Propylbenzene	5.00	6.02	5.66	120	113	74.0-126			6.16	20
Styrene	5.00	4.69	4.52	93.8	90.4	72.0-127			3.69	20
1,1,1,2-Tetrachloroethane	5.00	5.28	5.24	106	105	74.0-129			0.760	20
1,1,2,2-Tetrachloroethane	5.00	5.06	4.94	101	98.8	68.0-128			2.40	20
1,1,2-Trichlorotrifluoroethane	5.00	4.85	4.91	97.0	98.2	61.0-139			1.23	20
Tetrachloroethene	5.00	5.32	5.23	106	105	70.0-136			1.71	20
Toluene	5.00	5.50	5.22	110	104	75.0-121			5.22	20
1,2,3-Trichlorobenzene	5.00	4.97	4.88	99.4	97.6	59.0-139			1.83	20
1,2,4-Trichlorobenzene	5.00	5.73	5.53	115	111	62.0-137			3.55	20
1,1,1-Trichloroethane	5.00	5.86	5.47	117	109	69.0-126			6.88	20
1,1,2-Trichloroethane	5.00	5.28	4.96	106	99.2	78.0-123			6.25	20
Trichloroethene	5.00	5.36	5.35	107	107	76.0-126			0.187	20
Trichlorofluoromethane	5.00	4.56	4.57	91.2	91.4	61.0-142			0.219	20
1,2,3-Trichloropropane	5.00	5.21	5.10	104	102	67.0-129			2.13	20
1,2,4-Trimethylbenzene	5.00	5.20	5.02	104	100	70.0-126			3.52	20
1,2,3-Trimethylbenzene	5.00	5.34	5.10	107	102	74.0-124			4.60	20
1,3,5-Trimethylbenzene	5.00	5.68	5.36	114	107	73.0-127			5.80	20
Vinyl chloride	5.00	4.61	4.65	92.2	93.0	63.0-134			0.864	20
Xylenes, Total	15.0	17.3	16.5	115	110	72.0-127			4.73	20
Ethyl Ether	5.00	5.55	5.18	111	104	64.0-137			6.90	20
Tetrahydrofuran	5.00	5.43	5.65	109	113	37.0-146			3.97	24
Iodomethane	25.0	26.8	25.6	107	102	74.0-134			4.58	20
Allyl chloride	25.0	27.8	26.3	111	105	70.0-131			5.55	20
Trans-1,4-Dichloro-2-butene	5.00	4.27	4.20	85.4	84.0	45.0-143			1.65	20
(S) Toluene-d8				*96.7*	*95.4*	*75.0-131*				
(S) 4-Bromofluorobenzene				*105*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*96.6*	*95.8*	*70.0-130*				

L1676024-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676024-02 11/13/23 07:25 • (MS) R3999147-4 11/13/23 08:25 • (MSD) R3999147-5 11/13/23 08:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	114	97.5	92.3	0.000	0.000	1	10.0-160	V	V	5.48	40
Acrylonitrile	25.0	U	32.2	32.7	129	131	1	10.0-160			1.54	40
Benzene	5.00	U	6.06	6.08	121	122	1	10.0-149			0.329	37
Bromobenzene	5.00	U	5.15	5.28	103	106	1	10.0-156			2.49	38
Bromodichloromethane	5.00	U	6.38	6.38	128	128	1	10.0-143			0.000	37
Bromoform	5.00	U	5.34	5.39	107	108	1	10.0-146			0.932	36
Bromomethane	5.00	U	5.00	4.84	100	96.8	1	10.0-149			3.25	38
n-Butylbenzene	5.00	U	5.08	5.22	102	104	1	10.0-160			2.72	40
sec-Butylbenzene	5.00	U	5.77	5.94	115	119	1	10.0-159			2.90	39
tert-Butylbenzene	5.00	U	5.78	5.90	116	118	1	10.0-156			2.05	39
Carbon tetrachloride	5.00	U	6.97	7.00	139	140	1	10.0-145			0.429	37
Chlorobenzene	5.00	0.886	6.62	6.82	115	119	1	10.0-152			2.98	39
Chlorodibromomethane	5.00	U	5.73	5.65	115	113	1	10.0-146			1.41	37
Chloroethane	5.00	U	5.45	5.34	109	107	1	10.0-146			2.04	40
Chloroform	5.00	0.0880	6.29	6.49	124	128	1	10.0-146			3.13	37
Chloromethane	5.00	U	5.70	5.65	114	113	1	10.0-159			0.881	37
2-Chlorotoluene	5.00	U	5.32	5.95	106	119	1	10.0-159			11.2	38
4-Chlorotoluene	5.00	U	5.50	5.91	110	118	1	10.0-155			7.19	39
1,2-Dibromo-3-Chloropropane	5.00	U	4.83	4.84	96.6	96.8	1	10.0-151			0.207	39
1,2-Dibromoethane	5.00	U	4.94	4.97	98.8	99.4	1	10.0-148			0.605	34
Dibromomethane	5.00	U	5.81	5.73	116	115	1	10.0-147			1.39	35
1,2-Dichlorobenzene	5.00	0.910	6.64	6.86	115	119	1	10.0-155			3.26	37
1,3-Dichlorobenzene	5.00	1.15	6.86	6.93	114	116	1	10.0-153			1.02	38
1,4-Dichlorobenzene	5.00	0.773	5.96	6.32	104	111	1	10.0-151			5.86	38
Dichlorodifluoromethane	5.00	U	6.23	5.83	125	117	1	10.0-160			6.63	35
1,1-Dichloroethane	5.00	4.82	11.2	11.3	128	130	1	10.0-147			0.889	37
1,2-Dichloroethane	5.00	0.622	6.21	6.54	112	118	1	10.0-148			5.18	35
1,1-Dichloroethene	5.00	U	6.61	6.73	132	135	1	10.0-155			1.80	37
cis-1,2-Dichloroethene	5.00	8.27	14.8	15.3	131	141	1	10.0-149			3.32	37
trans-1,2-Dichloroethene	5.00	0.528	6.13	5.92	112	108	1	10.0-150			3.49	37
1,2-Dichloropropane	5.00	U	6.64	6.34	133	127	1	10.0-148			4.62	37
1,1-Dichloropropene	5.00	U	6.34	6.37	127	127	1	10.0-153			0.472	35
1,3-Dichloropropane	5.00	U	5.40	5.36	108	107	1	10.0-154			0.744	35
cis-1,3-Dichloropropene	5.00	U	5.97	5.70	119	114	1	10.0-151			4.63	37
trans-1,3-Dichloropropene	5.00	U	4.90	4.85	98.0	97.0	1	10.0-148			1.03	37
2,2-Dichloropropane	5.00	U	7.15	7.58	143	152	1	10.0-138	J5	J5	5.84	36
Di-isopropyl ether	5.00	0.0730	6.67	6.70	132	133	1	10.0-147			0.449	36
Ethylbenzene	5.00	U	5.75	5.63	115	113	1	10.0-160			2.11	38
Hexachloro-1,3-butadiene	5.00	U	5.51	6.04	110	121	1	10.0-160			9.18	40
Isopropylbenzene	5.00	U	6.60	6.71	132	134	1	10.0-155			1.65	38

L1676024-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676024-02 11/13/23 07:25 • (MS) R3999147-4 11/13/23 08:25 • (MSD) R3999147-5 11/13/23 08:45

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	U	5.97	6.06	119	121	1	10.0-160			1.50	40
2-Butanone (MEK)	25.0	3.07	23.8	30.0	82.9	108	1	10.0-160			23.0	40
Methylene Chloride	5.00	U	5.02	5.08	100	102	1	10.0-141			1.19	37
4-Methyl-2-pentanone (MIBK)	25.0	U	30.9	30.7	124	123	1	10.0-160			0.649	35
Methyl tert-butyl ether	5.00	U	6.50	6.65	130	133	1	11.0-147			2.28	35
Naphthalene	5.00	U	5.33	5.60	107	112	1	10.0-160			4.94	36
n-Propylbenzene	5.00	U	6.11	6.30	122	126	1	10.0-158			3.06	38
Styrene	5.00	U	4.66	4.85	93.2	97.0	1	10.0-160			4.00	40
1,1,1,2-Tetrachloroethane	5.00	U	5.95	5.95	119	119	1	10.0-149			0.000	39
1,1,2,2-Tetrachloroethane	5.00	U	5.53	5.66	111	113	1	10.0-160			2.32	35
1,1,2-Trichlorotrifluoroethane	5.00	U	6.61	6.71	132	134	1	10.0-160			1.50	36
Tetrachloroethene	5.00	0.0760	5.83	5.59	115	110	1	10.0-156			4.20	39
Toluene	5.00	U	5.53	5.63	111	113	1	10.0-156			1.79	38
1,2,3-Trichlorobenzene	5.00	U	4.27	4.51	85.4	90.2	1	10.0-160			5.47	40
1,2,4-Trichlorobenzene	5.00	U	5.48	5.65	110	113	1	10.0-160			3.05	40
1,1,1-Trichloroethane	5.00	U	6.96	7.08	139	142	1	10.0-144			1.71	35
1,1,2-Trichloroethane	5.00	U	5.37	5.31	107	106	1	10.0-160			1.12	35
Trichloroethene	5.00	0.703	6.34	6.34	113	113	1	10.0-156			0.000	38
Trichlorofluoromethane	5.00	U	6.25	6.16	125	123	1	10.0-160			1.45	40
1,2,3-Trichloropropane	5.00	U	5.33	5.40	107	108	1	10.0-156			1.30	35
1,2,4-Trimethylbenzene	5.00	U	5.57	5.70	111	114	1	10.0-160			2.31	36
1,2,3-Trimethylbenzene	5.00	0.0930	5.66	5.76	111	113	1	10.0-160			1.75	36
1,3,5-Trimethylbenzene	5.00	U	5.77	5.88	115	118	1	10.0-160			1.89	38
Vinyl chloride	5.00	0.205	5.77	5.77	111	111	1	10.0-160			0.000	37
Xylenes, Total	15.0	U	18.0	18.1	120	121	1	10.0-160			0.554	38
Ethyl Ether	5.00	5.62	11.5	11.7	118	122	1	10.0-160			1.72	31
Tetrahydrofuran	5.00	5.88	10.9	10.9	100	100	1	10.0-158			0.000	33
Iodomethane	25.0	U	29.3	29.8	117	119	1	10.0-160			1.69	38
Allyl chloride	25.0	U	31.6	31.4	126	126	1	10.0-160			0.635	30
Trans-1,4-Dichloro-2-butene	5.00	U	4.12	4.38	82.4	87.6	1	10.0-152			6.12	36
(S) Toluene-d8					*93.0*	*92.5*		*75.0-131*				
(S) 4-Bromofluorobenzene					*106*	*105*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*101*	*103*		*70.0-130*				

Method Blank (MB)

(MB) R4000632-3 11/15/23 23:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	U		0.0276	0.100
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*97.9*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

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

(LCS) R4000632-1 11/15/23 21:49 • (LCSD) R4000632-2 11/15/23 22:47

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	5.00	4.75	4.47	95.0	89.4	73.0-125			6.07	20
(S) Toluene-d8				*104*	*103*	*75.0-131*				
(S) 4-Bromofluorobenzene				*99.1*	*98.8*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*103*	*105*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
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.
Q	Sample was prepared and/or analyzed past holding time as defined in the method. Concentrations should be considered minimum values.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [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.

Company Name/Address:	Billing Information:
PES Environmental, Inc.- WA 2101 Fourth Ave., Suite 1310 Seattle, WA 98121	Attn: Accounts Payable 2101 4th Avenue, Suite 1310 Seattle, WA 98121

Pres Chk

Analysis / Container / Preservative

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project #: 443022-1413001.10.70

Lab Project #: PESENVSWA-ALP

Collected by (print): Osmin Monroy

Site/Facility ID #:

P.O. #: 443018-1413001.~~05.601~~ 10.701

Collected by (signature):

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

Quote #:

Date Results Needed:

Immediately Packed on Ice N ___ Y ✓

SDG # L1675773
G141

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 Cam
Shipped Via:

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-332-110823	Grab	GW	—	11/8/23	1521	3							X		-01
MW-323-110823	↓	GW	↓	↓	1445	3							X		-02
MW113-110823		GW			1400	3							X		-03
MW116-110823		GW			1324	3							X		-04
MW-322-110823		GW			1240	10	X	X		X	X	X	X		-05
MW-319-110823		GW			1121	3							X		-06
MW-994-110823		GW			1200	3							X		-07
MW-318-110823		GW			1047	3							X		-08
MW-317-110823		GW			1018	3							X		-09
MW-144R-110823		GW			0854	10	X	X		X	X	X	X		-10

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

Remarks:

pH ______ Temp ______

Flow ______ Other ______

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 6337 2216 8433

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
[signature]	11/8/23	1700		Trip Blank Received: Yes / (No) HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: M5A8 °C 4.5+0=4.5 Bottles Received: 59
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature]	Date: 11-9-23 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / (OK)

Company Name/Address:
PES Environmental, Inc.- WA
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project # 443022-1413001.10.70

Lab Project # PESENVSWA-ALP

SDG # L1675773

Table #

Collected by (print): Osmin Monroy

Site/Facility ID #

P.O. # 443018-1413001.~~05.601~~ 10.701

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 LAN
Shipped Via:

Collected by (signature):

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

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl			Remarks	Sample # (lab only)
MW-324-110823	Grab	GW	—	11/8/23	1033	3							X				-11
FMW-142-110823	↓	GW	↓	↓	1123								X				-12
MW119-110823	↓	GW	↓	↓	1307								X				-13
MW-996-110823	↓	GW	↓	↓	1111								X				-14
MW115-110823	↓	GW	↓	↓	1449								X				-15
		GW															
		GW															
		GW															
		GW															
		GW															

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

Remarks:

pH ______ Temp ________
Flow ______ Other ________

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 6337 2246 8433

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / (No) HCL / MeoH TBR	
[signature]	11/8/23	1700			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: MSAC °C 4.5+0=4.5 Bottles Received: 59	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) [signature] 17	Date: 11-9-23 Time: 900	Hold: Condition: NCF / (OK)

ANALYTICAL REPORT

February 09, 2024

Revised Report

PES Environmental, Inc.- WA

Sample Delivery Group:	L1676327
Samples Received:	11/10/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager

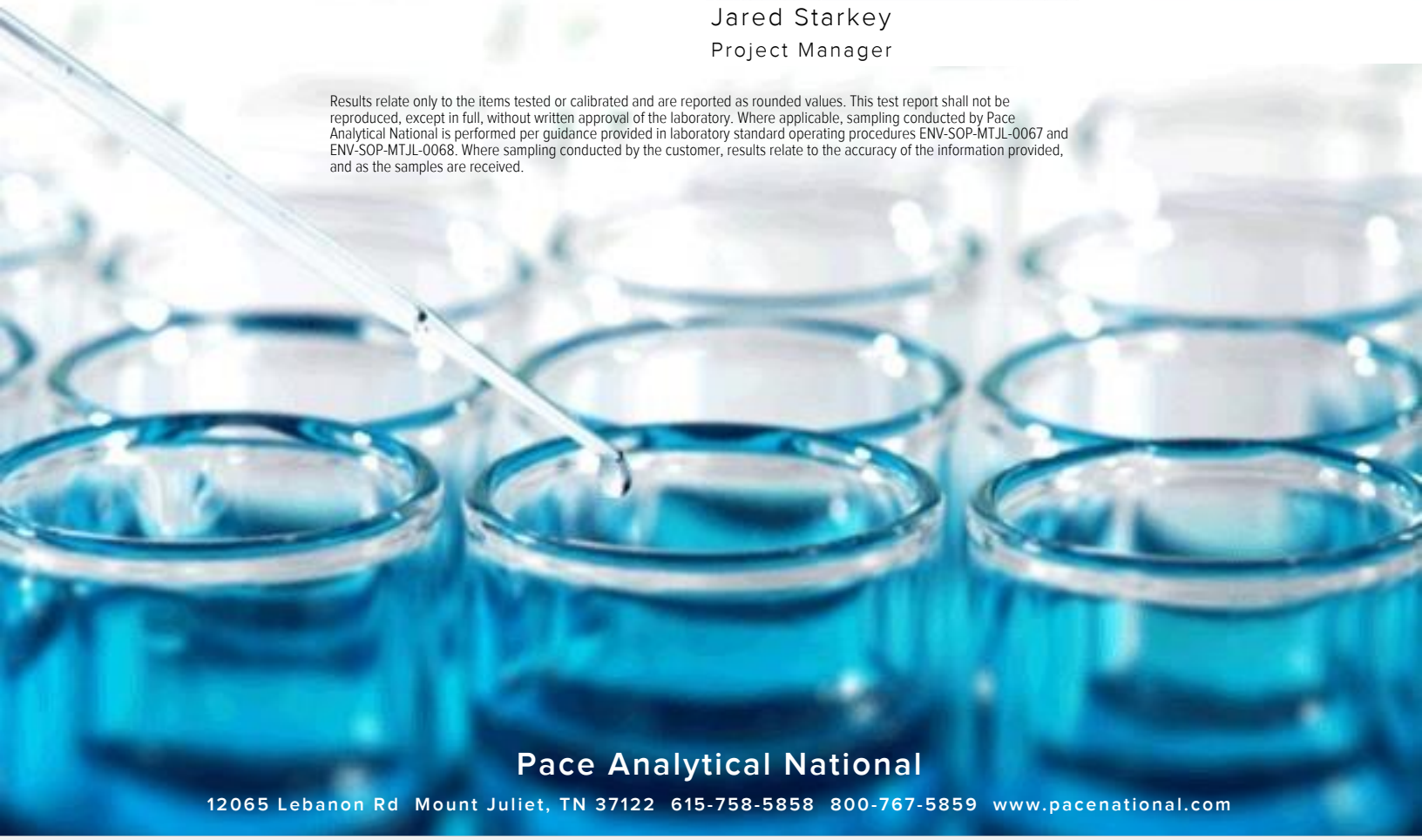


TABLE OF CONTENTS

MW-148-110923 L1676327-01 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 14:55 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 09:32	11/12/23 09:32	AV	Mt. Juliet, TN

MW123-110923 L1676327-02 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 14:09 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 09:51	11/12/23 09:51	AV	Mt. Juliet, TN

MW-342-110923 L1676327-03 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 12:43 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 10:10	11/12/23 10:10	AV	Mt. Juliet, TN

MW-336-110923 L1676327-04 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 12:03 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 10:29	11/12/23 10:29	AV	Mt. Juliet, TN

MW-335-110923 L1676327-05 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 11:27 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2173141	1	11/17/23 12:50	11/17/23 12:50	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2168926	1	11/10/23 20:31	11/10/23 20:31	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2178410	1	11/29/23 09:41	11/29/23 09:41	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169907	1	11/18/23 09:25	11/20/23 16:38	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169907	10	11/18/23 09:25	11/20/23 17:54	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2172277	1	11/17/23 13:58	11/17/23 13:58	OK	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	10	11/12/23 15:17	11/12/23 15:17	AV	Mt. Juliet, TN

MW-325-110923 L1676327-06 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 10:52 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 10:48	11/12/23 10:48	AV	Mt. Juliet, TN

MW-326R-110923 L1676327-07 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 10:02 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 11:08	11/12/23 11:08	AV	Mt. Juliet, TN

MW-995-110923 L1676327-08 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 12:00 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 11:27	11/12/23 11:27	AV	Mt. Juliet, TN

MW-351-110923 L1676327-09 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 09:22 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 11:46	11/12/23 11:46	AV	Mt. Juliet, TN

FMW-131-110923 L1676327-10 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 10:24 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 12:05	11/12/23 12:05	AV	Mt. Juliet, TN

GEI-2-110923 L1676327-11 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 11:33 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 12:24	11/12/23 12:24	AV	Mt. Juliet, TN

FMW-137-110923 L1676327-12 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 13:33 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 12:43	11/12/23 12:43	AV	Mt. Juliet, TN

MW-340-110923 L1676327-13 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 09:26 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 13:02	11/12/23 13:02	AV	Mt. Juliet, TN

MW-327-110923 L1676327-14 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 10:03 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 13:22	11/12/23 13:22	AV	Mt. Juliet, TN

MW-341-110923 L1676327-15 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 10:40 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 13:41	11/12/23 13:41	AV	Mt. Juliet, TN

MW-328-110923 L1676327-16 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 11:15 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 14:00	11/12/23 14:00	AV	Mt. Juliet, TN

MW-329-110923 L1676327-17 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 12:06 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 14:19	11/12/23 14:19	AV	Mt. Juliet, TN

MW128-110923 L1676327-18 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 12:58 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 14:38	11/12/23 14:38	AV	Mt. Juliet, TN

MW-334-110923 L1676327-19 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 14:14 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 14:58	11/12/23 14:58	AV	Mt. Juliet, TN

TB-110923 L1676327-20 GW

Collected by: N. Wisdom | Collected date/time: 11/09/23 00:00 | Received date/time: 11/10/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2169514	1	11/12/23 09:12	11/12/23 09:12	AV	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 11/30/23 13:21

Project Narrative

ID Corrections

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.51	C5 J4	0.548	1.00	1	11/12/2023 09:32	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 09:32	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 09:32	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 09:32	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 09:32	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 09:32	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 09:32	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 09:32	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 09:32	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 09:32	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 09:32	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 09:32	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 09:32	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 09:32	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 09:32	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 09:32	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 09:32	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 09:32	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 09:32	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 09:32	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 09:32	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 09:32	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 09:32	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 09:32	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 09:32	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 09:32	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 09:32	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 09:32	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 09:32	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 09:32	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 09:32	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 09:32	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 09:32	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 09:32	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 09:32	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 09:32	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 09:32	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 09:32	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 09:32	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 09:32	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 09:32	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 09:32	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 09:32	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 09:32	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 09:32	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 09:32	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 09:32	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 09:32	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 09:32	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 09:32	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 09:32	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 09:32	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 09:32	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 09:32	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 09:32	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 09:32	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 09:32	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 09:32	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 09:32	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 09:32	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 09:32	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 09:32	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 09:32	WG2169514
Vinyl chloride	0.154	C3	0.0273	0.100	1	11/12/2023 09:32	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 09:32	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 09:32	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 09:32	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 09:32	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 09:32	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 09:32	WG2169514
(S) Toluene-d8	*99.6*			*75.0-131*		*11/12/2023 09:32*	WG2169514
(S) 4-Bromofluorobenzene	*87.5*			*67.0-138*		*11/12/2023 09:32*	WG2169514
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 09:32*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.67	C5 J4	0.548	1.00	1	11/12/2023 09:51	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 09:51	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 09:51	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 09:51	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 09:51	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 09:51	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 09:51	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 09:51	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 09:51	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 09:51	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 09:51	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 09:51	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 09:51	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 09:51	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 09:51	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 09:51	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 09:51	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 09:51	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 09:51	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 09:51	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 09:51	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 09:51	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 09:51	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 09:51	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 09:51	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 09:51	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 09:51	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 09:51	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 09:51	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 09:51	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 09:51	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 09:51	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 09:51	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 09:51	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 09:51	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 09:51	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 09:51	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 09:51	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 09:51	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 09:51	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 09:51	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 09:51	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 09:51	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 09:51	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 09:51	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 09:51	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 09:51	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 09:51	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 09:51	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 09:51	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 09:51	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 09:51	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 09:51	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 09:51	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 09:51	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 09:51	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 09:51	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 09:51	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 09:51	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 09:51	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 09:51	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 09:51	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 09:51	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 09:51	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 09:51	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 09:51	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 09:51	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 09:51	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 09:51	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 09:51	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 09:51*	WG2169514
(S) 4-Bromofluorobenzene	*86.9*			*67.0-138*		*11/12/2023 09:51*	WG2169514
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/12/2023 09:51*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 10:10	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 10:10	WG2169514
Benzene	1.02		0.0160	0.0400	1	11/12/2023 10:10	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 10:10	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 10:10	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 10:10	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 10:10	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 10:10	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 10:10	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 10:10	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 10:10	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 10:10	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 10:10	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 10:10	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 10:10	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 10:10	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 10:10	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 10:10	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 10:10	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 10:10	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 10:10	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 10:10	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 10:10	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 10:10	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 10:10	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 10:10	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 10:10	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 10:10	WG2169514
cis-1,2-Dichloroethene	7.68		0.0276	0.100	1	11/12/2023 10:10	WG2169514
trans-1,2-Dichloroethene	0.0700	J	0.0572	0.200	1	11/12/2023 10:10	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 10:10	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 10:10	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 10:10	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 10:10	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 10:10	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 10:10	WG2169514
Di-isopropyl ether	0.0530		0.0140	0.0400	1	11/12/2023 10:10	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 10:10	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 10:10	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 10:10	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 10:10	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 10:10	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 10:10	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 10:10	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 10:10	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 10:10	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 10:10	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 10:10	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 10:10	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 10:10	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 10:10	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 10:10	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 10:10	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 10:10	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 10:10	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 10:10	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 10:10	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 10:10	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 10:10	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 10:10	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 10:10	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 10:10	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 10:10	WG2169514
Vinyl chloride	5.16	C3	0.0273	0.100	1	11/12/2023 10:10	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 10:10	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 10:10	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 10:10	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 10:10	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 10:10	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 10:10	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 10:10*	WG2169514
(S) 4-Bromofluorobenzene	*88.5*			*67.0-138*		*11/12/2023 10:10*	WG2169514
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 10:10*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 10:29	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 10:29	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 10:29	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 10:29	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 10:29	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 10:29	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 10:29	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 10:29	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 10:29	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 10:29	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 10:29	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 10:29	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 10:29	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 10:29	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 10:29	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 10:29	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 10:29	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 10:29	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 10:29	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 10:29	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 10:29	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 10:29	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 10:29	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 10:29	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 10:29	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 10:29	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 10:29	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 10:29	WG2169514
cis-1,2-Dichloroethene	0.198		0.0276	0.100	1	11/12/2023 10:29	WG2169514
trans-1,2-Dichloroethene	0.102	J	0.0572	0.200	1	11/12/2023 10:29	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 10:29	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 10:29	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 10:29	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 10:29	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 10:29	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 10:29	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 10:29	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 10:29	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 10:29	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 10:29	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 10:29	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 10:29	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 10:29	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 10:29	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 10:29	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 10:29	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 10:29	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 10:29	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 10:29	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 10:29	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 10:29	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 10:29	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 10:29	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 10:29	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 10:29	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 10:29	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 10:29	WG2169514
Trichloroethene	0.468		0.0160	0.0400	1	11/12/2023 10:29	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 10:29	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 10:29	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 10:29	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 10:29	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 10:29	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 10:29	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 10:29	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 10:29	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 10:29	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 10:29	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 10:29	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 10:29	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 10:29*	WG2169514
(S) 4-Bromofluorobenzene	*83.7*			*67.0-138*		*11/12/2023 10:29*	WG2169514
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/12/2023 10:29*	WG2169514

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	287000		8450	20000	1	11/17/2023 12:50	WG2173141

Sample Narrative:

L1676327-05 WG2173141: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	30900		379	1000	1	11/10/2023 20:31	WG2168926
Nitrate	U		48.0	100	1	11/10/2023 20:31	WG2168926
Sulfate	57000		594	5000	1	11/10/2023 20:31	WG2168926

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2790		102	1000	1	11/29/2023 09:41	WG2178410

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	147	B	28.1	100	1	11/20/2023 16:38	WG2169907
Manganese	1030		7.04	50.0	10	11/20/2023 17:54	WG2169907

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	317		0.287	0.678	1	11/17/2023 13:58	WG2172277
Ethane	2.79		0.296	1.29	1	11/17/2023 13:58	WG2172277
Ethene	U		0.422	1.27	1	11/17/2023 13:58	WG2172277

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	5.48	10.0	10	11/12/2023 15:17	WG2169514
Acrylonitrile	U		0.760	5.00	10	11/12/2023 15:17	WG2169514
Benzene	U		0.160	0.400	10	11/12/2023 15:17	WG2169514
Bromobenzene	U		0.420	5.00	10	11/12/2023 15:17	WG2169514
Bromodichloromethane	U		0.315	1.00	10	11/12/2023 15:17	WG2169514
Bromoform	U	C3	2.39	10.0	10	11/12/2023 15:17	WG2169514
Bromomethane	U		1.48	5.00	10	11/12/2023 15:17	WG2169514
n-Butylbenzene	U	C3	1.53	5.00	10	11/12/2023 15:17	WG2169514
sec-Butylbenzene	U		1.01	5.00	10	11/12/2023 15:17	WG2169514
tert-Butylbenzene	U		0.620	2.00	10	11/12/2023 15:17	WG2169514
Carbon tetrachloride	U		0.432	2.00	10	11/12/2023 15:17	WG2169514
Chlorobenzene	U		0.229	1.00	10	11/12/2023 15:17	WG2169514
Chlorodibromomethane	U		0.180	1.00	10	11/12/2023 15:17	WG2169514
Chloroethane	U		0.432	2.00	10	11/12/2023 15:17	WG2169514
Chloroform	U		0.166	1.00	10	11/12/2023 15:17	WG2169514
Chloromethane	U		0.556	5.00	10	11/12/2023 15:17	WG2169514
2-Chlorotoluene	U		0.368	1.00	10	11/12/2023 15:17	WG2169514
4-Chlorotoluene	U		0.452	2.00	10	11/12/2023 15:17	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	2.04	10.0	10	11/12/2023 15:17	WG2169514
1,2-Dibromoethane	U		0.210	1.00	10	11/12/2023 15:17	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.400	2.00	10	11/12/2023 15:17	WG2169514
1,2-Dichlorobenzene	U		0.580	2.00	10	11/12/2023 15:17	WG2169514
1,3-Dichlorobenzene	U		0.680	2.00	10	11/12/2023 15:17	WG2169514
1,4-Dichlorobenzene	U		0.788	2.00	10	11/12/2023 15:17	WG2169514
Dichlorodifluoromethane	U		0.327	1.00	10	11/12/2023 15:17	WG2169514
1,1-Dichloroethane	U		0.230	1.00	10	11/12/2023 15:17	WG2169514
1,2-Dichloroethane	U		0.190	1.00	10	11/12/2023 15:17	WG2169514
1,1-Dichloroethene	0.790	J	0.200	1.00	10	11/12/2023 15:17	WG2169514
cis-1,2-Dichloroethene	293		0.276	1.00	10	11/12/2023 15:17	WG2169514
trans-1,2-Dichloroethene	4.56		0.572	2.00	10	11/12/2023 15:17	WG2169514
1,2-Dichloropropane	U		0.508	2.00	10	11/12/2023 15:17	WG2169514
1,1-Dichloropropene	U		0.280	1.00	10	11/12/2023 15:17	WG2169514
1,3-Dichloropropane	U		0.700	2.00	10	11/12/2023 15:17	WG2169514
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/12/2023 15:17	WG2169514
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/12/2023 15:17	WG2169514
2,2-Dichloropropane	U	C3	0.317	1.00	10	11/12/2023 15:17	WG2169514
Di-isopropyl ether	U		0.140	0.400	10	11/12/2023 15:17	WG2169514
Ethylbenzene	U		0.212	1.00	10	11/12/2023 15:17	WG2169514
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/12/2023 15:17	WG2169514
Isopropylbenzene	U	C3	0.345	1.00	10	11/12/2023 15:17	WG2169514
p-Isopropyltoluene	U		0.932	2.00	10	11/12/2023 15:17	WG2169514
2-Butanone (MEK)	U	J3	5.00	10.0	10	11/12/2023 15:17	WG2169514
Methylene Chloride	U		2.65	10.0	10	11/12/2023 15:17	WG2169514
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/12/2023 15:17	WG2169514
Methyl tert-butyl ether	U		0.118	0.400	10	11/12/2023 15:17	WG2169514
Naphthalene	U	C3 J4	1.24	5.00	10	11/12/2023 15:17	WG2169514
n-Propylbenzene	U		0.472	2.00	10	11/12/2023 15:17	WG2169514
Styrene	U	C3	1.09	5.00	10	11/12/2023 15:17	WG2169514
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/12/2023 15:17	WG2169514
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/12/2023 15:17	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/12/2023 15:17	WG2169514
Tetrachloroethene	106		0.280	1.00	10	11/12/2023 15:17	WG2169514
Toluene	U		0.500	2.00	10	11/12/2023 15:17	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.250	5.00	10	11/12/2023 15:17	WG2169514
1,2,4-Trichlorobenzene	U	C3	1.93	5.00	10	11/12/2023 15:17	WG2169514
1,1,1-Trichloroethane	U		0.110	1.00	10	11/12/2023 15:17	WG2169514
1,1,2-Trichloroethane	U		0.353	1.00	10	11/12/2023 15:17	WG2169514
Trichloroethene	154		0.160	0.400	10	11/12/2023 15:17	WG2169514
Trichlorofluoromethane	U		0.200	1.00	10	11/12/2023 15:17	WG2169514
1,2,3-Trichloropropane	U		2.04	5.00	10	11/12/2023 15:17	WG2169514
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/12/2023 15:17	WG2169514
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/12/2023 15:17	WG2169514
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/12/2023 15:17	WG2169514
Vinyl chloride	U	C3	0.273	1.00	10	11/12/2023 15:17	WG2169514
Xylenes, Total	U		1.91	2.60	10	11/12/2023 15:17	WG2169514
Ethyl Ether	U		0.170	1.00	10	11/12/2023 15:17	WG2169514
Tetrahydrofuran	U		0.900	5.00	10	11/12/2023 15:17	WG2169514
Iodomethane	U		2.42	5.00	10	11/12/2023 15:17	WG2169514
Allyl chloride	U		5.80	10.0	10	11/12/2023 15:17	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/12/2023 15:17	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 15:17*	WG2169514
(S) 4-Bromofluorobenzene	*84.6*			*67.0-138*		*11/12/2023 15:17*	WG2169514
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 15:17*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.12	C5 J4	0.548	1.00	1	11/12/2023 10:48	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 10:48	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 10:48	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 10:48	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 10:48	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 10:48	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 10:48	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 10:48	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 10:48	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 10:48	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 10:48	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 10:48	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 10:48	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 10:48	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 10:48	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 10:48	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 10:48	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 10:48	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 10:48	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 10:48	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 10:48	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 10:48	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 10:48	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 10:48	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 10:48	WG2169514
1,1-Dichloroethane	0.0330	J	0.0230	0.100	1	11/12/2023 10:48	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 10:48	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 10:48	WG2169514
cis-1,2-Dichloroethene	1.56		0.0276	0.100	1	11/12/2023 10:48	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 10:48	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 10:48	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 10:48	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 10:48	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 10:48	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 10:48	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 10:48	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 10:48	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 10:48	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 10:48	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 10:48	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 10:48	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 10:48	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 10:48	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 10:48	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 10:48	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 10:48	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 10:48	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 10:48	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 10:48	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 10:48	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 10:48	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 10:48	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 10:48	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 10:48	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 10:48	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 10:48	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 10:48	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 10:48	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 10:48	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 10:48	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 10:48	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 10:48	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 10:48	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 10:48	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 10:48	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 10:48	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 10:48	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 10:48	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 10:48	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 10:48	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 10:48*	WG2169514
(S) 4-Bromofluorobenzene	*83.9*			*67.0-138*		*11/12/2023 10:48*	WG2169514
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 10:48*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	11.3	C5 J4	0.548	1.00	1	11/12/2023 11:08	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 11:08	WG2169514
Benzene	0.0440		0.0160	0.0400	1	11/12/2023 11:08	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 11:08	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 11:08	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 11:08	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 11:08	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 11:08	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 11:08	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 11:08	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 11:08	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 11:08	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 11:08	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 11:08	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 11:08	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 11:08	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 11:08	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 11:08	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 11:08	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 11:08	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 11:08	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 11:08	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 11:08	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 11:08	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 11:08	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 11:08	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 11:08	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 11:08	WG2169514
cis-1,2-Dichloroethene	0.125		0.0276	0.100	1	11/12/2023 11:08	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 11:08	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 11:08	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 11:08	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 11:08	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 11:08	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 11:08	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 11:08	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 11:08	WG2169514
Ethylbenzene	0.299		0.0212	0.100	1	11/12/2023 11:08	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 11:08	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 11:08	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 11:08	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 11:08	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 11:08	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 11:08	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 11:08	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 11:08	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 11:08	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 11:08	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 11:08	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 11:08	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 11:08	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 11:08	WG2169514
Toluene	1.34		0.0500	0.200	1	11/12/2023 11:08	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 11:08	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 11:08	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 11:08	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 11:08	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 11:08	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 11:08	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 11:08	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 11:08	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 11:08	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 11:08	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 11:08	WG2169514
Xylenes, Total	1.51		0.191	0.260	1	11/12/2023 11:08	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 11:08	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 11:08	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 11:08	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 11:08	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 11:08	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 11:08*	WG2169514
(S) 4-Bromofluorobenzene	*86.6*			*67.0-138*		*11/12/2023 11:08*	WG2169514
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/12/2023 11:08*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	10.4	C5 J4	0.548	1.00	1	11/12/2023 11:27	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 11:27	WG2169514
Benzene	0.0550		0.0160	0.0400	1	11/12/2023 11:27	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 11:27	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 11:27	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 11:27	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 11:27	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 11:27	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 11:27	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 11:27	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 11:27	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 11:27	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 11:27	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 11:27	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 11:27	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 11:27	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 11:27	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 11:27	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 11:27	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 11:27	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 11:27	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 11:27	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 11:27	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 11:27	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 11:27	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 11:27	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 11:27	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 11:27	WG2169514
cis-1,2-Dichloroethene	0.131		0.0276	0.100	1	11/12/2023 11:27	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 11:27	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 11:27	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 11:27	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 11:27	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 11:27	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 11:27	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 11:27	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 11:27	WG2169514
Ethylbenzene	0.295		0.0212	0.100	1	11/12/2023 11:27	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 11:27	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 11:27	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 11:27	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 11:27	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 11:27	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 11:27	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 11:27	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 11:27	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 11:27	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 11:27	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 11:27	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 11:27	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 11:27	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 11:27	WG2169514
Toluene	1.38		0.0500	0.200	1	11/12/2023 11:27	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 11:27	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 11:27	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 11:27	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 11:27	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 11:27	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 11:27	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 11:27	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 11:27	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 11:27	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 11:27	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 11:27	WG2169514
Xylenes, Total	1.50		0.191	0.260	1	11/12/2023 11:27	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 11:27	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 11:27	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 11:27	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 11:27	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 11:27	WG2169514
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 11:27*	WG2169514
(S) 4-Bromofluorobenzene	*85.4*			*67.0-138*		*11/12/2023 11:27*	WG2169514
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/12/2023 11:27*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.64	C5 J4	0.548	1.00	1	11/12/2023 11:46	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 11:46	WG2169514
Benzene	0.153		0.0160	0.0400	1	11/12/2023 11:46	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 11:46	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 11:46	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 11:46	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 11:46	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 11:46	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 11:46	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 11:46	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 11:46	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 11:46	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 11:46	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 11:46	WG2169514
Chloroform	0.0770	J	0.0166	0.100	1	11/12/2023 11:46	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 11:46	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 11:46	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 11:46	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 11:46	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 11:46	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 11:46	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 11:46	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 11:46	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 11:46	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 11:46	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 11:46	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 11:46	WG2169514
1,1-Dichloroethene	0.0470	J	0.0200	0.100	1	11/12/2023 11:46	WG2169514
cis-1,2-Dichloroethene	28.0		0.0276	0.100	1	11/12/2023 11:46	WG2169514
trans-1,2-Dichloroethene	0.151	J	0.0572	0.200	1	11/12/2023 11:46	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 11:46	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 11:46	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 11:46	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 11:46	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 11:46	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 11:46	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 11:46	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 11:46	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 11:46	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 11:46	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 11:46	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 11:46	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 11:46	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 11:46	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 11:46	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 11:46	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 11:46	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 11:46	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 11:46	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 11:46	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 11:46	WG2169514
Tetrachloroethene	0.0520	J	0.0280	0.100	1	11/12/2023 11:46	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 11:46	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 11:46	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 11:46	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 11:46	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 11:46	WG2169514
Trichloroethene	1.04		0.0160	0.0400	1	11/12/2023 11:46	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 11:46	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 11:46	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 11:46	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 11:46	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 11:46	WG2169514
Vinyl chloride	0.217	C3	0.0273	0.100	1	11/12/2023 11:46	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 11:46	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 11:46	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 11:46	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 11:46	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 11:46	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 11:46	WG2169514
(S) Toluene-d8	*98.8*			*75.0-131*		*11/12/2023 11:46*	WG2169514
(S) 4-Bromofluorobenzene	*85.4*			*67.0-138*		*11/12/2023 11:46*	WG2169514
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/12/2023 11:46*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 12:05	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 12:05	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 12:05	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 12:05	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 12:05	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 12:05	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 12:05	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 12:05	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 12:05	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 12:05	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 12:05	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 12:05	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 12:05	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 12:05	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 12:05	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 12:05	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 12:05	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 12:05	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 12:05	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 12:05	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 12:05	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 12:05	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 12:05	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 12:05	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 12:05	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 12:05	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 12:05	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 12:05	WG2169514
cis-1,2-Dichloroethene	17.7		0.0276	0.100	1	11/12/2023 12:05	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 12:05	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 12:05	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 12:05	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 12:05	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 12:05	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 12:05	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 12:05	WG2169514
Di-isopropyl ether	0.0410		0.0140	0.0400	1	11/12/2023 12:05	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 12:05	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 12:05	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 12:05	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 12:05	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 12:05	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 12:05	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 12:05	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 12:05	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 12:05	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 12:05	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 12:05	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 12:05	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 12:05	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 12:05	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 12:05	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 12:05	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 12:05	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 12:05	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 12:05	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 12:05	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 12:05	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 12:05	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 12:05	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 12:05	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 12:05	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 12:05	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 12:05	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 12:05	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 12:05	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 12:05	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 12:05	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 12:05	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 12:05	WG2169514
(S) Toluene-d8	*99.7*			*75.0-131*		*11/12/2023 12:05*	WG2169514
(S) 4-Bromofluorobenzene	*85.3*			*67.0-138*		*11/12/2023 12:05*	WG2169514
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 12:05*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 12:24	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 12:24	WG2169514
Benzene	4.30		0.0160	0.0400	1	11/12/2023 12:24	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 12:24	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 12:24	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 12:24	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 12:24	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 12:24	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 12:24	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 12:24	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 12:24	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 12:24	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 12:24	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 12:24	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 12:24	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 12:24	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 12:24	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 12:24	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 12:24	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 12:24	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 12:24	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 12:24	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 12:24	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 12:24	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 12:24	WG2169514
1,1-Dichloroethane	0.0380	J	0.0230	0.100	1	11/12/2023 12:24	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 12:24	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 12:24	WG2169514
cis-1,2-Dichloroethene	0.154		0.0276	0.100	1	11/12/2023 12:24	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 12:24	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 12:24	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 12:24	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 12:24	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 12:24	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 12:24	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 12:24	WG2169514
Di-isopropyl ether	0.106		0.0140	0.0400	1	11/12/2023 12:24	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 12:24	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 12:24	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 12:24	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 12:24	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 12:24	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 12:24	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 12:24	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 12:24	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 12:24	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 12:24	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 12:24	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 12:24	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 12:24	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 12:24	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 12:24	WG2169514
Toluene	0.0790	J	0.0500	0.200	1	11/12/2023 12:24	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 12:24	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 12:24	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 12:24	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 12:24	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 12:24	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 12:24	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 12:24	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 12:24	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 12:24	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 12:24	WG2169514
Vinyl chloride	4.58	C3	0.0273	0.100	1	11/12/2023 12:24	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 12:24	WG2169514
Ethyl Ether	0.101		0.0170	0.100	1	11/12/2023 12:24	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 12:24	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 12:24	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 12:24	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 12:24	WG2169514
(S) Toluene-d8	*99.2*			*75.0-131*		*11/12/2023 12:24*	WG2169514
(S) 4-Bromofluorobenzene	*85.7*			*67.0-138*		*11/12/2023 12:24*	WG2169514
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/12/2023 12:24*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 12:43	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 12:43	WG2169514
Benzene	0.0280	J	0.0160	0.0400	1	11/12/2023 12:43	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 12:43	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 12:43	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 12:43	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 12:43	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 12:43	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 12:43	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 12:43	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 12:43	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 12:43	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 12:43	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 12:43	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 12:43	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 12:43	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 12:43	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 12:43	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 12:43	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 12:43	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 12:43	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 12:43	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 12:43	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 12:43	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 12:43	WG2169514
1,1-Dichloroethane	0.0560	J	0.0230	0.100	1	11/12/2023 12:43	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 12:43	WG2169514
1,1-Dichloroethene	0.0290	J	0.0200	0.100	1	11/12/2023 12:43	WG2169514
cis-1,2-Dichloroethene	40.3		0.0276	0.100	1	11/12/2023 12:43	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 12:43	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 12:43	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 12:43	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 12:43	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 12:43	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 12:43	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 12:43	WG2169514
Di-isopropyl ether	0.115		0.0140	0.0400	1	11/12/2023 12:43	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 12:43	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 12:43	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 12:43	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 12:43	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 12:43	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 12:43	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 12:43	WG2169514
Methyl tert-butyl ether	0.0170	J	0.0118	0.0400	1	11/12/2023 12:43	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 12:43	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 12:43	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 12:43	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 12:43	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 12:43	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 12:43	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 12:43	WG2169514
Toluene	0.0680	J	0.0500	0.200	1	11/12/2023 12:43	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 12:43	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 12:43	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 12:43	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 12:43	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 12:43	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 12:43	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 12:43	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 12:43	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 12:43	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 12:43	WG2169514
Vinyl chloride	0.289	C3	0.0273	0.100	1	11/12/2023 12:43	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 12:43	WG2169514
Ethyl Ether	0.178		0.0170	0.100	1	11/12/2023 12:43	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 12:43	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 12:43	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 12:43	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 12:43	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 12:43*	WG2169514
(S) 4-Bromofluorobenzene	*84.1*			*67.0-138*		*11/12/2023 12:43*	WG2169514
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2023 12:43*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.51	C5 J4	0.548	1.00	1	11/12/2023 13:02	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 13:02	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 13:02	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 13:02	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 13:02	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 13:02	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 13:02	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 13:02	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 13:02	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 13:02	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 13:02	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 13:02	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 13:02	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 13:02	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 13:02	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 13:02	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 13:02	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 13:02	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 13:02	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 13:02	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 13:02	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 13:02	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 13:02	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 13:02	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 13:02	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 13:02	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 13:02	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 13:02	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 13:02	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 13:02	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 13:02	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 13:02	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 13:02	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 13:02	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 13:02	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 13:02	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 13:02	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 13:02	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 13:02	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 13:02	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 13:02	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 13:02	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 13:02	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 13:02	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 13:02	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 13:02	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 13:02	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 13:02	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 13:02	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 13:02	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 13:02	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 13:02	WG2169514
Toluene	0.143	J	0.0500	0.200	1	11/12/2023 13:02	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 13:02	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 13:02	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 13:02	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 13:02	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 13:02	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 13:02	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 13:02	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 13:02	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 13:02	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 13:02	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 13:02	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 13:02	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 13:02	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 13:02	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 13:02	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 13:02	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 13:02	WG2169514
(S) Toluene-d8	*99.1*			*75.0-131*		*11/12/2023 13:02*	WG2169514
(S) 4-Bromofluorobenzene	*84.5*			*67.0-138*		*11/12/2023 13:02*	WG2169514
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/12/2023 13:02*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.26	C5 J4	0.548	1.00	1	11/12/2023 13:22	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 13:22	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 13:22	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 13:22	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 13:22	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 13:22	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 13:22	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 13:22	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 13:22	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 13:22	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 13:22	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 13:22	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 13:22	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 13:22	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 13:22	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 13:22	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 13:22	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 13:22	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 13:22	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 13:22	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 13:22	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 13:22	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 13:22	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 13:22	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 13:22	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 13:22	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 13:22	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 13:22	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 13:22	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 13:22	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 13:22	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 13:22	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 13:22	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 13:22	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 13:22	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 13:22	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 13:22	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 13:22	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 13:22	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 13:22	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 13:22	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 13:22	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 13:22	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 13:22	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 13:22	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 13:22	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 13:22	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 13:22	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 13:22	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 13:22	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 13:22	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 13:22	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 13:22	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 13:22	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 13:22	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 13:22	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 13:22	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 13:22	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 13:22	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 13:22	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 13:22	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 13:22	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 13:22	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 13:22	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 13:22	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 13:22	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 13:22	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 13:22	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 13:22	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 13:22	WG2169514
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 13:22*	WG2169514
(S) 4-Bromofluorobenzene	*81.9*			*67.0-138*		*11/12/2023 13:22*	WG2169514
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/12/2023 13:22*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 13:41	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 13:41	WG2169514
Benzene	20.4		0.0160	0.0400	1	11/12/2023 13:41	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 13:41	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 13:41	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 13:41	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 13:41	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 13:41	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 13:41	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 13:41	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 13:41	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 13:41	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 13:41	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 13:41	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 13:41	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 13:41	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 13:41	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 13:41	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 13:41	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 13:41	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 13:41	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 13:41	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 13:41	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 13:41	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 13:41	WG2169514
1,1-Dichloroethane	0.0510	J	0.0230	0.100	1	11/12/2023 13:41	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 13:41	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 13:41	WG2169514
cis-1,2-Dichloroethene	5.42		0.0276	0.100	1	11/12/2023 13:41	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 13:41	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 13:41	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 13:41	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 13:41	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 13:41	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 13:41	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 13:41	WG2169514
Di-isopropyl ether	0.364		0.0140	0.0400	1	11/12/2023 13:41	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 13:41	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 13:41	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 13:41	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 13:41	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 13:41	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 13:41	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 13:41	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 13:41	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 13:41	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 13:41	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 13:41	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 13:41	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 13:41	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 13:41	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 13:41	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 13:41	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 13:41	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 13:41	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 13:41	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 13:41	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 13:41	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 13:41	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 13:41	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 13:41	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 13:41	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 13:41	WG2169514
Vinyl chloride	27.8	C3	0.0273	0.100	1	11/12/2023 13:41	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 13:41	WG2169514
Ethyl Ether	0.103		0.0170	0.100	1	11/12/2023 13:41	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 13:41	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 13:41	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 13:41	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 13:41	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 13:41*	WG2169514
(S) 4-Bromofluorobenzene	*85.9*			*67.0-138*		*11/12/2023 13:41*	WG2169514
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 13:41*	WG2169514

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 14:00	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:00	WG2169514
Benzene	6.74		0.0160	0.0400	1	11/12/2023 14:00	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:00	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:00	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 14:00	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:00	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 14:00	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:00	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:00	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:00	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:00	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:00	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:00	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:00	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:00	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:00	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:00	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 14:00	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:00	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:00	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:00	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:00	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:00	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:00	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:00	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:00	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:00	WG2169514
cis-1,2-Dichloroethene	0.195		0.0276	0.100	1	11/12/2023 14:00	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:00	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:00	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:00	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:00	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:00	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:00	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 14:00	WG2169514
Di-isopropyl ether	0.0550		0.0140	0.0400	1	11/12/2023 14:00	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:00	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:00	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 14:00	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:00	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 14:00	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:00	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:00	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:00	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 14:00	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:00	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 14:00	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:00	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:00	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:00	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:00	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:00	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 14:00	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 14:00	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:00	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:00	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:00	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:00	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:00	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:00	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:00	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:00	WG2169514
Vinyl chloride	0.669	C3	0.0273	0.100	1	11/12/2023 14:00	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:00	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 14:00	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:00	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:00	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:00	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:00	WG2169514
(S) Toluene-d8	*98.8*			*75.0-131*		*11/12/2023 14:00*	WG2169514
(S) 4-Bromofluorobenzene	*81.9*			*67.0-138*		*11/12/2023 14:00*	WG2169514
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 14:00*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 14:19	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:19	WG2169514
Benzene	0.172		0.0160	0.0400	1	11/12/2023 14:19	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:19	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:19	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 14:19	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:19	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 14:19	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:19	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:19	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:19	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:19	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:19	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:19	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:19	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:19	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:19	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:19	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 14:19	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:19	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:19	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:19	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:19	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:19	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:19	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:19	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:19	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:19	WG2169514
cis-1,2-Dichloroethene	8.39		0.0276	0.100	1	11/12/2023 14:19	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:19	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:19	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:19	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:19	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:19	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:19	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 14:19	WG2169514
Di-isopropyl ether	0.0640		0.0140	0.0400	1	11/12/2023 14:19	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:19	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:19	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 14:19	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:19	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 14:19	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:19	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:19	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:19	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 14:19	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:19	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 14:19	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:19	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:19	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:19	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:19	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:19	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 14:19	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 14:19	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:19	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:19	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:19	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:19	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:19	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:19	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:19	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:19	WG2169514
Vinyl chloride	20.7	C3	0.0273	0.100	1	11/12/2023 14:19	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:19	WG2169514
Ethyl Ether	0.0890	J	0.0170	0.100	1	11/12/2023 14:19	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:19	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:19	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:19	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:19	WG2169514
(S) Toluene-d8	*99.9*			*75.0-131*		*11/12/2023 14:19*	WG2169514
(S) 4-Bromofluorobenzene	*84.8*			*67.0-138*		*11/12/2023 14:19*	WG2169514
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/12/2023 14:19*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 14:38	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:38	WG2169514
Benzene	4.90		0.0160	0.0400	1	11/12/2023 14:38	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:38	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:38	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 14:38	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:38	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 14:38	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:38	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:38	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:38	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:38	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:38	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:38	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:38	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:38	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:38	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:38	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 14:38	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:38	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:38	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:38	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:38	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:38	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:38	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:38	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:38	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:38	WG2169514
cis-1,2-Dichloroethene	0.162		0.0276	0.100	1	11/12/2023 14:38	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:38	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:38	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:38	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:38	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:38	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:38	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 14:38	WG2169514
Di-isopropyl ether	0.198		0.0140	0.0400	1	11/12/2023 14:38	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:38	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:38	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 14:38	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:38	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 14:38	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:38	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:38	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:38	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 14:38	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:38	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 14:38	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:38	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:38	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:38	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:38	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:38	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 14:38	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 14:38	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:38	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:38	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:38	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:38	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:38	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:38	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:38	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:38	WG2169514
Vinyl chloride	0.953	C3	0.0273	0.100	1	11/12/2023 14:38	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:38	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 14:38	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:38	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:38	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:38	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:38	WG2169514
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 14:38*	WG2169514
(S) 4-Bromofluorobenzene	*85.8*			*67.0-138*		*11/12/2023 14:38*	WG2169514
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 14:38*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.62	C5 J4	0.548	1.00	1	11/12/2023 14:58	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:58	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 14:58	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:58	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:58	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 14:58	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:58	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 14:58	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:58	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:58	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:58	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:58	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:58	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:58	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:58	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:58	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:58	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:58	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 14:58	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:58	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:58	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:58	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:58	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:58	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:58	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:58	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:58	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:58	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 14:58	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:58	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:58	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:58	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:58	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:58	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:58	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 14:58	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 14:58	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:58	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:58	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 14:58	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:58	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 14:58	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:58	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:58	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:58	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 14:58	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:58	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 14:58	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:58	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:58	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:58	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:58	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:58	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 14:58	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 14:58	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:58	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:58	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:58	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:58	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:58	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:58	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:58	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:58	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 14:58	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:58	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 14:58	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:58	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:58	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:58	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:58	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 14:58*	WG2169514
(S) 4-Bromofluorobenzene	*86.2*			*67.0-138*		*11/12/2023 14:58*	WG2169514
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/12/2023 14:58*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.77	C5 J4	0.548	1.00	1	11/12/2023 09:12	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 09:12	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 09:12	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 09:12	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 09:12	WG2169514
Bromoform	U	C3	0.239	1.00	1	11/12/2023 09:12	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 09:12	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 09:12	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 09:12	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 09:12	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 09:12	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 09:12	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 09:12	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 09:12	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 09:12	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 09:12	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 09:12	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 09:12	WG2169514
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/12/2023 09:12	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 09:12	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 09:12	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 09:12	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 09:12	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 09:12	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 09:12	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 09:12	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 09:12	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 09:12	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 09:12	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 09:12	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 09:12	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 09:12	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 09:12	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 09:12	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 09:12	WG2169514
2,2-Dichloropropane	U	C3	0.0317	0.100	1	11/12/2023 09:12	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 09:12	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 09:12	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 09:12	WG2169514
Isopropylbenzene	U	C3	0.0345	0.100	1	11/12/2023 09:12	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 09:12	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 09:12	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 09:12	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 09:12	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 09:12	WG2169514
Naphthalene	U	C3 J4	0.124	0.500	1	11/12/2023 09:12	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 09:12	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 09:12	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 09:12	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 09:12	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 09:12	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 09:12	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 09:12	WG2169514
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/12/2023 09:12	WG2169514
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/12/2023 09:12	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 09:12	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 09:12	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 09:12	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 09:12	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 09:12	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 09:12	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 09:12	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 09:12	WG2169514
Vinyl chloride	U	C3	0.0273	0.100	1	11/12/2023 09:12	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 09:12	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 09:12	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 09:12	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 09:12	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 09:12	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 09:12	WG2169514
(S) Toluene-d8	*100*			*75.0-131*		*11/12/2023 09:12*	WG2169514
(S) 4-Bromofluorobenzene	*88.0*			*67.0-138*		*11/12/2023 09:12*	WG2169514
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 09:12*	WG2169514

Method Blank (MB)

(MB) R4002184-2 11/17/23 11:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1675846-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1675846-01 11/17/23 12:04 • (DUP) R4002184-3 11/17/23 12:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	79000	79000	1	0.00143		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4002184-1 11/17/23 11:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	95300	95.3	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4001520-1 11/10/23 10:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1676320-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1676320-03 11/10/23 18:00 • (DUP) R4001520-3 11/10/23 18:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	2010	1950	1	3.44		15
Nitrate	U	U	1	0.000		15
Sulfate	1820	1780	1	1.99	J	15

L1676404-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1676404-03 11/10/23 21:25 • (DUP) R4001520-6 11/10/23 21:39

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	1260	1190	1	5.78		15
Nitrate	314	293	1	7.12		15
Sulfate	1300	1230	1	5.58	J	15

Laboratory Control Sample (LCS)

(LCS) R4001520-2 11/10/23 10:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40100	100	80.0-120	
Nitrate	8000	7730	96.7	80.0-120	
Sulfate	40000	40000	100	80.0-120	

L1676320-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676320-03 11/10/23 18:00 • (MS) R4001520-4 11/10/23 18:27 • (MSD) R4001520-5 11/10/23 18:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	2010	41600	41800	99.0	99.5	1	80.0-120			0.486	15
Nitrate	8000	U	7370	7360	92.1	92.0	1	80.0-120			0.140	15
Sulfate	40000	1820	39500	39700	94.3	94.6	1	80.0-120			0.304	15

L1676404-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676404-03 11/10/23 21:25 • (MS) R4001520-7 11/10/23 22:20 • (MSD) R4001520-8 11/10/23 22:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	1260	40300	40800	97.6	98.9	1	80.0-120			1.33	15
Nitrate	8000	314	7910	7960	94.9	95.6	1	80.0-120			0.742	15
Sulfate	40000	1300	39500	40300	95.6	97.4	1	80.0-120			1.78	15

QUALITY CONTROL SUMMARY

L1676327-05

Method Blank (MB)

(MB) R4006249-2 11/29/23 00:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	162	J	102	1000

L1676015-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676015-01 11/29/23 02:14 • (DUP) R4006249-5 11/29/23 02:31

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	156	U	1	200	P1	20

L1676304-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1676304-05 11/29/23 08:02 • (DUP) R4006249-8 11/29/23 08:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	561	555	1	1.02	J	20

Laboratory Control Sample (LCS)

(LCS) R4006249-1 11/29/23 00:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24500	97.9	85.0-115	

L1674653-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1674653-04 11/29/23 01:12 • (MS) R4006249-3 11/29/23 01:34 • (MSD) R4006249-4 11/29/23 01:57

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	U	24500	24700	97.8	99.0	1	85.0-115			1.18	20

L1676304-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676304-04 11/29/23 06:57 • (MS) R4006249-6 11/29/23 07:21 • (MSD) R4006249-7 11/29/23 07:44

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	450	25500	25300	100	99.4	1	85.0-115			0.709	20

Method Blank (MB)

(MB) R4002451-6 11/20/23 17:14

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	69.2	J	28.1	100
Manganese	1.87	J	0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4002451-2 11/20/23 16:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	1060	106	80.0-120	
Manganese	50.0	51.8	104	80.0-120	

L1676327-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676327-05 11/20/23 16:38 • (MS) R4002451-4 11/20/23 16:45 • (MSD) R4002451-5 11/20/23 16:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	147	1210	1230	106	109	1	75.0-125			1.88	20
Manganese	50.0	1030	1080	1070	94.1	70.1	1	75.0-125		V	1.12	20

Method Blank (MB)

(MB) R4001481-1 11/17/23 12:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1676304-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676304-01 11/17/23 12:26 • (DUP) R4001481-4 11/17/23 14:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1676602-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1676602-05 11/17/23 14:22 • (DUP) R4001481-5 11/17/23 15:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4001481-2 11/17/23 12:21 • (LCSD) R4001481-6 11/17/23 16:03

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	71.2	67.8	105	100	85.0-115			4.89	20
Methane	67.8	71.2	66.9	105	98.7	85.0-115			6.23	20
Ethane	129	119	119	92.2	92.2	85.0-115			0.000	20
Ethane	129	119	117	92.2	90.7	85.0-115			1.69	20
Ethene	127	119	119	93.7	93.7	85.0-115			0.000	20
Ethene	127	119	117	93.7	92.1	85.0-115			1.69	20

Method Blank (MB)

(MB) R4003157-3 11/12/23 08:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4003157-3 11/12/23 08:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*99.1*			*75.0-131*
(S) 4-Bromofluorobenzene	*83.6*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*

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

(LCS) R4003157-1 11/12/23 07:18 • (LCSD) R4003157-2 11/12/23 07:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	40.9	42.5	164	170	10.0-160	J4	J4	3.84	31
Acrylonitrile	25.0	22.2	23.9	88.8	95.6	45.0-153			7.38	22
Benzene	5.00	4.61	4.63	92.2	92.6	70.0-123			0.433	20
Bromobenzene	5.00	4.90	4.82	98.0	96.4	73.0-121			1.65	20
Bromodichloromethane	5.00	4.77	4.98	95.4	99.6	73.0-121			4.31	20
Bromoform	5.00	3.88	4.17	77.6	83.4	64.0-132			7.20	20
Bromomethane	5.00	4.26	4.51	85.2	90.2	56.0-147			5.70	20
n-Butylbenzene	5.00	3.87	3.86	77.4	77.2	68.0-135			0.259	20
sec-Butylbenzene	5.00	4.67	4.48	93.4	89.6	74.0-130			4.15	20
tert-Butylbenzene	5.00	4.37	5.07	87.4	101	75.0-127			14.8	20
Carbon tetrachloride	5.00	4.65	4.93	93.0	98.6	66.0-128			5.85	20
Chlorobenzene	5.00	4.42	4.61	88.4	92.2	76.0-128			4.21	20
Chlorodibromomethane	5.00	4.57	4.53	91.4	90.6	74.0-127			0.879	20
Chloroethane	5.00	4.29	4.61	85.8	92.2	61.0-134			7.19	20
Chloroform	5.00	4.98	5.24	99.6	105	72.0-123			5.09	20
Chloromethane	5.00	4.66	4.69	93.2	93.8	51.0-138			0.642	20
2-Chlorotoluene	5.00	4.99	4.94	99.8	98.8	75.0-124			1.01	20
4-Chlorotoluene	5.00	4.87	5.02	97.4	100	75.0-124			3.03	20
1,2-Dibromo-3-Chloropropane	5.00	3.49	3.89	69.8	77.8	59.0-130			10.8	20
1,2-Dibromoethane	5.00	4.39	4.54	87.8	90.8	74.0-128			3.36	20
Dibromomethane	5.00	4.82	4.96	96.4	99.2	75.0-122			2.86	20
1,2-Dichlorobenzene	5.00	4.09	4.28	81.8	85.6	76.0-124			4.54	20
1,3-Dichlorobenzene	5.00	4.69	4.81	93.8	96.2	76.0-125			2.53	20
1,4-Dichlorobenzene	5.00	4.48	4.54	89.6	90.8	77.0-121			1.33	20
Dichlorodifluoromethane	5.00	4.69	4.75	93.8	95.0	43.0-156			1.27	20
1,1-Dichloroethane	5.00	4.54	4.64	90.8	92.8	70.0-127			2.18	20
1,2-Dichloroethane	5.00	4.92	4.94	98.4	98.8	65.0-131			0.406	20
1,1-Dichloroethene	5.00	4.53	4.66	90.6	93.2	65.0-131			2.83	20
cis-1,2-Dichloroethene	5.00	4.64	4.58	92.8	91.6	73.0-125			1.30	20
trans-1,2-Dichloroethene	5.00	4.64	4.67	92.8	93.4	71.0-125			0.644	20
1,2-Dichloropropane	5.00	4.12	4.31	82.4	86.2	74.0-125			4.51	20
1,1-Dichloropropene	5.00	4.67	4.95	93.4	99.0	73.0-125			5.82	20
1,3-Dichloropropane	5.00	4.58	4.56	91.6	91.2	80.0-125			0.438	20
cis-1,3-Dichloropropene	5.00	4.09	4.36	81.8	87.2	76.0-127			6.39	20
trans-1,3-Dichloropropene	5.00	4.39	4.51	87.8	90.2	73.0-127			2.70	20
2,2-Dichloropropane	5.00	3.71	3.69	74.2	73.8	59.0-135			0.541	20
Di-isopropyl ether	5.00	4.51	4.79	90.2	95.8	60.0-136			6.02	20
Ethylbenzene	5.00	4.34	4.55	86.8	91.0	74.0-126			4.72	20
Hexachloro-1,3-butadiene	5.00	4.17	3.89	83.4	77.8	57.0-150			6.95	20
Isopropylbenzene	5.00	3.89	4.14	77.8	82.8	72.0-127			6.23	20

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

(LCS) R4003157-1 11/12/23 07:18 • (LCSD) R4003157-2 11/12/23 07:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.16	4.27	83.2	85.4	72.0-133			2.61	20
2-Butanone (MEK)	25.0	23.4	34.2	93.6	137	30.0-160		J3	37.5	24
Methylene Chloride	5.00	4.40	4.70	88.0	94.0	68.0-123			6.59	20
4-Methyl-2-pentanone (MIBK)	25.0	24.0	24.5	96.0	98.0	56.0-143			2.06	20
Methyl tert-butyl ether	5.00	4.92	4.73	98.4	94.6	66.0-132			3.94	20
Naphthalene	5.00	2.74	2.90	54.8	58.0	59.0-130	J4	J4	5.67	20
n-Propylbenzene	5.00	4.85	4.97	97.0	99.4	74.0-126			2.44	20
Styrene	5.00	3.68	3.76	73.6	75.2	72.0-127			2.15	20
1,1,1,2-Tetrachloroethane	5.00	4.34	4.43	86.8	88.6	74.0-129			2.05	20
1,1,2,2-Tetrachloroethane	5.00	4.23	4.56	84.6	91.2	68.0-128			7.51	20
1,1,2-Trichlorotrifluoroethane	5.00	5.03	4.92	101	98.4	61.0-139			2.21	20
Tetrachloroethene	5.00	4.61	4.50	92.2	90.0	70.0-136			2.41	20
Toluene	5.00	4.55	4.61	91.0	92.2	75.0-121			1.31	20
1,2,3-Trichlorobenzene	5.00	3.27	3.35	65.4	67.0	59.0-139			2.42	20
1,2,4-Trichlorobenzene	5.00	3.31	3.18	66.2	63.6	62.0-137			4.01	20
1,1,1-Trichloroethane	5.00	4.70	5.09	94.0	102	69.0-126			7.97	20
1,1,2-Trichloroethane	5.00	4.68	4.85	93.6	97.0	78.0-123			3.57	20
Trichloroethene	5.00	5.40	5.18	108	104	76.0-126			4.16	20
Trichlorofluoromethane	5.00	4.18	4.82	83.6	96.4	61.0-142			14.2	20
1,2,3-Trichloropropane	5.00	5.60	5.61	112	112	67.0-129			0.178	20
1,2,4-Trimethylbenzene	5.00	4.55	4.44	91.0	88.8	70.0-126			2.45	20
1,2,3-Trimethylbenzene	5.00	4.45	4.48	89.0	89.6	74.0-124			0.672	20
1,3,5-Trimethylbenzene	5.00	4.61	4.66	92.2	93.2	73.0-127			1.08	20
Vinyl chloride	5.00	3.78	4.06	75.6	81.2	63.0-134			7.14	20
Xylenes, Total	15.0	12.3	12.6	82.0	84.0	72.0-127			2.41	20
Ethyl Ether	5.00	4.79	4.85	95.8	97.0	64.0-137			1.24	20
Tetrahydrofuran	5.00	5.39	5.47	108	109	37.0-146			1.47	24
Iodomethane	25.0	24.6	25.8	98.4	103	74.0-134			4.76	20
Allyl chloride	25.0	22.3	23.9	89.2	95.6	70.0-131			6.93	20
Trans-1,4-Dichloro-2-butene	5.00	4.06	4.11	81.2	82.2	45.0-143			1.22	20
(S) Toluene-d8				*97.7*	*99.7*	*75.0-131*				
(S) 4-Bromofluorobenzene				*88.2*	*88.4*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*107*	*109*	*70.0-130*				

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

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [5]	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

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

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

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

Company Name/Address:

PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:

Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Analysis / Container / Preservative

Chain of Custody

Pace PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1676327

G184

Acctnum: PESENVSWA
Template: T240736
Prelogin: P1033818
PM: 546 - Jared Starkey
PB: 10/26/23 Cam
Shipped Via:

Report to: ~~Bill Haldeman~~ Erik Hedberg

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project # 443022-1413001.10.70

Lab Project # PESENVSWA-ALP

Collected by (print): N. Wisdom

Site/Facility ID #

P.O. # 443018-1413001.~~05.601~~ 10.701

Collected by (signature):

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

Quote #

Date Results Needed

Immediately Packed on Ice N ___ Y ✓

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-148-110923	Grab	GW	—	11/9/23	1455	3							X		-01
MW123-110923	↓	GW	↓	↓	1409	3							X		-02
MW-342-110923	↓	GW	↓	↓	1243	3							X		-03
MW-336-110923	↓	GW	↓	↓	1203	3							X		-04
MW-335-110923	↓	GW	↓	↓	1127	10	X	X		X	X	X	X		-05
MW-325-110923	↓	GW	↓	↓	1052	3							X		-06
MW-326R-110923	↓	GW	↓	↓	1002	3							X		-07
MW-995-110923	↓	GW	↓	↓	1200	3							X		-08
MW-351-110923	↓	GW	↓	↓	0922	3							X		-09
FMW-131-110923	↓	GW	↓	↓	1024	3							X		-10

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

Remarks: Tier 2 lab QA/QC (batch QC ok)

pH ______ Temp ______
Flow ______ Other ______

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

Samples returned via:
__ UPS __ FedEx __ Courier ________

Tracking # 6643 4313 3301

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	
Natalie Wisdom	11/9/23	1645		Trip Blank Received: Yes / No HCL / MeoH TBR
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: MSA8 °C 0.1+0=0.1 Bottles Received: 64
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature) Eric [signature] 17	Date: 11-10-23 Time: 900

If preservation required by Login: Date/Time

Hold: PH-10BDH4321 TRC-2352362 CR6-20221V PH-10BDH4321 TRC-236276 CR6-20221V

Condition: NCF / OK

Pace® Location Requested (City/State):

CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR Code for instructions

L1676327

Company Name: PES Environmental	Contact/Report To: Erik Hedberg
Street Address: 2101 4th Ave Seattle, WA 98121	Phone #: 206-529-3980
	E-Mail: erik.hedberg@nv5.com
	Cc E-Mail: jessica.babb@nv5.com
Customer Project #: 1413001.10.701	Invoice to:
Project Name: American Linen	Invoice E-mail:
Site Collection Info/Facility ID (as applicable):	Purchase Order # (if applicable):
	Quote #:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET	County / State origin of sample(s):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Regulatory Program (DW, RCRA, etc.) as applicable:
	Rush (Pre-approval required): [ ] 2 Day [ ] 3 day [ ] 5 day [ ] Other
	Date Results Requested:
	DW PWSID # or WW Permit # as applicable:
	Field Filtered (if applicable): [ ] Yes [ ] No
	Analysis:

Specify Container Size **

Identify Container Preservative Type***

Analysis Requested

**Container Size: (1) 1L, (2) 500mL, (3) 250mL, (4) 125mL, (5) 100mL, (6) 40mL vial, (7) EnCore, (8) TerraCore, (9) Other

*** Preservative Types: (1) None, (2) HNO3, (3) H2SO4, (4) HCl, (5) NaOH, (6) Zn Acetate, (7) NaHSO4, (8) Sod. Thiosulfate, (9) Ascorbic Acid, (10) MeOH, (11) Other

Lab Use Only: Proj. Mgr: / AcctNum / Client ID: / Table #: / Profile / Template: / Prelog / Bottle Ord. ID:

Preservation non-conformance identified for sample.

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SS), Oil (OL), Wipe (WP), Tissue (TS), Bioassay (B), Vapor (V), Other (OT), Surface Water (SW), Sediment (SED), Sludge (SL), Caulk

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res. CL2	Number & Type of Containers: Plastic	Number & Type of Containers: Glass	ALK	Cl-, Nitrate, SO4	Fe, Mn	RSK	TOC	V8260	Sample Comment
GEI-2-110923	W	G	11/9/23	1133					3						X	-11
FMW-137-110923				1333											X	-12
MW-340-110923				926											X	-13
MW-327-110923				1003											X	-14
MW-341-110923				1040											X	-15
MW-328-110923				1115											X	-16
MW-329-110923				1206											X	-17
MW128-110923				1258											X	-18
MW-334-110923		↓		1414			(NEW)								X	-19
TB-110923	↓	—	↓	—					↓ 1						X	-20

Customer Remarks / Special Conditions / Possible Hazards:

Collected By: Printed Name: Natalie Wisdom

Signature: Natalie Wisdom

Additional Instructions from Pace®:

# Coolers:	Thermometer ID:	Correction Factor (°C):	Obs. Temp. (°C):	Corrected Temp. (°C):

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Natalie Wisdom	11/9/23 1645	Ei Hlaw 17 / Pace	11-10-23 / 900
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

Tracking Number: 6643 4313 3301

Delivered by: [ ] In- Person [ ] Courier [ ] FedEX [ ] UPS [ ] Other

Page: 1 of 2

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

December 04, 2023

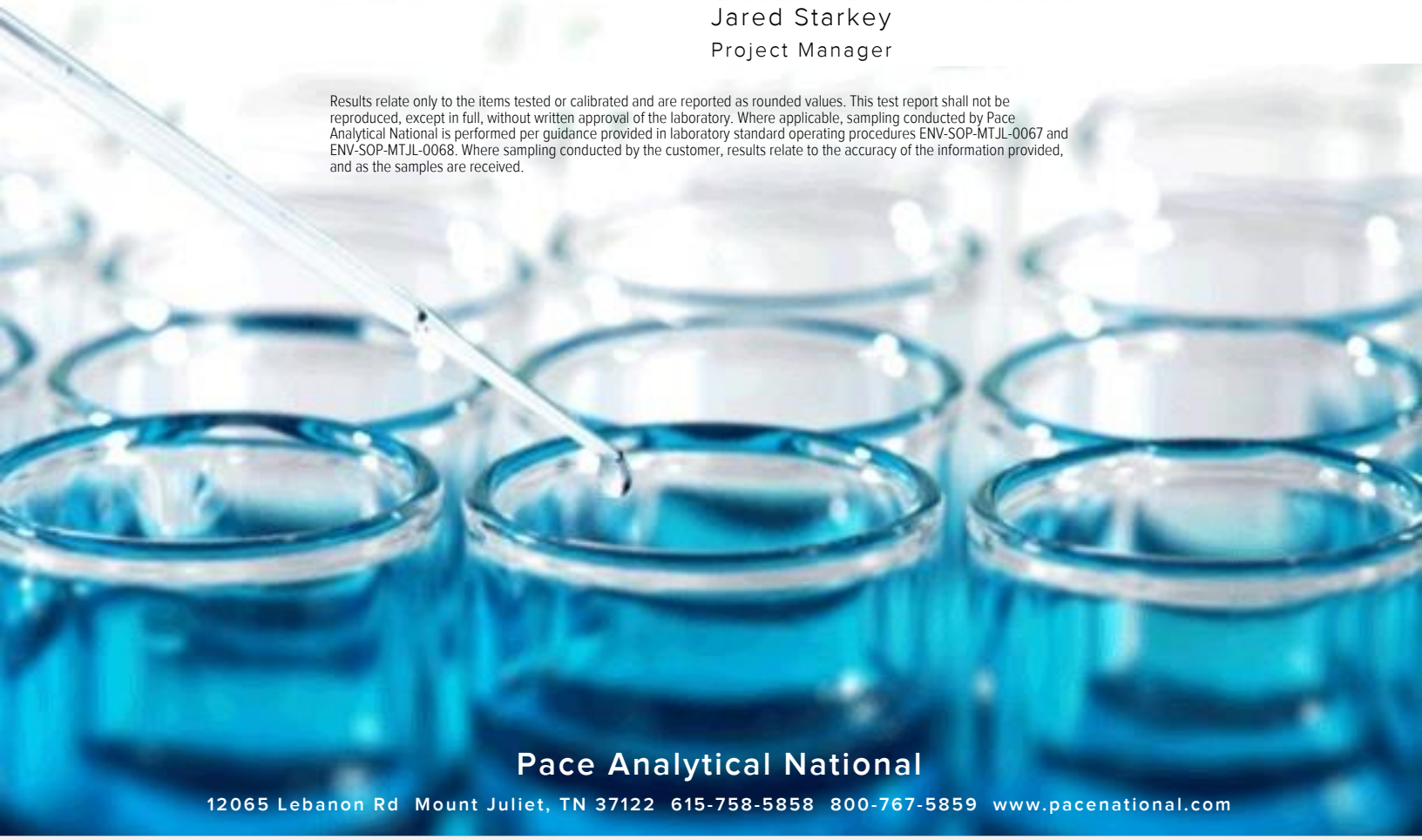
PES Environmental, Inc.- WA

Sample Delivery Group:	L1676892
Samples Received:	11/11/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

MW-147-111023 L1676892-01 GW

Collected by | Collected date/time 11/10/23 10:40 | Received date/time 11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2172434	1	11/16/23 12:18	11/16/23 12:18	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2169403	1	11/11/23 19:41	11/11/23 19:41	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2179167	1	12/01/23 14:47	12/01/23 14:47	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169913	1	11/20/23 06:46	11/20/23 19:04	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2173812	1	11/20/23 11:39	11/20/23 11:39	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2174693	1	11/21/23 10:04	11/21/23 10:04	AV	Mt. Juliet, TN

MW-347-111023 L1676892-02 GW

Collected by | Collected date/time 11/10/23 14:09 | Received date/time 11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2172434	1	11/16/23 12:33	11/16/23 12:33	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2169403	1	11/11/23 19:54	11/11/23 19:54	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2179167	1	12/01/23 16:28	12/01/23 16:28	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169913	1	11/20/23 06:46	11/20/23 19:07	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2173812	1	11/20/23 11:46	11/20/23 11:46	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173211	1	11/18/23 01:30	11/18/23 01:30	DWR	Mt. Juliet, TN

MW-153-111023 L1676892-03 GW

Collected by | Collected date/time 11/10/23 14:24 | Received date/time 11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173211	1	11/18/23 01:49	11/18/23 01:49	DWR	Mt. Juliet, TN

MW-154-111023 L1676892-04 GW

Collected by | Collected date/time 11/10/23 13:08 | Received date/time 11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2172434	1	11/16/23 12:43	11/16/23 12:43	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2169403	1	11/11/23 20:35	11/11/23 20:35	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2179167	1	12/01/23 16:57	12/01/23 16:57	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169913	1	11/20/23 06:46	11/20/23 19:19	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2173812	1	11/20/23 11:54	11/20/23 11:54	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2174876	10	11/21/23 13:48	11/21/23 13:48	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173211	1	11/18/23 02:08	11/18/23 02:08	DWR	Mt. Juliet, TN

MW-146-111023 L1676892-05 GW

Collected by | Collected date/time 11/10/23 12:18 | Received date/time 11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2172434	1	11/16/23 12:50	11/16/23 12:50	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2169403	1	11/11/23 20:48	11/11/23 20:48	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2179167	1	12/01/23 17:15	12/01/23 17:15	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169913	1	11/20/23 06:46	11/20/23 19:22	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2173812	1	11/20/23 12:00	11/20/23 12:00	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2174876	10	11/21/23 13:54	11/21/23 13:54	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173609	10	11/18/23 13:53	11/18/23 13:53	ACG	Mt. Juliet, TN

MW-306-111023 L1676892-06 GW

Collected by	Collected date/time	Received date/time
	11/10/23 11:01	11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173609	1	11/18/23 07:51	11/18/23 07:51	ACG	Mt. Juliet, TN

MW-307-111023 L1676892-07 GW

Collected by	Collected date/time	Received date/time
	11/10/23 10:08	11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173609	1	11/18/23 08:10	11/18/23 08:10	ACG	Mt. Juliet, TN

MW-155-111023 L1676892-08 GW

Collected by	Collected date/time	Received date/time
	11/10/23 08:48	11/11/23 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2174432	1	11/20/23 14:26	11/20/23 14:26	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2169403	1	11/11/23 21:02	11/11/23 21:02	ASM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2179167	1	12/01/23 17:29	12/01/23 17:29	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2169913	1	11/20/23 06:46	11/20/23 19:26	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2173812	1	11/20/23 12:06	11/20/23 12:06	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173609	1	11/18/23 08:29	11/18/23 08:29	ACG	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.

Jared Starkey
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	264000		8450	20000	1	11/16/2023 12:18	WG2172434

Sample Narrative:

L1676892-01 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	71300		379	1000	1	11/11/2023 19:41	WG2169403
Nitrate	72.2	J	48.0	100	1	11/11/2023 19:41	WG2169403
Sulfate	25200		594	5000	1	11/11/2023 19:41	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7020		102	1000	1	12/01/2023 14:47	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4690		28.1	100	1	11/20/2023 19:04	WG2169913
Manganese	354		0.704	5.00	1	11/20/2023 19:04	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1660		0.287	0.678	1	11/20/2023 11:39	WG2173812
Ethane	17.5		0.296	1.29	1	11/20/2023 11:39	WG2173812
Ethene	93.6		0.422	1.27	1	11/20/2023 11:39	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	C3	0.548	1.00	1	11/21/2023 10:04	WG2174693
Acrylonitrile	U		0.0760	0.500	1	11/21/2023 10:04	WG2174693
Benzene	0.0200	J	0.0160	0.0400	1	11/21/2023 10:04	WG2174693
Bromobenzene	U		0.0420	0.500	1	11/21/2023 10:04	WG2174693
Bromodichloromethane	U		0.0315	0.100	1	11/21/2023 10:04	WG2174693
Bromoform	U		0.239	1.00	1	11/21/2023 10:04	WG2174693
Bromomethane	U		0.148	0.500	1	11/21/2023 10:04	WG2174693
n-Butylbenzene	U		0.153	0.500	1	11/21/2023 10:04	WG2174693
sec-Butylbenzene	U		0.101	0.500	1	11/21/2023 10:04	WG2174693
tert-Butylbenzene	U		0.0620	0.200	1	11/21/2023 10:04	WG2174693
Carbon tetrachloride	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Chlorobenzene	U		0.0229	0.100	1	11/21/2023 10:04	WG2174693
Chlorodibromomethane	U		0.0180	0.100	1	11/21/2023 10:04	WG2174693
Chloroethane	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Chloroform	U		0.0166	0.100	1	11/21/2023 10:04	WG2174693
Chloromethane	U	C3	0.0556	0.500	1	11/21/2023 10:04	WG2174693
2-Chlorotoluene	U		0.0368	0.100	1	11/21/2023 10:04	WG2174693
4-Chlorotoluene	U		0.0452	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/21/2023 10:04	WG2174693
1,2-Dibromoethane	U		0.0210	0.100	1	11/21/2023 10:04	WG2174693

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/21/2023 10:04	WG2174693
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/21/2023 10:04	WG2174693
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/21/2023 10:04	WG2174693
Dichlorodifluoromethane	U		0.0327	0.100	1	11/21/2023 10:04	WG2174693
1,1-Dichloroethane	U		0.0230	0.100	1	11/21/2023 10:04	WG2174693
1,2-Dichloroethane	U		0.0190	0.100	1	11/21/2023 10:04	WG2174693
1,1-Dichloroethene	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
cis-1,2-Dichloroethene	0.921		0.0276	0.100	1	11/21/2023 10:04	WG2174693
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dichloropropane	U		0.0508	0.200	1	11/21/2023 10:04	WG2174693
1,1-Dichloropropene	U		0.0280	0.100	1	11/21/2023 10:04	WG2174693
1,3-Dichloropropane	U		0.0700	0.200	1	11/21/2023 10:04	WG2174693
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/21/2023 10:04	WG2174693
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/21/2023 10:04	WG2174693
2,2-Dichloropropane	U		0.0317	0.100	1	11/21/2023 10:04	WG2174693
Di-isopropyl ether	U		0.0140	0.0400	1	11/21/2023 10:04	WG2174693
Ethylbenzene	U		0.0212	0.100	1	11/21/2023 10:04	WG2174693
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/21/2023 10:04	WG2174693
Isopropylbenzene	U		0.0345	0.100	1	11/21/2023 10:04	WG2174693
p-Isopropyltoluene	U		0.0932	0.200	1	11/21/2023 10:04	WG2174693
2-Butanone (MEK)	U		0.500	1.00	1	11/21/2023 10:04	WG2174693
Methylene Chloride	U		0.265	1.00	1	11/21/2023 10:04	WG2174693
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/21/2023 10:04	WG2174693
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/21/2023 10:04	WG2174693
Naphthalene	U	C3	0.124	0.500	1	11/21/2023 10:04	WG2174693
n-Propylbenzene	U		0.0472	0.200	1	11/21/2023 10:04	WG2174693
Styrene	U		0.109	0.500	1	11/21/2023 10:04	WG2174693
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/21/2023 10:04	WG2174693
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/21/2023 10:04	WG2174693
Tetrachloroethene	U		0.0280	0.100	1	11/21/2023 10:04	WG2174693
Toluene	0.0720	J	0.0500	0.200	1	11/21/2023 10:04	WG2174693
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/21/2023 10:04	WG2174693
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/21/2023 10:04	WG2174693
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/21/2023 10:04	WG2174693
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/21/2023 10:04	WG2174693
Trichloroethene	U		0.0160	0.0400	1	11/21/2023 10:04	WG2174693
Trichlorofluoromethane	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
1,2,3-Trichloropropane	U		0.204	0.500	1	11/21/2023 10:04	WG2174693
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/21/2023 10:04	WG2174693
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/21/2023 10:04	WG2174693
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Vinyl chloride	6.62		0.0273	0.100	1	11/21/2023 10:04	WG2174693
Xylenes, Total	U		0.191	0.260	1	11/21/2023 10:04	WG2174693
Ethyl Ether	U		0.0170	0.100	1	11/21/2023 10:04	WG2174693
Tetrahydrofuran	0.183	C3 J	0.0900	0.500	1	11/21/2023 10:04	WG2174693
Iodomethane	U		0.242	0.500	1	11/21/2023 10:04	WG2174693
Allyl chloride	U		0.580	1.00	1	11/21/2023 10:04	WG2174693
Trans-1,4-Dichloro-2-butene	U	J3	0.0560	0.200	1	11/21/2023 10:04	WG2174693
(S) Toluene-d8	*100*			*75.0-131*		*11/21/2023 10:04*	WG2174693
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/21/2023 10:04*	WG2174693
(S) 1,2-Dichloroethane-d4	*94.5*			*70.0-130*		*11/21/2023 10:04*	WG2174693

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	210000		8450	20000	1	11/16/2023 12:33	WG2172434

Sample Narrative:

L1676892-02 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31400		379	1000	1	11/11/2023 19:54	WG2169403
Nitrate	78.0	J	48.0	100	1	11/11/2023 19:54	WG2169403
Sulfate	33400		594	5000	1	11/11/2023 19:54	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1680		102	1000	1	12/01/2023 16:28	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	634		28.1	100	1	11/20/2023 19:07	WG2169913
Manganese	116		0.704	5.00	1	11/20/2023 19:07	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1420		0.287	0.678	1	11/20/2023 11:46	WG2173812
Ethane	3.66		0.296	1.29	1	11/20/2023 11:46	WG2173812
Ethene	11.4		0.422	1.27	1	11/20/2023 11:46	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	60.9	C5	0.548	1.00	1	11/18/2023 01:30	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 01:30	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 01:30	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 01:30	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 01:30	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 01:30	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 01:30	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 01:30	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 01:30	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 01:30	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 01:30	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 01:30	WG2173211
Chloroethane	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Chloroform	U		0.0166	0.100	1	11/18/2023 01:30	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 01:30	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 01:30	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 01:30	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 01:30	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 01:30	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 01:30	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 01:30	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 01:30	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 01:30	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 01:30	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
cis-1,2-Dichloroethene	0.889		0.0276	0.100	1	11/18/2023 01:30	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 01:30	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 01:30	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 01:30	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 01:30	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 01:30	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 01:30	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 01:30	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 01:30	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 01:30	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 01:30	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 01:30	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 01:30	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 01:30	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 01:30	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 01:30	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 01:30	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 01:30	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 01:30	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 01:30	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 01:30	WG2173211
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 01:30	WG2173211
Toluene	0.0530	J	0.0500	0.200	1	11/18/2023 01:30	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 01:30	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 01:30	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 01:30	WG2173211
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 01:30	WG2173211
Trichloroethene	0.124		0.0160	0.0400	1	11/18/2023 01:30	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 01:30	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 01:30	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 01:30	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Vinyl chloride	8.19		0.0273	0.100	1	11/18/2023 01:30	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 01:30	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 01:30	WG2173211
Tetrahydrofuran	6.48		0.0900	0.500	1	11/18/2023 01:30	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 01:30	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 01:30	WG2173211
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 01:30	WG2173211
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 01:30*	WG2173211
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/18/2023 01:30*	WG2173211
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/18/2023 01:30*	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.25	C5	0.548	1.00	1	11/18/2023 01:49	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 01:49	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 01:49	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 01:49	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 01:49	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 01:49	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 01:49	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 01:49	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 01:49	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 01:49	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 01:49	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 01:49	WG2173211
Chloroethane	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Chloroform	U		0.0166	0.100	1	11/18/2023 01:49	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 01:49	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 01:49	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 01:49	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 01:49	WG2173211
Dibromomethane	U		0.0400	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 01:49	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 01:49	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 01:49	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 01:49	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 01:49	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 01:49	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
cis-1,2-Dichloroethene	0.303		0.0276	0.100	1	11/18/2023 01:49	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 01:49	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 01:49	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 01:49	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 01:49	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 01:49	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 01:49	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 01:49	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 01:49	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 01:49	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 01:49	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 01:49	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 01:49	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 01:49	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 01:49	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 01:49	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 01:49	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 01:49	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 01:49	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 01:49	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 01:49	WG2173211
Tetrachloroethene	0.0700	J	0.0280	0.100	1	11/18/2023 01:49	WG2173211
Toluene	U		0.0500	0.200	1	11/18/2023 01:49	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 01:49	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 01:49	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 01:49	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 01:49	WG2173211
Trichloroethene	0.0330	J	0.0160	0.0400	1	11/18/2023 01:49	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 01:49	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 01:49	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 01:49	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Vinyl chloride	0.231		0.0273	0.100	1	11/18/2023 01:49	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 01:49	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 01:49	WG2173211
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 01:49	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 01:49	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 01:49	WG2173211
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 01:49	WG2173211
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 01:49*	WG2173211
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/18/2023 01:49*	WG2173211
(S) 1,2-Dichloroethane-d4	*93.0*			*70.0-130*		*11/18/2023 01:49*	WG2173211

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	188000		8450	20000	1	11/16/2023 12:43	WG2172434

Sample Narrative:

L1676892-04 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	47000		379	1000	1	11/11/2023 20:35	WG2169403
Nitrate	4020		48.0	100	1	11/11/2023 20:35	WG2169403
Sulfate	65200		594	5000	1	11/11/2023 20:35	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2570		102	1000	1	12/01/2023 16:57	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	388		28.1	100	1	11/20/2023 19:19	WG2169913
Manganese	114		0.704	5.00	1	11/20/2023 19:19	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6950		2.87	6.78	10	11/21/2023 13:48	WG2174876
Ethane	14.3		0.296	1.29	1	11/20/2023 11:54	WG2173812
Ethene	U		0.422	1.27	1	11/20/2023 11:54	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 02:08	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 02:08	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 02:08	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 02:08	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 02:08	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 02:08	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 02:08	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 02:08	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 02:08	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 02:08	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 02:08	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 02:08	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 02:08	WG2173211
Chloroethane	0.118	J	0.0432	0.200	1	11/18/2023 02:08	WG2173211
Chloroform	0.0590	J	0.0166	0.100	1	11/18/2023 02:08	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 02:08	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 02:08	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 02:08	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 02:08	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 02:08	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 02:08	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 02:08	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 02:08	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 02:08	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 02:08	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
cis-1,2-Dichloroethene	0.616		0.0276	0.100	1	11/18/2023 02:08	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 02:08	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 02:08	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 02:08	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 02:08	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 02:08	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 02:08	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 02:08	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 02:08	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 02:08	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 02:08	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 02:08	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 02:08	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 02:08	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 02:08	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 02:08	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 02:08	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 02:08	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 02:08	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 02:08	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 02:08	WG2173211
Tetrachloroethene	58.1		0.0280	0.100	1	11/18/2023 02:08	WG2173211
Toluene	U		0.0500	0.200	1	11/18/2023 02:08	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 02:08	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 02:08	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 02:08	WG2173211
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 02:08	WG2173211
Trichloroethene	4.32		0.0160	0.0400	1	11/18/2023 02:08	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 02:08	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 02:08	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 02:08	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 02:08	WG2173211
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 02:08	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 02:08	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 02:08	WG2173211
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 02:08	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 02:08	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 02:08	WG2173211
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 02:08	WG2173211
(S) Toluene-d8	*100*			*75.0-131*		*11/18/2023 02:08*	WG2173211
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/18/2023 02:08*	WG2173211
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*		*11/18/2023 02:08*	WG2173211

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	610000		8450	20000	1	11/16/2023 12:50	WG2172434

Sample Narrative:
L1676892-05 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	49900		379	1000	1	11/11/2023 20:48	WG2169403
Nitrate	78.9	J	48.0	100	1	11/11/2023 20:48	WG2169403
Sulfate	7900		594	5000	1	11/11/2023 20:48	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5350		102	1000	1	12/01/2023 17:15	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10100		28.1	100	1	11/20/2023 19:22	WG2169913
Manganese	1560		0.704	5.00	1	11/20/2023 19:22	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17900		2.87	6.78	10	11/21/2023 13:54	WG2174876
Ethane	340		0.296	1.29	1	11/20/2023 12:00	WG2173812
Ethene	194		0.422	1.27	1	11/20/2023 12:00	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	11/18/2023 13:53	WG2173609
Acrylonitrile	U		0.760	5.00	10	11/18/2023 13:53	WG2173609
Benzene	U		0.160	0.400	10	11/18/2023 13:53	WG2173609
Bromobenzene	U		0.420	5.00	10	11/18/2023 13:53	WG2173609
Bromodichloromethane	U		0.315	1.00	10	11/18/2023 13:53	WG2173609
Bromoform	U		2.39	10.0	10	11/18/2023 13:53	WG2173609
Bromomethane	U		1.48	5.00	10	11/18/2023 13:53	WG2173609
n-Butylbenzene	U		1.53	5.00	10	11/18/2023 13:53	WG2173609
sec-Butylbenzene	U		1.01	5.00	10	11/18/2023 13:53	WG2173609
tert-Butylbenzene	U		0.620	2.00	10	11/18/2023 13:53	WG2173609
Carbon tetrachloride	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Chlorobenzene	U		0.229	1.00	10	11/18/2023 13:53	WG2173609
Chlorodibromomethane	U		0.180	1.00	10	11/18/2023 13:53	WG2173609
Chloroethane	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Chloroform	U		0.166	1.00	10	11/18/2023 13:53	WG2173609
Chloromethane	U		0.556	5.00	10	11/18/2023 13:53	WG2173609
2-Chlorotoluene	U		0.368	1.00	10	11/18/2023 13:53	WG2173609
4-Chlorotoluene	U		0.452	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/18/2023 13:53	WG2173609
1,2-Dibromoethane	U		0.210	1.00	10	11/18/2023 13:53	WG2173609

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.400	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dichlorobenzene	U		0.580	2.00	10	11/18/2023 13:53	WG2173609
1,3-Dichlorobenzene	U		0.680	2.00	10	11/18/2023 13:53	WG2173609
1,4-Dichlorobenzene	U		0.788	2.00	10	11/18/2023 13:53	WG2173609
Dichlorodifluoromethane	U		0.327	1.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloroethane	U		0.230	1.00	10	11/18/2023 13:53	WG2173609
1,2-Dichloroethane	U		0.190	1.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloroethene	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
cis-1,2-Dichloroethene	19.3		0.276	1.00	10	11/18/2023 13:53	WG2173609
trans-1,2-Dichloroethene	0.770	J	0.572	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dichloropropane	U		0.508	2.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloropropene	U		0.280	1.00	10	11/18/2023 13:53	WG2173609
1,3-Dichloropropane	U		0.700	2.00	10	11/18/2023 13:53	WG2173609
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/18/2023 13:53	WG2173609
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/18/2023 13:53	WG2173609
2,2-Dichloropropane	U		0.317	1.00	10	11/18/2023 13:53	WG2173609
Di-isopropyl ether	U		0.140	0.400	10	11/18/2023 13:53	WG2173609
Ethylbenzene	U		0.212	1.00	10	11/18/2023 13:53	WG2173609
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/18/2023 13:53	WG2173609
Isopropylbenzene	U		0.345	1.00	10	11/18/2023 13:53	WG2173609
p-Isopropyltoluene	U		0.932	2.00	10	11/18/2023 13:53	WG2173609
2-Butanone (MEK)	U		5.00	10.0	10	11/18/2023 13:53	WG2173609
Methylene Chloride	U		2.65	10.0	10	11/18/2023 13:53	WG2173609
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/18/2023 13:53	WG2173609
Methyl tert-butyl ether	U		0.118	0.400	10	11/18/2023 13:53	WG2173609
Naphthalene	U	C3	1.24	5.00	10	11/18/2023 13:53	WG2173609
n-Propylbenzene	U		0.472	2.00	10	11/18/2023 13:53	WG2173609
Styrene	U		1.09	5.00	10	11/18/2023 13:53	WG2173609
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/18/2023 13:53	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/18/2023 13:53	WG2173609
Tetrachloroethene	U		0.280	1.00	10	11/18/2023 13:53	WG2173609
Toluene	U		0.500	2.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.250	5.00	10	11/18/2023 13:53	WG2173609
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/18/2023 13:53	WG2173609
1,1,1-Trichloroethane	U		0.110	1.00	10	11/18/2023 13:53	WG2173609
1,1,2-Trichloroethane	U		0.353	1.00	10	11/18/2023 13:53	WG2173609
Trichloroethene	U		0.160	0.400	10	11/18/2023 13:53	WG2173609
Trichlorofluoromethane	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trichloropropane	U		2.04	5.00	10	11/18/2023 13:53	WG2173609
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/18/2023 13:53	WG2173609
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Vinyl chloride	120		0.273	1.00	10	11/18/2023 13:53	WG2173609
Xylenes, Total	U		1.91	2.60	10	11/18/2023 13:53	WG2173609
Ethyl Ether	U		0.170	1.00	10	11/18/2023 13:53	WG2173609
Tetrahydrofuran	2.79	J	0.900	5.00	10	11/18/2023 13:53	WG2173609
Iodomethane	U		2.42	5.00	10	11/18/2023 13:53	WG2173609
Allyl chloride	U		5.80	10.0	10	11/18/2023 13:53	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.560	2.00	10	11/18/2023 13:53	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 13:53*	WG2173609
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/18/2023 13:53*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/18/2023 13:53*	WG2173609

Sample Narrative:

L1676892-05 WG2173609: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.60	C5	0.548	1.00	1	11/18/2023 07:51	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 07:51	WG2173609
Benzene	U		0.0160	0.0400	1	11/18/2023 07:51	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 07:51	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 07:51	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 07:51	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 07:51	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 07:51	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 07:51	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 07:51	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 07:51	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 07:51	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 07:51	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 07:51	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 07:51	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 07:51	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 07:51	WG2173609
Dibromomethane	U		0.0400	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 07:51	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 07:51	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 07:51	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 07:51	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 07:51	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 07:51	WG2173609
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 07:51	WG2173609
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 07:51	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 07:51	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 07:51	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 07:51	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 07:51	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 07:51	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 07:51	WG2173609
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 07:51	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 07:51	WG2173609
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 07:51	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 07:51	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 07:51	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 07:51	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 07:51	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 07:51	WG2173609
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 07:51	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 07:51	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 07:51	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 07:51	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 07:51	WG2173609
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 07:51	WG2173609
Toluene	U		0.0500	0.200	1	11/18/2023 07:51	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 07:51	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 07:51	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 07:51	WG2173609

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 07:51	WG2173609
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 07:51	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 07:51	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 07:51	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 07:51	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 07:51	WG2173609
Xylenes, Total	U		0.191	0.260	1	11/18/2023 07:51	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 07:51	WG2173609
Tetrahydrofuran	0.202	J	0.0900	0.500	1	11/18/2023 07:51	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 07:51	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 07:51	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/18/2023 07:51	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 07:51*	WG2173609
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/18/2023 07:51*	WG2173609
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*		*11/18/2023 07:51*	WG2173609

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 08:10	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 08:10	WG2173609
Benzene	0.0760		0.0160	0.0400	1	11/18/2023 08:10	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 08:10	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 08:10	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 08:10	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 08:10	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 08:10	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 08:10	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 08:10	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 08:10	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 08:10	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 08:10	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 08:10	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 08:10	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 08:10	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 08:10	WG2173609
Dibromomethane	U		0.0400	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 08:10	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 08:10	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 08:10	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 08:10	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 08:10	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 08:10	WG2173609
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
cis-1,2-Dichloroethene	0.0380	J	0.0276	0.100	1	11/18/2023 08:10	WG2173609
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 08:10	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 08:10	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 08:10	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 08:10	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 08:10	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 08:10	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 08:10	WG2173609
Ethylbenzene	0.100	J	0.0212	0.100	1	11/18/2023 08:10	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 08:10	WG2173609
Isopropylbenzene	0.0480	J	0.0345	0.100	1	11/18/2023 08:10	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 08:10	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 08:10	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 08:10	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 08:10	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 08:10	WG2173609
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 08:10	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 08:10	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 08:10	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 08:10	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 08:10	WG2173609
Tetrachloroethene	0.0640	J	0.0280	0.100	1	11/18/2023 08:10	WG2173609
Toluene	0.264		0.0500	0.200	1	11/18/2023 08:10	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 08:10	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 08:10	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 08:10	WG2173609

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 08:10	WG2173609
Trichloroethene	0.0160	J	0.0160	0.0400	1	11/18/2023 08:10	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 08:10	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 08:10	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 08:10	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 08:10	WG2173609
Xylenes, Total	0.619		0.191	0.260	1	11/18/2023 08:10	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 08:10	WG2173609
Tetrahydrofuran	0.0920	J	0.0900	0.500	1	11/18/2023 08:10	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 08:10	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 08:10	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/18/2023 08:10	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 08:10*	WG2173609
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 08:10*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/18/2023 08:10*	WG2173609

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	287000		8450	20000	1	11/20/2023 14:26	WG2174432

Sample Narrative:

L1676892-08 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15400		379	1000	1	11/11/2023 21:02	WG2169403
Nitrate	2550		48.0	100	1	11/11/2023 21:02	WG2169403
Sulfate	146000		594	5000	1	11/11/2023 21:02	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2210		102	1000	1	12/01/2023 17:29	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	970		28.1	100	1	11/20/2023 19:26	WG2169913
Manganese	413		0.704	5.00	1	11/20/2023 19:26	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	170		0.287	0.678	1	11/20/2023 12:06	WG2173812
Ethane	1.60		0.296	1.29	1	11/20/2023 12:06	WG2173812
Ethene	U		0.422	1.27	1	11/20/2023 12:06	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 08:29	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 08:29	WG2173609
Benzene	0.0220	J	0.0160	0.0400	1	11/18/2023 08:29	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 08:29	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 08:29	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 08:29	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 08:29	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 08:29	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 08:29	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 08:29	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 08:29	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 08:29	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 08:29	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 08:29	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 08:29	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 08:29	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 08:29	WG2173609

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 08:29	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 08:29	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 08:29	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 08:29	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 08:29	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 08:29	WG2173609
1,1-Dichloroethene	0.245		0.0200	0.100	1	11/18/2023 08:29	WG2173609
cis-1,2-Dichloroethene	84.3		0.0276	0.100	1	11/18/2023 08:29	WG2173609
trans-1,2-Dichloroethene	0.158	J	0.0572	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 08:29	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 08:29	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 08:29	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 08:29	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 08:29	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 08:29	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 08:29	WG2173609
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 08:29	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 08:29	WG2173609
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 08:29	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 08:29	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 08:29	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 08:29	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 08:29	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 08:29	WG2173609
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 08:29	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 08:29	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 08:29	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 08:29	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 08:29	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 08:29	WG2173609
Tetrachloroethene	36.6		0.0280	0.100	1	11/18/2023 08:29	WG2173609
Toluene	U		0.0500	0.200	1	11/18/2023 08:29	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 08:29	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 08:29	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 08:29	WG2173609
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 08:29	WG2173609
Trichloroethene	11.8		0.0160	0.0400	1	11/18/2023 08:29	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 08:29	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 08:29	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 08:29	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 08:29	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Vinyl chloride	1.22		0.0273	0.100	1	11/18/2023 08:29	WG2173609
Xylenes, Total	U		0.191	0.260	1	11/18/2023 08:29	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 08:29	WG2173609
Tetrahydrofuran	0.191	J	0.0900	0.500	1	11/18/2023 08:29	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 08:29	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 08:29	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/18/2023 08:29	WG2173609
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 08:29*	WG2173609
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 08:29*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/18/2023 08:29*	WG2173609

Method Blank (MB)

(MB) R4001316-3 11/16/23 11:57

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1676892-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676892-01 11/16/23 12:18 • (DUP) R4001316-4 11/16/23 12:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	264000	267000	1	1.26		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1676304-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1676304-07 11/16/23 14:01 • (DUP) R4001316-5 11/16/23 14:08

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	508000	510000	1	0.306		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4001316-2 11/16/23 11:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	104000	104	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4002348-2 11/20/23 12:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1676682-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676682-01 11/20/23 13:06 • (DUP) R4002348-3 11/20/23 13:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	275000	276000	1	0.441		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1676829-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1676829-05 11/20/23 15:13 • (DUP) R4002348-4 11/20/23 15:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	903000	895000	1	0.920		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4002348-1 11/20/23 12:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	97200	97.2	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4002753-1 11/11/23 09:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1676829-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1676829-04 11/11/23 18:32 • (DUP) R4002753-3 11/11/23 18:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	25000	24600	1	1.85		15
Nitrate	71.0	72.0	1	1.40	J	15
Sulfate	621	U	1	200	P1	15

L1676949-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1676949-03 11/11/23 23:40 • (DUP) R4002753-6 11/12/23 00:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	2960	2930	1	0.887		15
Nitrate	77.0	U	1	200	P1	15
Sulfate	108000	108000	1	0.0661		15

Laboratory Control Sample (LCS)

(LCS) R4002753-2 11/11/23 10:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40400	101	80.0-120	
Nitrate	8000	7940	99.2	80.0-120	
Sulfate	40000	40000	100	80.0-120	

L1676829-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676829-04 11/11/23 18:32 • (MS) R4002753-4 11/11/23 19:00 • (MSD) R4002753-5 11/11/23 19:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	25000	59800	60300	87.0	88.1	1	80.0-120			0.783	15
Nitrate	8000	71.0	7660	7800	94.9	96.6	1	80.0-120			1.81	15
Sulfate	40000	621	38200	39100	93.9	96.3	1	80.0-120			2.43	15

L1676949-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676949-03 11/11/23 23:40 • (MS) R4002753-7 11/12/23 00:33 • (MSD) R4002753-8 11/12/23 00:46

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	2960	42800	42700	99.6	99.3	1	80.0-120			0.354	15
Nitrate	8000	77.0	8020	7930	99.2	98.1	1	80.0-120			1.10	15
Sulfate	40000	108000	128000	128000	50.9	50.5	1	80.0-120	J6	J6	0.151	15

Method Blank (MB)

(MB) R4007431-2 12/01/23 11:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	157	J	102	1000

L1676892-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1676892-02 12/01/23 16:28 • (DUP) R4007431-5 12/01/23 16:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	1680	1540	1	8.94		20

L1676480-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1676480-03 12/01/23 22:58 • (DUP) R4007431-8 12/01/23 23:22

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	57600	58300	2	1.28		20

Laboratory Control Sample (LCS)

(LCS) R4007431-1 12/01/23 11:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	23300	93.1	85.0-115	

L1676892-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676892-01 12/01/23 14:47 • (MS) R4007431-3 12/01/23 15:09 • (MSD) R4007431-4 12/01/23 15:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	7020	32000	31900	100	99.6	1	85.0-115			0.375	20

L1676949-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676949-03 12/01/23 19:49 • (MS) R4007431-6 12/01/23 20:16 • (MSD) R4007431-7 12/01/23 20:38

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	1980	26900	26900	99.6	99.8	1	85.0-115			0.223	20

Method Blank (MB)

(MB) R4002484-1 11/20/23 18:36

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4002484-2 11/20/23 18:40

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iron	1000	961	96.1	80.0-120	
Manganese	50.0	48.0	95.9	80.0-120	

L1676949-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1676949-03 11/20/23 18:43 • (MS) R4002484-4 11/20/23 18:50 • (MSD) R4002484-5 11/20/23 18:53

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Iron	1000	55.0	987	989	93.2	93.4	1	75.0-125			0.261	20
Manganese	50.0	787	831	829	88.2	83.2	1	75.0-125			0.299	20

Method Blank (MB)

(MB) R4002336-2 11/20/23 11:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1677224-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1677224-02 11/20/23 12:17 • (DUP) R4002336-3 11/20/23 13:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	18.2	18.6	1	2.17		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1677810-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1677810-02 11/20/23 14:23 • (DUP) R4002336-4 11/20/23 15:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4002336-1 11/20/23 11:15 • (LCSD) R4002336-5 11/20/23 15:39

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	66.2	71.4	97.6	105	85.0-115			7.56	20
Ethane	129	117	119	90.7	92.2	85.0-115			1.69	20
Ethene	127	118	119	92.9	93.7	85.0-115			0.844	20

Method Blank (MB)

(MB) R4003068-2 11/21/23 13:34

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1677308-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1677308-14 11/21/23 14:11 • (DUP) R4003068-3 11/21/23 15:13

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	3710	3770	1	1.60		20

L1677779-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1677779-06 11/21/23 15:36 • (DUP) R4003068-4 11/21/23 17:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20

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

(LCS) R4003068-1 11/21/23 13:31 • (LCSD) R4003068-5 11/21/23 17:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	70.2	72.0	104	106	85.0-115			2.53	20

Method Blank (MB)

(MB) R4002235-3 11/17/23 22:40

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4002235-3 11/17/23 22:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*103*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*92.4*			*70.0-130*

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

(LCS) R4002235-1 11/17/23 20:17 • (LCSD) R4002235-2 11/17/23 20:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	30.7	29.5	123	118	10.0-160			3.99	31
Acrylonitrile	25.0	23.5	22.8	94.0	91.2	45.0-153			3.02	22
Benzene	5.00	4.91	4.74	98.2	94.8	70.0-123			3.52	20
Bromobenzene	5.00	5.34	5.05	107	101	73.0-121			5.58	20
Bromodichloromethane	5.00	4.78	4.55	95.6	91.0	73.0-121			4.93	20
Bromoform	5.00	5.32	5.14	106	103	64.0-132			3.44	20
Bromomethane	5.00	5.23	5.02	105	100	56.0-147			4.10	20
n-Butylbenzene	5.00	5.43	5.28	109	106	68.0-135			2.80	20
sec-Butylbenzene	5.00	5.13	4.94	103	98.8	74.0-130			3.77	20
tert-Butylbenzene	5.00	5.34	5.22	107	104	75.0-127			2.27	20
Carbon tetrachloride	5.00	5.19	4.81	104	96.2	66.0-128			7.60	20
Chlorobenzene	5.00	5.24	4.92	105	98.4	76.0-128			6.30	20
Chlorodibromomethane	5.00	5.47	5.31	109	106	74.0-127			2.97	20
Chloroethane	5.00	5.33	5.01	107	100	61.0-134			6.19	20
Chloroform	5.00	4.72	4.46	94.4	89.2	72.0-123			5.66	20
Chloromethane	5.00	4.77	4.43	95.4	88.6	51.0-138			7.39	20
2-Chlorotoluene	5.00	5.16	5.12	103	102	75.0-124			0.778	20
4-Chlorotoluene	5.00	5.11	4.92	102	98.4	75.0-124			3.79	20
1,2-Dibromo-3-Chloropropane	5.00	4.65	4.69	93.0	93.8	59.0-130			0.857	20
1,2-Dibromoethane	5.00	5.26	5.13	105	103	74.0-128			2.50	20
Dibromomethane	5.00	5.21	5.05	104	101	75.0-122			3.12	20
1,2-Dichlorobenzene	5.00	5.09	4.90	102	98.0	76.0-124			3.80	20
1,3-Dichlorobenzene	5.00	5.20	5.07	104	101	76.0-125			2.53	20
1,4-Dichlorobenzene	5.00	4.92	4.76	98.4	95.2	77.0-121			3.31	20
Dichlorodifluoromethane	5.00	6.24	5.66	125	113	43.0-156			9.75	20
1,1-Dichloroethane	5.00	4.96	4.67	99.2	93.4	70.0-127			6.02	20
1,2-Dichloroethane	5.00	4.53	4.30	90.6	86.0	65.0-131			5.21	20
1,1-Dichloroethene	5.00	4.77	4.51	95.4	90.2	65.0-131			5.60	20
cis-1,2-Dichloroethene	5.00	5.23	4.91	105	98.2	73.0-125			6.31	20
trans-1,2-Dichloroethene	5.00	5.22	4.91	104	98.2	71.0-125			6.12	20
1,2-Dichloropropane	5.00	5.05	4.89	101	97.8	74.0-125			3.22	20
1,1-Dichloropropene	5.00	5.03	4.70	101	94.0	73.0-125			6.78	20
1,3-Dichloropropane	5.00	5.23	5.13	105	103	80.0-125			1.93	20
cis-1,3-Dichloropropene	5.00	5.04	4.96	101	99.2	76.0-127			1.60	20
trans-1,3-Dichloropropene	5.00	4.92	4.84	98.4	96.8	73.0-127			1.64	20
2,2-Dichloropropane	5.00	4.96	4.43	99.2	88.6	59.0-135			11.3	20
Di-isopropyl ether	5.00	4.51	4.35	90.2	87.0	60.0-136			3.61	20
Ethylbenzene	5.00	5.28	4.95	106	99.0	74.0-126			6.45	20
Hexachloro-1,3-butadiene	5.00	5.00	4.81	100	96.2	57.0-150			3.87	20
Isopropylbenzene	5.00	5.03	4.77	101	95.4	72.0-127			5.31	20

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

(LCS) R4002235-1 11/17/23 20:17 • (LCSD) R4002235-2 11/17/23 20:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	5.04	4.90	101	98.0	72.0-133			2.82	20
2-Butanone (MEK)	25.0	21.7	24.6	86.8	98.4	30.0-160			12.5	24
Methylene Chloride	5.00	4.89	4.63	97.8	92.6	68.0-123			5.46	20
4-Methyl-2-pentanone (MIBK)	25.0	24.4	24.0	97.6	96.0	56.0-143			1.65	20
Methyl tert-butyl ether	5.00	4.85	4.53	97.0	90.6	66.0-132			6.82	20
Naphthalene	5.00	4.52	4.59	90.4	91.8	59.0-130			1.54	20
n-Propylbenzene	5.00	5.26	5.01	105	100	74.0-126			4.87	20
Styrene	5.00	5.19	5.07	104	101	72.0-127			2.34	20
1,1,1,2-Tetrachloroethane	5.00	4.85	4.57	97.0	91.4	74.0-129			5.94	20
1,1,2,2-Tetrachloroethane	5.00	4.37	4.38	87.4	87.6	68.0-128			0.229	20
1,1,2-Trichlorotrifluoroethane	5.00	6.27	5.66	125	113	61.0-139			10.2	20
Tetrachloroethene	5.00	5.34	5.14	107	103	70.0-136			3.82	20
Toluene	5.00	5.01	4.83	100	96.6	75.0-121			3.66	20
1,2,3-Trichlorobenzene	5.00	4.65	4.78	93.0	95.6	59.0-139			2.76	20
1,2,4-Trichlorobenzene	5.00	4.94	4.99	98.8	99.8	62.0-137			1.01	20
1,1,1-Trichloroethane	5.00	4.84	4.51	96.8	90.2	69.0-126			7.06	20
1,1,2-Trichloroethane	5.00	4.90	4.79	98.0	95.8	78.0-123			2.27	20
Trichloroethene	5.00	5.60	5.07	112	101	76.0-126			9.93	20
Trichlorofluoromethane	5.00	6.05	5.54	121	111	61.0-142			8.80	20
1,2,3-Trichloropropane	5.00	4.85	4.93	97.0	98.6	67.0-129			1.64	20
1,2,4-Trimethylbenzene	5.00	4.86	4.74	97.2	94.8	70.0-126			2.50	20
1,2,3-Trimethylbenzene	5.00	4.69	4.54	93.8	90.8	74.0-124			3.25	20
1,3,5-Trimethylbenzene	5.00	4.86	4.70	97.2	94.0	73.0-127			3.35	20
Vinyl chloride	5.00	5.40	4.89	108	97.8	63.0-134			9.91	20
Xylenes, Total	15.0	15.4	15.2	103	101	72.0-127			1.31	20
Ethyl Ether	5.00	4.71	4.69	94.2	93.8	64.0-137			0.426	20
Tetrahydrofuran	5.00	4.66	4.20	93.2	84.0	37.0-146			10.4	24
Iodomethane	25.0	24.9	23.9	99.6	95.6	74.0-134			4.10	20
Allyl chloride	25.0	25.4	24.0	102	96.0	70.0-131			5.67	20
Trans-1,4-Dichloro-2-butene	5.00	2.36	2.42	47.2	48.4	45.0-143			2.51	20
(S) Toluene-d8				*99.9*	*102*	*75.0-131*				
(S) 4-Bromofluorobenzene				*99.7*	*100*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*94.8*	*93.7*	*70.0-130*				

Method Blank (MB)

(MB) R4003610-3 11/18/23 07:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4003610-3 11/18/23 07:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*102*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*

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

(LCS) R4003610-1 11/18/23 05:56 • (LCSD) R4003610-2 11/18/23 06:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	33.2	29.1	133	116	10.0-160			13.2	31
Acrylonitrile	25.0	23.6	22.1	94.4	88.4	45.0-153			6.56	22
Benzene	5.00	4.81	4.78	96.2	95.6	70.0-123			0.626	20
Bromobenzene	5.00	4.99	5.13	99.8	103	73.0-121			2.77	20
Bromodichloromethane	5.00	4.50	4.64	90.0	92.8	73.0-121			3.06	20
Bromoform	5.00	5.06	5.07	101	101	64.0-132			0.197	20
Bromomethane	5.00	5.32	5.31	106	106	56.0-147			0.188	20
n-Butylbenzene	5.00	4.59	4.92	91.8	98.4	68.0-135			6.94	20
sec-Butylbenzene	5.00	4.56	4.84	91.2	96.8	74.0-130			5.96	20
tert-Butylbenzene	5.00	4.84	5.13	96.8	103	75.0-127			5.82	20
Carbon tetrachloride	5.00	4.91	5.04	98.2	101	66.0-128			2.61	20
Chlorobenzene	5.00	4.93	4.94	98.6	98.8	76.0-128			0.203	20
Chlorodibromomethane	5.00	5.13	5.24	103	105	74.0-127			2.12	20
Chloroethane	5.00	4.97	5.12	99.4	102	61.0-134			2.97	20
Chloroform	5.00	4.44	4.54	88.8	90.8	72.0-123			2.23	20
Chloromethane	5.00	4.64	4.56	92.8	91.2	51.0-138			1.74	20
2-Chlorotoluene	5.00	4.85	4.96	97.0	99.2	75.0-124			2.24	20
4-Chlorotoluene	5.00	4.73	4.86	94.6	97.2	75.0-124			2.71	20
1,2-Dibromo-3-Chloropropane	5.00	4.25	4.37	85.0	87.4	59.0-130			2.78	20
1,2-Dibromoethane	5.00	5.04	4.99	101	99.8	74.0-128			0.997	20
Dibromomethane	5.00	4.93	5.25	98.6	105	75.0-122			6.29	20
1,2-Dichlorobenzene	5.00	4.81	5.05	96.2	101	76.0-124			4.87	20
1,3-Dichlorobenzene	5.00	4.93	5.10	98.6	102	76.0-125			3.39	20
1,4-Dichlorobenzene	5.00	4.62	4.87	92.4	97.4	77.0-121			5.27	20
Dichlorodifluoromethane	5.00	5.74	5.82	115	116	43.0-156			1.38	20
1,1-Dichloroethane	5.00	4.73	4.70	94.6	94.0	70.0-127			0.636	20
1,2-Dichloroethane	5.00	4.36	4.36	87.2	87.2	65.0-131			0.000	20
1,1-Dichloroethene	5.00	4.49	4.52	89.8	90.4	65.0-131			0.666	20
cis-1,2-Dichloroethene	5.00	4.90	4.98	98.0	99.6	73.0-125			1.62	20
trans-1,2-Dichloroethene	5.00	4.90	5.00	98.0	100	71.0-125			2.02	20
1,2-Dichloropropane	5.00	4.92	4.90	98.4	98.0	74.0-125			0.407	20
1,1-Dichloropropene	5.00	4.66	4.68	93.2	93.6	73.0-125			0.428	20
1,3-Dichloropropane	5.00	5.03	5.06	101	101	80.0-125			0.595	20
cis-1,3-Dichloropropene	5.00	4.84	4.90	96.8	98.0	76.0-127			1.23	20
trans-1,3-Dichloropropene	5.00	4.53	4.64	90.6	92.8	73.0-127			2.40	20
2,2-Dichloropropane	5.00	4.62	4.76	92.4	95.2	59.0-135			2.99	20
Di-isopropyl ether	5.00	4.27	4.36	85.4	87.2	60.0-136			2.09	20
Ethylbenzene	5.00	4.81	4.98	96.2	99.6	74.0-126			3.47	20
Hexachloro-1,3-butadiene	5.00	4.46	4.53	89.2	90.6	57.0-150			1.56	20
Isopropylbenzene	5.00	4.68	4.86	93.6	97.2	72.0-127			3.77	20

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

(LCS) R4003610-1 11/18/23 05:56 • (LCSD) R4003610-2 11/18/23 06:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.49	4.80	89.8	96.0	72.0-133			6.67	20
2-Butanone (MEK)	25.0	25.6	23.2	102	92.8	30.0-160			9.84	24
Methylene Chloride	5.00	4.51	4.72	90.2	94.4	68.0-123			4.55	20
4-Methyl-2-pentanone (MIBK)	25.0	22.8	23.0	91.2	92.0	56.0-143			0.873	20
Methyl tert-butyl ether	5.00	4.51	4.71	90.2	94.2	66.0-132			4.34	20
Naphthalene	5.00	3.91	4.31	78.2	86.2	59.0-130			9.73	20
n-Propylbenzene	5.00	4.76	5.01	95.2	100	74.0-126			5.12	20
Styrene	5.00	4.92	4.94	98.4	98.8	72.0-127			0.406	20
1,1,1,2-Tetrachloroethane	5.00	4.55	4.70	91.0	94.0	74.0-129			3.24	20
1,1,2,2-Tetrachloroethane	5.00	4.15	4.37	83.0	87.4	68.0-128			5.16	20
1,1,2-Trichlorotrifluoroethane	5.00	5.77	5.90	115	118	61.0-139			2.23	20
Tetrachloroethene	5.00	5.15	5.09	103	102	70.0-136			1.17	20
Toluene	5.00	4.79	4.80	95.8	96.0	75.0-121			0.209	20
1,2,3-Trichlorobenzene	5.00	3.85	4.36	77.0	87.2	59.0-139			12.4	20
1,2,4-Trichlorobenzene	5.00	4.30	4.52	86.0	90.4	62.0-137			4.99	20
1,1,1-Trichloroethane	5.00	4.41	4.53	88.2	90.6	69.0-126			2.68	20
1,1,2-Trichloroethane	5.00	4.65	4.75	93.0	95.0	78.0-123			2.13	20
Trichloroethene	5.00	5.27	5.14	105	103	76.0-126			2.50	20
Trichlorofluoromethane	5.00	5.59	5.70	112	114	61.0-142			1.95	20
1,2,3-Trichloropropane	5.00	4.71	4.75	94.2	95.0	67.0-129			0.846	20
1,2,4-Trimethylbenzene	5.00	4.48	4.63	89.6	92.6	70.0-126			3.29	20
1,2,3-Trimethylbenzene	5.00	4.33	4.60	86.6	92.0	74.0-124			6.05	20
1,3,5-Trimethylbenzene	5.00	4.47	4.79	89.4	95.8	73.0-127			6.91	20
Vinyl chloride	5.00	5.25	5.22	105	104	63.0-134			0.573	20
Xylenes, Total	15.0	15.0	15.4	100	103	72.0-127			2.63	20
Ethyl Ether	5.00	4.56	4.59	91.2	91.8	64.0-137			0.656	20
Tetrahydrofuran	5.00	4.31	4.04	86.2	80.8	37.0-146			6.47	24
Iodomethane	25.0	24.4	24.3	97.6	97.2	74.0-134			0.411	20
Allyl chloride	25.0	24.3	24.7	97.2	98.8	70.0-131			1.63	20
Trans-1,4-Dichloro-2-butene	5.00	2.17	2.49	43.4	49.8	45.0-143	J4		13.7	20
(S) Toluene-d8				*101*	*98.9*	*75.0-131*				
(S) 4-Bromofluorobenzene				*101*	*99.6*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*93.5*	*94.4*	*70.0-130*				

Method Blank (MB)

(MB) R4003261-3 11/21/23 08:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4003261-3 11/21/23 08:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*99.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*105*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*

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

(LCS) R4003261-1 11/21/23 07:32 • (LCSD) R4003261-2 11/21/23 07:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	15.4	14.7	61.6	58.8	10.0-160			4.65	31
Acrylonitrile	25.0	23.2	22.6	92.8	90.4	45.0-153			2.62	22
Benzene	5.00	4.75	4.48	95.0	89.6	70.0-123			5.85	20
Bromobenzene	5.00	5.02	4.64	100	92.8	73.0-121			7.87	20
Bromodichloromethane	5.00	4.52	4.38	90.4	87.6	73.0-121			3.15	20
Bromoform	5.00	4.91	4.99	98.2	99.8	64.0-132			1.62	20
Bromomethane	5.00	4.87	4.29	97.4	85.8	56.0-147			12.7	20
n-Butylbenzene	5.00	5.01	4.87	100	97.4	68.0-135			2.83	20
sec-Butylbenzene	5.00	4.73	4.52	94.6	90.4	74.0-130			4.54	20
tert-Butylbenzene	5.00	5.02	4.73	100	94.6	75.0-127			5.95	20
Carbon tetrachloride	5.00	4.78	4.36	95.6	87.2	66.0-128			9.19	20
Chlorobenzene	5.00	4.88	4.57	97.6	91.4	76.0-128			6.56	20
Chlorodibromomethane	5.00	5.00	4.81	100	96.2	74.0-127			3.87	20
Chloroethane	5.00	4.87	4.40	97.4	88.0	61.0-134			10.1	20
Chloroform	5.00	4.64	4.28	92.8	85.6	72.0-123			8.07	20
Chloromethane	5.00	3.92	3.71	78.4	74.2	51.0-138			5.50	20
2-Chlorotoluene	5.00	4.94	4.82	98.8	96.4	75.0-124			2.46	20
4-Chlorotoluene	5.00	4.89	4.56	97.8	91.2	75.0-124			6.98	20
1,2-Dibromo-3-Chloropropane	5.00	3.95	3.99	79.0	79.8	59.0-130			1.01	20
1,2-Dibromoethane	5.00	5.00	4.64	100	92.8	74.0-128			7.47	20
Dibromomethane	5.00	4.95	4.77	99.0	95.4	75.0-122			3.70	20
1,2-Dichlorobenzene	5.00	4.74	4.85	94.8	97.0	76.0-124			2.29	20
1,3-Dichlorobenzene	5.00	4.93	4.83	98.6	96.6	76.0-125			2.05	20
1,4-Dichlorobenzene	5.00	4.66	4.72	93.2	94.4	77.0-121			1.28	20
Dichlorodifluoromethane	5.00	4.91	4.55	98.2	91.0	43.0-156			7.61	20
1,1-Dichloroethane	5.00	4.78	4.43	95.6	88.6	70.0-127			7.60	20
1,2-Dichloroethane	5.00	4.50	4.31	90.0	86.2	65.0-131			4.31	20
1,1-Dichloroethene	5.00	4.47	4.05	89.4	81.0	65.0-131			9.86	20
cis-1,2-Dichloroethene	5.00	5.01	4.64	100	92.8	73.0-125			7.67	20
trans-1,2-Dichloroethene	5.00	5.06	4.51	101	90.2	71.0-125			11.5	20
1,2-Dichloropropane	5.00	5.08	4.72	102	94.4	74.0-125			7.35	20
1,1-Dichloropropene	5.00	4.71	4.35	94.2	87.0	73.0-125			7.95	20
1,3-Dichloropropane	5.00	5.01	4.73	100	94.6	80.0-125			5.75	20
cis-1,3-Dichloropropene	5.00	5.14	4.87	103	97.4	76.0-127			5.39	20
trans-1,3-Dichloropropene	5.00	4.88	4.55	97.6	91.0	73.0-127			7.00	20
2,2-Dichloropropane	5.00	5.08	4.52	102	90.4	59.0-135			11.7	20
Di-isopropyl ether	5.00	4.32	4.14	86.4	82.8	60.0-136			4.26	20
Ethylbenzene	5.00	4.84	4.67	96.8	93.4	74.0-126			3.58	20
Hexachloro-1,3-butadiene	5.00	4.77	4.73	95.4	94.6	57.0-150			0.842	20
Isopropylbenzene	5.00	4.62	4.51	92.4	90.2	72.0-127			2.41	20

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

(LCS) R4003261-1 11/21/23 07:32 • (LCSD) R4003261-2 11/21/23 07:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.80	4.61	96.0	92.2	72.0-133			4.04	20
2-Butanone (MEK)	25.0	23.5	21.6	94.0	86.4	30.0-160			8.43	24
Methylene Chloride	5.00	4.75	4.30	95.0	86.0	68.0-123			9.94	20
4-Methyl-2-pentanone (MIBK)	25.0	22.2	21.5	88.8	86.0	56.0-143			3.20	20
Methyl tert-butyl ether	5.00	4.53	4.28	90.6	85.6	66.0-132			5.68	20
Naphthalene	5.00	3.90	4.41	78.0	88.2	59.0-130			12.3	20
n-Propylbenzene	5.00	4.90	4.58	98.0	91.6	74.0-126			6.75	20
Styrene	5.00	4.76	4.61	95.2	92.2	72.0-127			3.20	20
1,1,1,2-Tetrachloroethane	5.00	4.35	4.25	87.0	85.0	74.0-129			2.33	20
1,1,2,2-Tetrachloroethane	5.00	4.24	3.92	84.8	78.4	68.0-128			7.84	20
1,1,2-Trichlorotrifluoroethane	5.00	5.53	5.28	111	106	61.0-139			4.63	20
Tetrachloroethene	5.00	4.81	4.52	96.2	90.4	70.0-136			6.22	20
Toluene	5.00	4.67	4.39	93.4	87.8	75.0-121			6.18	20
1,2,3-Trichlorobenzene	5.00	4.26	4.55	85.2	91.0	59.0-139			6.58	20
1,2,4-Trichlorobenzene	5.00	4.52	5.14	90.4	103	62.0-137			12.8	20
1,1,1-Trichloroethane	5.00	4.47	4.25	89.4	85.0	69.0-126			5.05	20
1,1,2-Trichloroethane	5.00	4.64	4.37	92.8	87.4	78.0-123			5.99	20
Trichloroethene	5.00	5.03	4.92	101	98.4	76.0-126			2.21	20
Trichlorofluoromethane	5.00	5.31	4.75	106	95.0	61.0-142			11.1	20
1,2,3-Trichloropropane	5.00	4.66	4.43	93.2	88.6	67.0-129			5.06	20
1,2,4-Trimethylbenzene	5.00	4.64	4.44	92.8	88.8	70.0-126			4.41	20
1,2,3-Trimethylbenzene	5.00	4.49	4.39	89.8	87.8	74.0-124			2.25	20
1,3,5-Trimethylbenzene	5.00	4.65	4.40	93.0	88.0	73.0-127			5.52	20
Vinyl chloride	5.00	4.59	4.13	91.8	82.6	63.0-134			10.6	20
Xylenes, Total	15.0	14.1	14.2	94.0	94.7	72.0-127			0.707	20
Ethyl Ether	5.00	4.59	4.29	91.8	85.8	64.0-137			6.76	20
Tetrahydrofuran	5.00	3.68	3.47	73.6	69.4	37.0-146			5.87	24
Iodomethane	25.0	24.5	22.6	98.0	90.4	74.0-134			8.07	20
Allyl chloride	25.0	26.1	23.8	104	95.2	70.0-131			9.22	20
Trans-1,4-Dichloro-2-butene	5.00	5.93	4.72	119	94.4	45.0-143		J3	22.7	20
(S) Toluene-d8				*99.4*	*97.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*104*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.6*	*96.3*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Email To:
jessica.babb@nv5.com;natalie.wisdom@nv5.com;erik.hedberg@nv5.com

Report to:
Erik Hedberg

Project Description:
American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project #
443022-1413001.10.701.02

Lab Project #
PESENVSWA-ALP

Collected by (print):
N. Wisdom

Site/Facility ID #

P.O. # 10.701
443018-1413001.~~05.601~~

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Date Results Needed

Quote #

Pres Chk

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	~~FERROUS 250mlAmb-HCl~~	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-147-111023	Grab	GW	—	11/10/23	1040	10	X	X		X	X	X	X		-01
MW-347-111023		GW			1409	10	X	X		X	X	X	X		-02
MW-153-111023		GW			1424	3							X		-03
MW-154-111023		GW			1308	10	X	X		X	X	X	X		-04
MW-146-111023		GW			1218	10	X	X		X	X	X	X		-05
MW-306-111023		GW			1101	3							X		-06
MW-307-111023		GW			1008	3							X		-07
MW-155-111023		GW			0848	10	X	X	S	X	X	X	X	No Ferrous Fe (NEW)	-08
		GW													
		GW													

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1676692
C187

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1035102**
PM: **546 - Jared Starkey**
PB:
Shipped Via:

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

Remarks: lab QA/QC required (batch QC OK)

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Natalie Wisdom	11/10/23	1640		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 1.6 °C Bottles Received: 59
by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11-11-23 Time: 0800

PH-10BDH4321 TRC-235236.2 CR6-20221V
PH-10BDH4321 TRC-235236.2 CR6-20221V

Hold: Condition: NCF / OK

ANALYTICAL REPORT

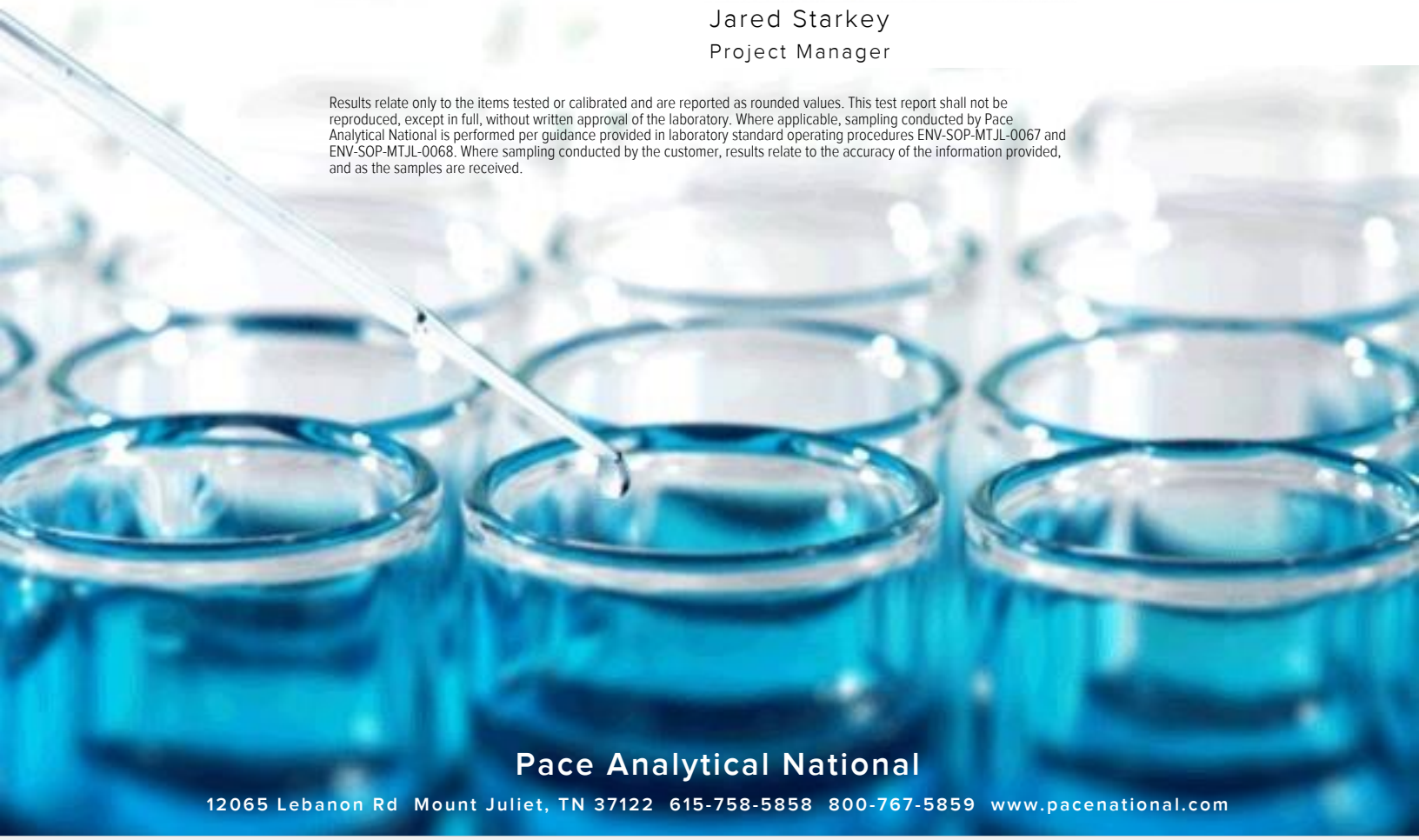
December 04, 2023

PES Environmental, Inc.- WA

Sample Delivery Group:	L1677527
Samples Received:	11/14/2023
Project Number:	1413001.10.003
Description:	American Linen- Q4 2023
Site:	SDOT
Report To:	Erik Hedberg 2101 Fourth Ave., Suite 1310 Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

MW-349-111323 L1677527-01 GW

Collected by: Osmin Monroy | Collected date/time: 11/13/23 10:08 | Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2174432	1	11/20/23 14:31	11/20/23 14:31	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2171026	1	11/15/23 00:32	11/15/23 00:32	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2175651	1	11/27/23 01:02	11/27/23 01:02	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2180825	1	12/02/23 09:31	12/02/23 09:31	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2174222	5	11/21/23 10:35	11/21/23 15:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2174876	1	11/21/23 14:18	11/21/23 14:18	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2175722	10	11/21/23 18:07	11/21/23 18:07	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 16:59	11/18/23 16:59	JBE	Mt. Juliet, TN

HMW-9IB-111323 L1677527-02 GW

Collected by: Osmin Monroy | Collected date/time: 11/13/23 11:13 | Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2174432	1	11/20/23 14:37	11/20/23 14:37	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2171026	1	11/15/23 00:45	11/15/23 00:45	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2175651	1	11/27/23 01:18	11/27/23 01:18	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2180825	1	12/02/23 09:47	12/02/23 09:47	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2174222	10	11/21/23 10:35	11/21/23 15:56	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2174876	1	11/21/23 14:30	11/21/23 14:30	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2175722	10	11/21/23 18:14	11/21/23 18:14	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 17:18	11/18/23 17:18	JBE	Mt. Juliet, TN

MW-350-111323 L1677527-03 GW

Collected by: Osmin Monroy | Collected date/time: 11/13/23 12:53 | Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2174432	1	11/20/23 14:42	11/20/23 14:42	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2171026	1	11/15/23 00:59	11/15/23 00:59	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2175651	1	11/27/23 02:06	11/27/23 02:06	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2180825	1	12/02/23 10:00	12/02/23 10:00	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2174222	5	11/21/23 10:35	11/21/23 15:59	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2174876	1	11/21/23 14:41	11/21/23 14:41	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 17:37	11/18/23 17:37	JBE	Mt. Juliet, TN

MW-344-111323 L1677527-05 GW

Collected by: Osmin Monroy | Collected date/time: 11/13/23 14:02 | Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	25	11/18/23 21:28	11/18/23 21:28	JBE	Mt. Juliet, TN

MW-345-111323 L1677527-06 GW

Collected by: Osmin Monroy | Collected date/time: 11/13/23 14:49 | Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 17:56	11/18/23 17:56	JBE	Mt. Juliet, TN

EQ-111323 L1677527-07 GW

Collected by: Osmin Monroy
Collected date/time: 11/13/23 15:30
Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2174432	1	11/20/23 14:47	11/20/23 14:47	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2171026	1	11/15/23 01:12	11/15/23 01:12	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2180825	1	12/02/23 10:17	12/02/23 10:17	ASH	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2174222	1	11/21/23 10:35	11/21/23 14:55	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2174876	1	11/21/23 15:24	11/21/23 15:24	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 14:45	11/18/23 14:45	JBE	Mt. Juliet, TN

TB-111323 L1677527-08 GW

Collected by: Osmin Monroy
Collected date/time: 11/13/23 12:00
Received date/time: 11/14/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 15:04	11/18/23 15:04	JBE	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.

Jared Starkey
Project Manager

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	478000		8450	20000	1	11/20/2023 14:31	WG2174432

Sample Narrative:
L1677527-01 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	35800		379	1000	1	11/27/2023 01:02	WG2175651
Nitrate	126	P1	48.0	100	1	11/15/2023 00:32	WG2171026
Sulfate	10100		594	5000	1	11/27/2023 01:02	WG2175651

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3640		102	1000	1	12/02/2023 09:31	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2550		140	500	5	11/21/2023 15:52	WG2174222
Manganese	392		3.52	25.0	5	11/21/2023 15:52	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	20800		2.87	6.78	10	11/21/2023 18:07	WG2175722
Ethane	1.42		0.296	1.29	1	11/21/2023 14:18	WG2174876
Ethene	5.15		0.422	1.27	1	11/21/2023 14:18	WG2174876

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	70.0	C5	0.548	1.00	1	11/18/2023 16:59	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 16:59	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 16:59	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 16:59	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 16:59	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 16:59	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 16:59	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 16:59	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 16:59	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 16:59	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 16:59	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 16:59	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 16:59	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 16:59	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 16:59	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 16:59	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 16:59	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 16:59	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 16:59	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 16:59	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 16:59	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 16:59	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 16:59	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 16:59	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 16:59	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 16:59	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 16:59	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 16:59	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 16:59	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 16:59	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 16:59	WG2173799
cis-1,2-Dichloroethene	0.993		0.0276	0.100	1	11/18/2023 16:59	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 16:59	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 16:59	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 16:59	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 16:59	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 16:59	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 16:59	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 16:59	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 16:59	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 16:59	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 16:59	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 16:59	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 16:59	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 16:59	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 16:59	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 16:59	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 16:59	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 16:59	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 16:59	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 16:59	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 16:59	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 16:59	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 16:59	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 16:59	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 16:59	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 16:59	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 16:59	WG2173799
Toluene	0.412		0.0500	0.200	1	11/18/2023 16:59	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 16:59	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 16:59	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 16:59	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 16:59	WG2173799
Trichloroethene	0.0440		0.0160	0.0400	1	11/18/2023 16:59	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 16:59	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 16:59	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 16:59	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 16:59	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 16:59	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 16:59	WG2173799
Vinyl chloride	2.50	C3	0.0273	0.100	1	11/18/2023 16:59	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 16:59	WG2173799
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2023 16:59*	WG2173799
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*		*11/18/2023 16:59*	WG2173799
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/18/2023 16:59*	WG2173799

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	774000		8450	20000	1	11/20/2023 14:37	WG2174432

Sample Narrative:
L1677527-02 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	54500		379	1000	1	11/27/2023 01:18	WG2175651
Nitrate	125		48.0	100	1	11/15/2023 00:45	WG2171026
Sulfate	1560	J	594	5000	1	11/27/2023 01:18	WG2175651

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2310	B	102	1000	1	12/02/2023 09:47	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11100		281	1000	10	11/21/2023 15:56	WG2174222
Manganese	1920		7.04	50.0	10	11/21/2023 15:56	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25400		2.87	6.78	10	11/21/2023 18:14	WG2175722
Ethane	136		0.296	1.29	1	11/21/2023 14:30	WG2174876
Ethene	2.30		0.422	1.27	1	11/21/2023 14:30	WG2174876

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	19.8	C5	0.548	1.00	1	11/18/2023 17:18	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 17:18	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 17:18	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 17:18	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 17:18	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 17:18	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 17:18	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 17:18	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 17:18	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 17:18	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 17:18	WG2173799
Carbon disulfide	0.257	J	0.162	0.500	1	11/18/2023 17:18	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 17:18	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 17:18	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 17:18	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 17:18	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 17:18	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 17:18	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 17:18	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 17:18	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 17:18	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 17:18	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 17:18	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 17:18	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 17:18	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 17:18	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 17:18	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 17:18	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 17:18	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 17:18	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 17:18	WG2173799
cis-1,2-Dichloroethene	2.88		0.0276	0.100	1	11/18/2023 17:18	WG2173799
trans-1,2-Dichloroethene	0.437		0.0572	0.200	1	11/18/2023 17:18	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 17:18	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 17:18	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 17:18	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 17:18	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 17:18	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 17:18	WG2173799
Di-isopropyl ether	0.0890		0.0140	0.0400	1	11/18/2023 17:18	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 17:18	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 17:18	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 17:18	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 17:18	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 17:18	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 17:18	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 17:18	WG2173799
2-Butanone (MEK)	13.5		0.500	1.00	1	11/18/2023 17:18	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 17:18	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 17:18	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 17:18	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 17:18	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 17:18	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 17:18	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 17:18	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 17:18	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 17:18	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 17:18	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 17:18	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 17:18	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 17:18	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 17:18	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 17:18	WG2173799
Trichloroethene	0.422		0.0160	0.0400	1	11/18/2023 17:18	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 17:18	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 17:18	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 17:18	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 17:18	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 17:18	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 17:18	WG2173799
Vinyl chloride	0.989	C3	0.0273	0.100	1	11/18/2023 17:18	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 17:18	WG2173799
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2023 17:18*	WG2173799
(S) 4-Bromofluorobenzene	*87.4*			*67.0-138*		*11/18/2023 17:18*	WG2173799
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/18/2023 17:18*	WG2173799

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	317000		8450	20000	1	11/20/2023 14:42	WG2174432

Sample Narrative:
L1677527-03 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15600		379	1000	1	11/27/2023 02:06	WG2175651
Nitrate	79.1	J	48.0	100	1	11/15/2023 00:59	WG2171026
Sulfate	34500		594	5000	1	11/27/2023 02:06	WG2175651

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1740	B	102	1000	1	12/02/2023 10:00	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5380		140	500	5	11/21/2023 15:59	WG2174222
Manganese	658		3.52	25.0	5	11/21/2023 15:59	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2500		0.287	0.678	1	11/21/2023 14:41	WG2174876
Ethane	14.7		0.296	1.29	1	11/21/2023 14:41	WG2174876
Ethene	22.4		0.422	1.27	1	11/21/2023 14:41	WG2174876

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 17:37	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 17:37	WG2173799
Benzene	0.0300	J	0.0160	0.0400	1	11/18/2023 17:37	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 17:37	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 17:37	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 17:37	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 17:37	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 17:37	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 17:37	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 17:37	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 17:37	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 17:37	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 17:37	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 17:37	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 17:37	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 17:37	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 17:37	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 17:37	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 17:37	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 17:37	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 17:37	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 17:37	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 17:37	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 17:37	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 17:37	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 17:37	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 17:37	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 17:37	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 17:37	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 17:37	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 17:37	WG2173799
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 17:37	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 17:37	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 17:37	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 17:37	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 17:37	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 17:37	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 17:37	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 17:37	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 17:37	WG2173799
Ethylbenzene	0.0550	J	0.0212	0.100	1	11/18/2023 17:37	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 17:37	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 17:37	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 17:37	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 17:37	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 17:37	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 17:37	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 17:37	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 17:37	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 17:37	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 17:37	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 17:37	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 17:37	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 17:37	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 17:37	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 17:37	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 17:37	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 17:37	WG2173799
Toluene	0.116	J	0.0500	0.200	1	11/18/2023 17:37	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 17:37	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 17:37	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 17:37	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 17:37	WG2173799
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 17:37	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 17:37	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 17:37	WG2173799
1,2,4-Trimethylbenzene	0.0760	J	0.0464	0.200	1	11/18/2023 17:37	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 17:37	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 17:37	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 17:37	WG2173799
Vinyl chloride	3.50	C3	0.0273	0.100	1	11/18/2023 17:37	WG2173799
Xylenes, Total	0.200	J	0.191	0.260	1	11/18/2023 17:37	WG2173799
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 17:37*	WG2173799
(S) 4-Bromofluorobenzene	*87.1*			*67.0-138*		*11/18/2023 17:37*	WG2173799
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/18/2023 17:37*	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	17.0	J	13.7	25.0	25	11/18/2023 21:28	WG2173799
Acrylonitrile	U		1.90	12.5	25	11/18/2023 21:28	WG2173799
Benzene	U		0.400	1.00	25	11/18/2023 21:28	WG2173799
Bromobenzene	U		1.05	12.5	25	11/18/2023 21:28	WG2173799
Bromochloromethane	U		1.13	5.00	25	11/18/2023 21:28	WG2173799
Bromodichloromethane	U		0.788	2.50	25	11/18/2023 21:28	WG2173799
Bromoform	U		5.98	25.0	25	11/18/2023 21:28	WG2173799
Bromomethane	U		3.70	12.5	25	11/18/2023 21:28	WG2173799
n-Butylbenzene	U		3.83	12.5	25	11/18/2023 21:28	WG2173799
sec-Butylbenzene	U		2.53	12.5	25	11/18/2023 21:28	WG2173799
tert-Butylbenzene	U		1.55	5.00	25	11/18/2023 21:28	WG2173799
Carbon disulfide	U		4.05	12.5	25	11/18/2023 21:28	WG2173799
Carbon tetrachloride	U		1.08	5.00	25	11/18/2023 21:28	WG2173799
Chlorobenzene	U		0.573	2.50	25	11/18/2023 21:28	WG2173799
Chlorodibromomethane	U		0.450	2.50	25	11/18/2023 21:28	WG2173799
Chloroethane	U		1.08	5.00	25	11/18/2023 21:28	WG2173799
Chloroform	U		0.415	2.50	25	11/18/2023 21:28	WG2173799
Chloromethane	U		1.39	12.5	25	11/18/2023 21:28	WG2173799
2-Chlorotoluene	U		0.920	2.50	25	11/18/2023 21:28	WG2173799
4-Chlorotoluene	U		1.13	5.00	25	11/18/2023 21:28	WG2173799
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	11/18/2023 21:28	WG2173799
1,2-Dibromoethane	U		0.525	2.50	25	11/18/2023 21:28	WG2173799
Dibromomethane	U		1.00	5.00	25	11/18/2023 21:28	WG2173799
1,2-Dichlorobenzene	U		1.45	5.00	25	11/18/2023 21:28	WG2173799
1,3-Dichlorobenzene	U		1.70	5.00	25	11/18/2023 21:28	WG2173799
1,4-Dichlorobenzene	U		1.97	5.00	25	11/18/2023 21:28	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	1.40	5.00	25	11/18/2023 21:28	WG2173799
Dichlorodifluoromethane	U		0.818	2.50	25	11/18/2023 21:28	WG2173799
1,1-Dichloroethane	U		0.575	2.50	25	11/18/2023 21:28	WG2173799
1,2-Dichloroethane	U		0.475	2.50	25	11/18/2023 21:28	WG2173799
1,1-Dichloroethene	U		0.500	2.50	25	11/18/2023 21:28	WG2173799
cis-1,2-Dichloroethene	383		0.690	2.50	25	11/18/2023 21:28	WG2173799
trans-1,2-Dichloroethene	5.32		1.43	5.00	25	11/18/2023 21:28	WG2173799
1,2-Dichloropropane	U		1.27	5.00	25	11/18/2023 21:28	WG2173799
1,1-Dichloropropene	U		0.700	2.50	25	11/18/2023 21:28	WG2173799
1,3-Dichloropropane	U		1.75	5.00	25	11/18/2023 21:28	WG2173799
cis-1,3-Dichloropropene	U		0.678	2.50	25	11/18/2023 21:28	WG2173799
trans-1,3-Dichloropropene	U		1.53	5.00	25	11/18/2023 21:28	WG2173799
2,2-Dichloropropane	U		0.793	2.50	25	11/18/2023 21:28	WG2173799
Di-isopropyl ether	U		0.350	1.00	25	11/18/2023 21:28	WG2173799
Ethylbenzene	U		0.530	2.50	25	11/18/2023 21:28	WG2173799
Hexachloro-1,3-butadiene	U		12.7	25.0	25	11/18/2023 21:28	WG2173799
2-Hexanone	U		10.0	25.0	25	11/18/2023 21:28	WG2173799
n-Hexane	U		1.06	5.00	25	11/18/2023 21:28	WG2173799
Iodomethane	U		6.05	12.5	25	11/18/2023 21:28	WG2173799
Isopropylbenzene	U		0.863	2.50	25	11/18/2023 21:28	WG2173799
p-Isopropyltoluene	U		2.33	5.00	25	11/18/2023 21:28	WG2173799
2-Butanone (MEK)	U		12.5	25.0	25	11/18/2023 21:28	WG2173799
Methylene Chloride	U		6.63	25.0	25	11/18/2023 21:28	WG2173799
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0	25	11/18/2023 21:28	WG2173799
Methyl tert-butyl ether	U		0.295	1.00	25	11/18/2023 21:28	WG2173799
Naphthalene	U	C3	3.10	12.5	25	11/18/2023 21:28	WG2173799
n-Propylbenzene	U		1.18	5.00	25	11/18/2023 21:28	WG2173799
Styrene	U	C3	2.73	12.5	25	11/18/2023 21:28	WG2173799
1,1,1,2-Tetrachloroethane	U		0.500	2.50	25	11/18/2023 21:28	WG2173799
1,1,2,2-Tetrachloroethane	U		0.390	2.50	25	11/18/2023 21:28	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50	25	11/18/2023 21:28	WG2173799
Tetrachloroethene	U		0.700	2.50	25	11/18/2023 21:28	WG2173799
Toluene	U		1.25	5.00	25	11/18/2023 21:28	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.625	12.5	25	11/18/2023 21:28	WG2173799
1,2,4-Trichlorobenzene	U	C3	4.83	12.5	25	11/18/2023 21:28	WG2173799
1,1,1-Trichloroethane	U		0.275	2.50	25	11/18/2023 21:28	WG2173799
1,1,2-Trichloroethane	U		0.883	2.50	25	11/18/2023 21:28	WG2173799
Trichloroethene	0.900	J	0.400	1.00	25	11/18/2023 21:28	WG2173799
Trichlorofluoromethane	U		0.500	2.50	25	11/18/2023 21:28	WG2173799
1,2,3-Trichloropropane	U		5.10	12.5	25	11/18/2023 21:28	WG2173799
1,2,4-Trimethylbenzene	U		1.16	5.00	25	11/18/2023 21:28	WG2173799
1,2,3-Trimethylbenzene	U		1.15	5.00	25	11/18/2023 21:28	WG2173799
1,3,5-Trimethylbenzene	U		1.08	5.00	25	11/18/2023 21:28	WG2173799
Vinyl acetate	U		3.53	12.5	25	11/18/2023 21:28	WG2173799
Vinyl chloride	241	C3	0.682	2.50	25	11/18/2023 21:28	WG2173799
Xylenes, Total	U		4.78	6.50	25	11/18/2023 21:28	WG2173799
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 21:28*	WG2173799
(S) 4-Bromofluorobenzene	*85.6*			*67.0-138*		*11/18/2023 21:28*	WG2173799
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/18/2023 21:28*	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 17:56	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 17:56	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 17:56	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 17:56	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 17:56	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 17:56	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 17:56	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 17:56	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 17:56	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 17:56	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 17:56	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 17:56	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 17:56	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 17:56	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 17:56	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 17:56	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 17:56	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 17:56	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 17:56	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 17:56	WG2173799
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 17:56	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 17:56	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 17:56	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 17:56	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 17:56	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 17:56	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 17:56	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 17:56	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 17:56	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 17:56	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 17:56	WG2173799
cis-1,2-Dichloroethene	5.93		0.0276	0.100	1	11/18/2023 17:56	WG2173799
trans-1,2-Dichloroethene	0.132	J	0.0572	0.200	1	11/18/2023 17:56	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 17:56	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 17:56	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 17:56	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 17:56	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 17:56	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 17:56	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 17:56	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 17:56	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 17:56	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 17:56	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 17:56	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 17:56	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 17:56	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 17:56	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 17:56	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 17:56	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 17:56	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 17:56	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 17:56	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 17:56	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 17:56	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 17:56	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 17:56	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 17:56	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 17:56	WG2173799
Toluene	0.0580	J	0.0500	0.200	1	11/18/2023 17:56	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 17:56	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 17:56	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 17:56	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 17:56	WG2173799
Trichloroethene	0.0480		0.0160	0.0400	1	11/18/2023 17:56	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 17:56	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 17:56	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 17:56	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 17:56	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 17:56	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 17:56	WG2173799
Vinyl chloride	54.7	C3	0.0273	0.100	1	11/18/2023 17:56	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 17:56	WG2173799
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2023 17:56*	WG2173799
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*11/18/2023 17:56*	WG2173799
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/18/2023 17:56*	WG2173799

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	U		8450	20000	1	11/20/2023 14:47	WG2174432

Sample Narrative:
L1677527-07 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	433	J	379	1000	1	11/15/2023 01:12	WG2171026
Nitrate	74.3	J	48.0	100	1	11/15/2023 01:12	WG2171026
Sulfate	U		594	5000	1	11/15/2023 01:12	WG2171026

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	310	B J	102	1000	1	12/02/2023 10:17	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	U		28.1	100	1	11/21/2023 14:55	WG2174222
Manganese	U		0.704	5.00	1	11/21/2023 14:55	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	6.31		0.287	0.678	1	11/21/2023 15:24	WG2174876
Ethane	U		0.296	1.29	1	11/21/2023 15:24	WG2174876
Ethene	U		0.422	1.27	1	11/21/2023 15:24	WG2174876

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.76	C5	0.548	1.00	1	11/18/2023 14:45	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 14:45	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 14:45	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 14:45	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 14:45	WG2173799
Bromodichloromethane	0.140		0.0315	0.100	1	11/18/2023 14:45	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 14:45	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 14:45	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 14:45	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 14:45	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 14:45	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 14:45	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 14:45	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 14:45	WG2173799
Chlorodibromomethane	0.148		0.0180	0.100	1	11/18/2023 14:45	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 14:45	WG2173799
Chloroform	0.111		0.0166	0.100	1	11/18/2023 14:45	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 14:45	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 14:45	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 14:45	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 14:45	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 14:45	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 14:45	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 14:45	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 14:45	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 14:45	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 14:45	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 14:45	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 14:45	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 14:45	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 14:45	WG2173799
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 14:45	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 14:45	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 14:45	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 14:45	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 14:45	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 14:45	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 14:45	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 14:45	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 14:45	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 14:45	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 14:45	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 14:45	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 14:45	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 14:45	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 14:45	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 14:45	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 14:45	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 14:45	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 14:45	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 14:45	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 14:45	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 14:45	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 14:45	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 14:45	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 14:45	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 14:45	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 14:45	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 14:45	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 14:45	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 14:45	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 14:45	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 14:45	WG2173799
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 14:45	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 14:45	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 14:45	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 14:45	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 14:45	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 14:45	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 14:45	WG2173799
Vinyl chloride	U	C3	0.0273	0.100	1	11/18/2023 14:45	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 14:45	WG2173799
(S) Toluene-d8	*109*			*75.0-131*		*11/18/2023 14:45*	WG2173799
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*11/18/2023 14:45*	WG2173799
(S) 1,2-Dichloroethane-d4	*93.4*			*70.0-130*		*11/18/2023 14:45*	WG2173799

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.16	C5	0.548	1.00	1	11/18/2023 15:04	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 15:04	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 15:04	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 15:04	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 15:04	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 15:04	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 15:04	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 15:04	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 15:04	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 15:04	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 15:04	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 15:04	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 15:04	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 15:04	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 15:04	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 15:04	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 15:04	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 15:04	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 15:04	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 15:04	WG2173799
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 15:04	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 15:04	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 15:04	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 15:04	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 15:04	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 15:04	WG2173799
trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 15:04	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 15:04	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 15:04	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 15:04	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 15:04	WG2173799
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 15:04	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 15:04	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 15:04	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 15:04	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 15:04	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 15:04	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 15:04	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 15:04	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 15:04	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 15:04	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 15:04	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 15:04	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 15:04	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 15:04	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 15:04	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 15:04	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 15:04	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 15:04	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 15:04	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 15:04	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 15:04	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 15:04	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 15:04	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 15:04	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 15:04	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 15:04	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 15:04	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 15:04	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 15:04	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 15:04	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 15:04	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 15:04	WG2173799
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 15:04	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 15:04	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 15:04	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 15:04	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 15:04	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 15:04	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 15:04	WG2173799
Vinyl chloride	U	C3	0.0273	0.100	1	11/18/2023 15:04	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 15:04	WG2173799
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 15:04*	WG2173799
(S) 4-Bromofluorobenzene	*88.8*			*67.0-138*		*11/18/2023 15:04*	WG2173799
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/18/2023 15:04*	WG2173799

Method Blank (MB)

(MB) R4002348-2 11/20/23 12:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1676682-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1676682-01 11/20/23 13:06 • (DUP) R4002348-3 11/20/23 13:11

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	275000	276000	1	0.441		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1676829-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1676829-05 11/20/23 15:13 • (DUP) R4002348-4 11/20/23 15:17

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	903000	895000	1	0.920		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4002348-1 11/20/23 12:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	97200	97.2	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4000426-1 11/14/23 16:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		379	1000
Nitrate	U		48.0	100
Sulfate	U		594	5000

L1677499-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1677499-04 11/14/23 22:47 • (DUP) R4000426-3 11/15/23 03:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	102000	103000	1	0.539		15
Nitrate	123	U	1	200	P1	15
Sulfate	10500	10100	1	3.36		15

L1677527-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1677527-01 11/15/23 00:32 • (DUP) R4000426-6 11/15/23 04:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	34900	35300	1	1.14		15
Nitrate	126	76.3	1	49.4	J P1	15
Sulfate	6890	6920	1	0.477		15

Laboratory Control Sample (LCS)

(LCS) R4000426-2 11/14/23 16:42

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40300	101	80.0-120	
Nitrate	8000	7990	99.8	80.0-120	
Sulfate	40000	38000	94.9	80.0-120	

L1677499-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677499-04 11/14/23 22:47 • (MS) R4000426-4 11/15/23 03:27 • (MSD) R4000426-5 11/15/23 03:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	102000	122000	123000	49.5	52.7	1	80.0-120	J6	J6	1.05	15
Nitrate	8000	123	7710	7830	94.8	96.3	1	80.0-120			1.55	15
Sulfate	40000	10500	46800	47700	90.9	93.0	1	80.0-120			1.78	15

L1677527-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1677527-01 11/15/23 00:32 • (MS) R4000426-7 11/15/23 04:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	34900	69900	87.6	1	80.0-120	
Nitrate	8000	126	7920	97.5	1	80.0-120	
Sulfate	40000	6890	45500	96.5	1	80.0-120	

Method Blank (MB)

(MB) R4004498-1 11/26/23 18:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Sulfate	U		594	5000

L1677308-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1677308-10 11/26/23 22:07 • (DUP) R4004498-3 11/26/23 22:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	8390	8410	1	0.270		15
Sulfate	49300	49000	1	0.471		15

L1677672-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1677672-01 11/27/23 04:13 • (DUP) R4004498-6 11/27/23 04:29

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	13600	13700	1	0.852		15
Sulfate	5940	6020	1	1.32		15

Laboratory Control Sample (LCS)

(LCS) R4004498-2 11/26/23 18:36

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40400	101	80.0-120	
Sulfate	40000	41700	104	80.0-120	

L1677308-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677308-10 11/26/23 22:07 • (MS) R4004498-4 11/26/23 23:11 • (MSD) R4004498-5 11/26/23 23:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	8390	47800	47500	98.5	97.8	1	80.0-120			0.547	15
Sulfate	40000	49300	79700	79500	76.1	75.5	1	80.0-120	J6	J6	0.315	15

L1677672-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1677672-01 11/27/23 04:13 • (MS) R4004498-7 11/27/23 05:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	13600	51000	93.4	1	80.0-120	
Sulfate	40000	5940	45100	97.9	1	80.0-120	

Method Blank (MB)

(MB) R4007432-2 12/02/23 01:50

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	242	J	102	1000

L1677224-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1677224-01 12/02/23 02:42 • (DUP) R4007432-3 12/02/23 02:56

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	2400	2410	1	0.250		20

L1677469-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1677469-01 12/02/23 06:03 • (DUP) R4007432-6 12/02/23 06:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	295	250	1	16.5	J	20

Laboratory Control Sample (LCS)

(LCS) R4007432-1 12/02/23 01:37

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	24000	96.2	85.0-115	

L1677224-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677224-02 12/02/23 03:09 • (MS) R4007432-4 12/02/23 03:32 • (MSD) R4007432-5 12/02/23 03:54

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	1580	26300	26500	99.0	99.5	1	85.0-115			0.455	20

L1677499-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677499-05 12/02/23 08:31 • (MS) R4007432-7 12/02/23 08:54 • (MSD) R4007432-8 12/02/23 09:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	1850	26700	26500	99.4	98.7	1	85.0-115			0.714	20

Method Blank (MB)

(MB) R4002931-1 11/21/23 13:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4002931-2 11/21/23 13:57

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	920	92.0	80.0-120	
Manganese	50.0	45.8	91.5	80.0-120	

L1677631-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1677631-07 11/21/23 14:00 • (MS) R4002931-4 11/21/23 14:07 • (MSD) R4002931-5 11/21/23 14:10

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	294	1520	1290	123	99.9	1	75.0-125			16.3	20
Manganese	50.0	381	447	435	133	109	1	75.0-125	V		2.69	20

Method Blank (MB)

(MB) R4003068-2 11/21/23 13:34

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1677308-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1677308-14 11/21/23 14:11 • (DUP) R4003068-3 11/21/23 15:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	3710	3770	1	1.60		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1677779-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1677779-06 11/21/23 15:36 • (DUP) R4003068-4 11/21/23 17:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	U	1	0.000		20
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4003068-1 11/21/23 13:31 • (LCSD) R4003068-5 11/21/23 17:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	70.2	72.0	104	106	85.0-115			2.53	20
Ethane	129	118	114	91.5	88.4	85.0-115			3.45	20
Ethene	127	117	114	92.1	89.8	85.0-115			2.60	20

Method Blank (MB)

(MB) R4003102-2 11/21/23 18:02

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1679637-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1679637-01 11/21/23 18:25 • (DUP) R4003102-3 11/21/23 18:28

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	U	1	0.000		20

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

(LCS) R4003102-1 11/21/23 17:57 • (LCSD) R4003102-4 11/21/23 18:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	68.4	66.2	101	97.6	85.0-115			3.27	20

Method Blank (MB)

(MB) R4003456-3 11/18/23 11:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromochloromethane	U		0.0452	0.200
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon disulfide	U		0.162	0.500
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
trans-1,4-Dichloro-2-butene	U		0.0560	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400

Method Blank (MB)

(MB) R4003456-3 11/18/23 11:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
2-Hexanone	U		0.400	1.00
n-Hexane	U		0.0424	0.200
Iodomethane	U		0.242	0.500
Isopropylbenzene	U		0.0345	0.100
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl acetate	U		0.141	0.500
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*87.7*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

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

(LCS) R4003456-1 11/18/23 10:02 • (LCSD) R4003456-2 11/18/23 10:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	33.4	36.9	134	148	10.0-160			9.96	31
Acrylonitrile	25.0	21.1	26.0	84.4	104	45.0-153			20.8	22
Benzene	5.00	4.95	4.83	99.0	96.6	70.0-123			2.45	20
Bromobenzene	5.00	5.63	5.41	113	108	73.0-121			3.99	20
Bromochloromethane	5.00	4.99	5.31	99.8	106	77.0-128			6.21	20
Bromodichloromethane	5.00	5.03	5.00	101	100	73.0-121			0.598	20
Bromoform	5.00	4.45	4.31	89.0	86.2	64.0-132			3.20	20
Bromomethane	5.00	4.56	4.43	91.2	88.6	56.0-147			2.89	20
n-Butylbenzene	5.00	4.31	4.23	86.2	84.6	68.0-135			1.87	20
sec-Butylbenzene	5.00	4.92	4.90	98.4	98.0	74.0-130			0.407	20
tert-Butylbenzene	5.00	5.02	4.66	100	93.2	75.0-127			7.44	20
Carbon disulfide	5.00	4.66	4.51	93.2	90.2	56.0-133			3.27	20
Carbon tetrachloride	5.00	4.89	4.84	97.8	96.8	66.0-128			1.03	20
Chlorobenzene	5.00	4.86	4.92	97.2	98.4	76.0-128			1.23	20
Chlorodibromomethane	5.00	4.89	4.79	97.8	95.8	74.0-127			2.07	20
Chloroethane	5.00	4.26	4.06	85.2	81.2	61.0-134			4.81	20
Chloroform	5.00	5.16	5.14	103	103	72.0-123			0.388	20
Chloromethane	5.00	4.38	4.27	87.6	85.4	51.0-138			2.54	20
2-Chlorotoluene	5.00	5.49	5.34	110	107	75.0-124			2.77	20
4-Chlorotoluene	5.00	5.28	5.11	106	102	75.0-124			3.27	20
1,2-Dibromo-3-Chloropropane	5.00	4.34	4.62	86.8	92.4	59.0-130			6.25	20
1,2-Dibromoethane	5.00	4.96	4.89	99.2	97.8	74.0-128			1.42	20
Dibromomethane	5.00	4.72	5.05	94.4	101	75.0-122			6.76	20
1,2-Dichlorobenzene	5.00	4.40	4.64	88.0	92.8	76.0-124			5.31	20
1,3-Dichlorobenzene	5.00	5.08	5.17	102	103	76.0-125			1.76	20
1,4-Dichlorobenzene	5.00	4.80	4.86	96.0	97.2	77.0-121			1.24	20
trans-1,4-Dichloro-2-butene	5.00	2.89	3.16	57.8	63.2	45.0-143			8.93	20
Dichlorodifluoromethane	5.00	4.87	4.88	97.4	97.6	43.0-156			0.205	20
1,1-Dichloroethane	5.00	4.65	4.63	93.0	92.6	70.0-127			0.431	20
1,2-Dichloroethane	5.00	4.46	4.72	89.2	94.4	65.0-131			5.66	20
1,1-Dichloroethene	5.00	4.61	4.78	92.2	95.6	65.0-131			3.62	20
cis-1,2-Dichloroethene	5.00	4.83	4.79	96.6	95.8	73.0-125			0.832	20
trans-1,2-Dichloroethene	5.00	5.02	4.99	100	99.8	71.0-125			0.599	20
1,2-Dichloropropane	5.00	4.68	4.56	93.6	91.2	74.0-125			2.60	20
1,1-Dichloropropene	5.00	5.24	4.82	105	96.4	73.0-125			8.35	20
1,3-Dichloropropane	5.00	4.99	4.79	99.8	95.8	80.0-125			4.09	20
cis-1,3-Dichloropropene	5.00	5.02	4.94	100	98.8	76.0-127			1.61	20
trans-1,3-Dichloropropene	5.00	5.04	4.89	101	97.8	73.0-127			3.02	20
2,2-Dichloropropane	5.00	4.47	4.51	89.4	90.2	59.0-135			0.891	20
Di-isopropyl ether	5.00	4.58	4.51	91.6	90.2	60.0-136			1.54	20

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

(LCS) R4003456-1 11/18/23 10:02 • (LCSD) R4003456-2 11/18/23 10:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	5.00	4.79	4.81	95.8	96.2	74.0-126			0.417	20
Hexachloro-1,3-butadiene	5.00	4.42	4.54	88.4	90.8	57.0-150			2.68	20
2-Hexanone	25.0	24.6	23.9	98.4	95.6	54.0-147			2.89	20
n-Hexane	5.00	4.97	5.12	99.4	102	55.0-137			2.97	20
Iodomethane	25.0	25.8	26.0	103	104	74.0-134			0.772	20
Isopropylbenzene	5.00	4.32	4.49	86.4	89.8	72.0-127			3.86	20
p-Isopropyltoluene	5.00	4.64	4.60	92.8	92.0	72.0-133			0.866	20
2-Butanone (MEK)	25.0	28.2	32.0	113	128	30.0-160			12.6	24
Methylene Chloride	5.00	4.83	4.63	96.6	92.6	68.0-123			4.23	20
4-Methyl-2-pentanone (MIBK)	25.0	26.5	26.2	106	105	56.0-143			1.14	20
Methyl tert-butyl ether	5.00	4.51	4.90	90.2	98.0	66.0-132			8.29	20
Naphthalene	5.00	3.15	3.58	63.0	71.6	59.0-130			12.8	20
n-Propylbenzene	5.00	5.39	5.22	108	104	74.0-126			3.20	20
Styrene	5.00	3.98	4.10	79.6	82.0	72.0-127			2.97	20
1,1,1,2-Tetrachloroethane	5.00	4.52	4.74	90.4	94.8	74.0-129			4.75	20
1,1,2,2-Tetrachloroethane	5.00	5.70	5.45	114	109	68.0-128			4.48	20
1,1,2-Trichlorotrifluoroethane	5.00	4.90	4.98	98.0	99.6	61.0-139			1.62	20
Tetrachloroethene	5.00	5.15	5.11	103	102	70.0-136			0.780	20
Toluene	5.00	4.96	4.92	99.2	98.4	75.0-121			0.810	20
1,2,3-Trichlorobenzene	5.00	3.79	4.03	75.8	80.6	59.0-139			6.14	20
1,2,4-Trichlorobenzene	5.00	3.72	3.90	74.4	78.0	62.0-137			4.72	20
1,1,1-Trichloroethane	5.00	5.00	4.81	100	96.2	69.0-126			3.87	20
1,1,2-Trichloroethane	5.00	5.09	5.04	102	101	78.0-123			0.987	20
Trichloroethene	5.00	5.03	5.06	101	101	76.0-126			0.595	20
Trichlorofluoromethane	5.00	4.48	3.97	89.6	79.4	61.0-142			12.1	20
1,2,3-Trichloropropane	5.00	6.06	5.74	121	115	67.0-129			5.42	20
1,2,4-Trimethylbenzene	5.00	4.93	4.71	98.6	94.2	70.0-126			4.56	20
1,2,3-Trimethylbenzene	5.00	4.62	4.80	92.4	96.0	74.0-124			3.82	20
1,3,5-Trimethylbenzene	5.00	5.04	4.78	101	95.6	73.0-127			5.30	20
Vinyl acetate	25.0	25.3	24.8	101	99.2	43.0-159			2.00	20
Vinyl chloride	5.00	3.91	3.64	78.2	72.8	63.0-134			7.15	20
Xylenes, Total	15.0	13.4	13.7	89.3	91.3	72.0-127			2.21	20
(S) Toluene-d8				*103*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*88.8*	*89.3*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*106*	*103*	*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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.

Company Name/Address:
PES Environmental, Inc.- WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Pres Chk

Report to: Jessica Babb

Email To: jessica.babb@nv5.com;natalie.wisdom@nv5.co

Project Description: American Linen- Q4 2023

City/State Collected:

Please Circle: PT MT CT ET

Phone: 206-529-3980

Client Project # 14130001.10.603

Lab Project # PESENVSWA-AL

Collected by (print): Osmin Monroy

Site/Facility ID # SDOT

P.O. #

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK, CL, NO2 125mlHDPE-NoPres	Metals 250mlHDPE-HNO3	RSK175 40mlAmb HCl	SO4 125mlHDPE-NoPres	TOC 250mlAmb-HCl	V8260 40mlAmb-HCl	Remarks	Sample # (lab only)
MW-349-111323	G	GW	—	11/13/23	1008	10	X	X	X	X	X	X		-01
MW-9IB-111323		GW	—		1113	10	X	X	X	X	X	X		-02
MW-350-111323		GW	—		1253	10	X	X	X	X	X	X		-03
MW-344-111323		GW	—		1402	3						X		-04
MW-345-111323		GW	—		1449	3						X		-05
EQ-111323		GW	—		1530	10	X	X	X	X	X	X		-06
TB-111323		GW	—		1200	1						X		-07
		GW												
		GW												
		GW												

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1677527

H029

Acctnum: PESENVSWA
Template: T241746
Prelogin: P1036751
PM: 546 - Jared Starkey
PB: CS 11/9/23

Shipped Via: FedEX Priority

* 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 # 6643 4316 8670

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCl / MeoH TBR
	11/13/23	1645		1
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: COA °C Bottles Received:
				2.5+0=2.5 35
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
				11/14/23 0900

If pr PH-10BDH4321 TRC-2352362 CR6-20221V /Time

Hold:

Condition: NCF / OK

ANALYTICAL REPORT

February 13, 2024

Revised Report

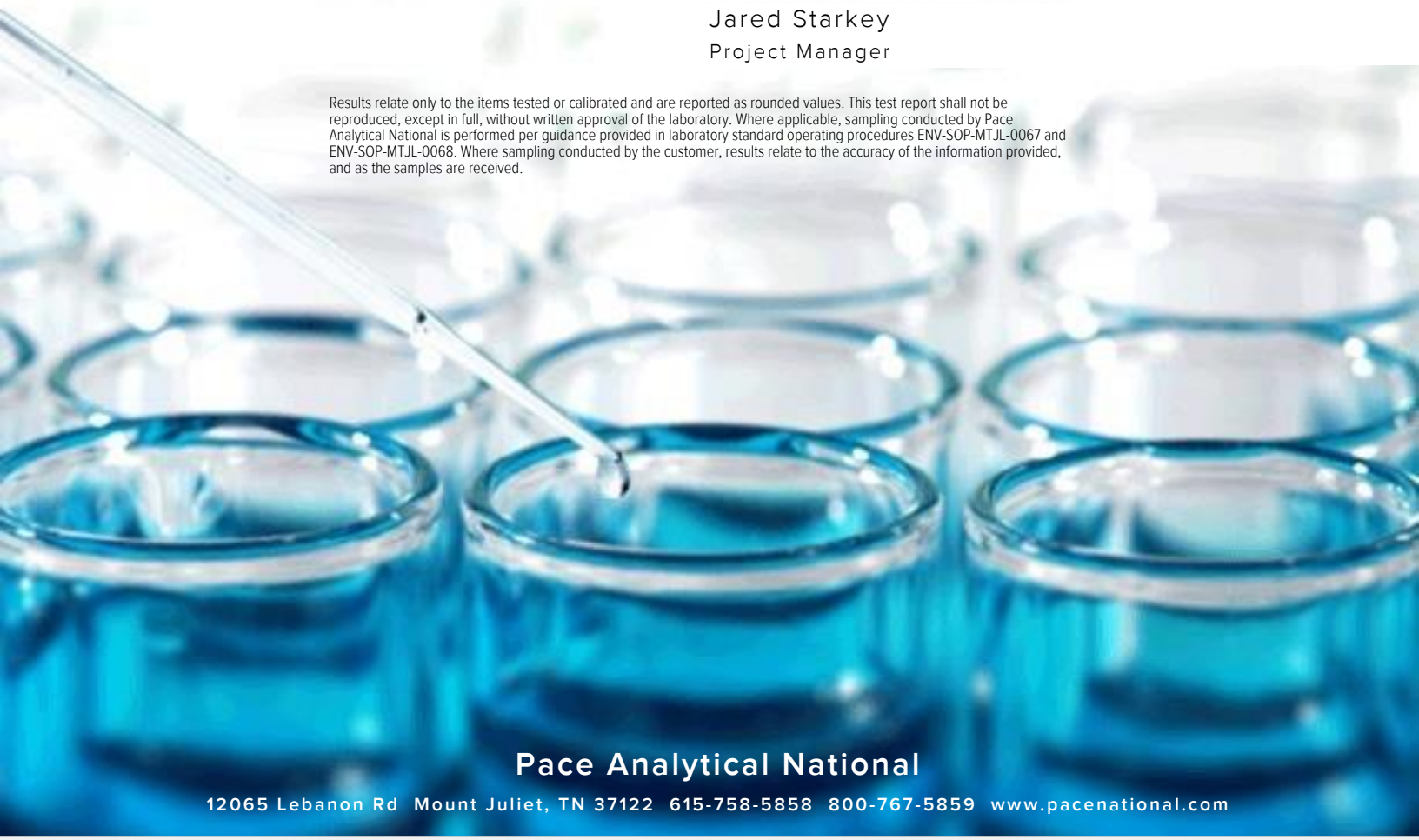
PES Environmental, Inc.- WA

Sample Delivery Group:	L1678545
Samples Received:	11/16/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

FMW-129-111423 L1678545-01 GW

Collected by	Collected date/time	Received date/time
	11/14/23 10:47	11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 18:16	11/18/23 18:16	JBE	Mt. Juliet, TN

MW106-111423 L1678545-02 GW

Collected by	Collected date/time	Received date/time
	11/14/23 13:55	11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173799	1	11/18/23 18:35	11/18/23 18:35	JBE	Mt. Juliet, TN

FMW-140-111423 L1678545-03 GW

Collected by	Collected date/time	Received date/time
	11/14/23 16:31	11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173848	1	11/18/23 22:46	11/18/23 22:46	ACG	Mt. Juliet, TN

MW-348-111523 L1678545-04 GW

Collected by	Collected date/time	Received date/time
	11/14/23 10:47	11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG2173298	1	11/20/23 15:19	11/20/23 15:19	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2177339	1	11/26/23 02:14	11/26/23 02:14	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG2182046	1	12/06/23 14:17	12/06/23 14:17	DMA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2174880	1	11/21/23 15:44	11/22/23 14:39	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2174880	10	11/21/23 15:44	11/22/23 14:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2176392	1	11/26/23 15:38	11/26/23 15:38	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG2177659	10	11/26/23 17:01	11/26/23 17:01	CCM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173848	1	11/18/23 23:06	11/18/23 23:06	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2174930	10	11/21/23 11:21	11/21/23 11:21	AV	Mt. Juliet, TN

TB-111523 L1678545-05 GW

Collected by	Collected date/time	Received date/time
	11/14/23 00:00	11/16/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2173848	1	11/18/23 18:20	11/18/23 18:20	ACG	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.

Jared Starkey
Project Manager

Report Revision History

Level II Report - Version 1: 12/07/23 11:28

Project Narrative

ID Corrections

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	0.860	J	0.548	1.00	1	11/18/2023 18:16	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 18:16	WG2173799
Benzene	0.0250	J	0.0160	0.0400	1	11/18/2023 18:16	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 18:16	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 18:16	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 18:16	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 18:16	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 18:16	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 18:16	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 18:16	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 18:16	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 18:16	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 18:16	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 18:16	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 18:16	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 18:16	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 18:16	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 18:16	WG2173799
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 18:16	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 18:16	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 18:16	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 18:16	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 18:16	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 18:16	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 18:16	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 18:16	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 18:16	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 18:16	WG2173799
cis-1,2-Dichloroethene	9.16		0.0276	0.100	1	11/18/2023 18:16	WG2173799
trans-1,2-Dichloroethene	0.101	J	0.0572	0.200	1	11/18/2023 18:16	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 18:16	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 18:16	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 18:16	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 18:16	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 18:16	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 18:16	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 18:16	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 18:16	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 18:16	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 18:16	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 18:16	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 18:16	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 18:16	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 18:16	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 18:16	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 18:16	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 18:16	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 18:16	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 18:16	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 18:16	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 18:16	WG2173799
Tetrachloroethene	1.09		0.0280	0.100	1	11/18/2023 18:16	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 18:16	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 18:16	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 18:16	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 18:16	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 18:16	WG2173799
Trichloroethene	3.59		0.0160	0.0400	1	11/18/2023 18:16	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 18:16	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 18:16	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 18:16	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 18:16	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 18:16	WG2173799
Vinyl chloride	U	C3	0.0273	0.100	1	11/18/2023 18:16	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 18:16	WG2173799
Ethyl Ether	U	J3	0.0170	0.100	1	11/18/2023 18:16	WG2173799
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 18:16	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 18:16	WG2173799
Allyl chloride	U		0.580	1.00	1	11/18/2023 18:16	WG2173799
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 18:16	WG2173799
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 18:16*	WG2173799
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*		*11/18/2023 18:16*	WG2173799
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/18/2023 18:16*	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.20	C5	0.548	1.00	1	11/18/2023 18:35	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 18:35	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 18:35	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 18:35	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 18:35	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 18:35	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 18:35	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 18:35	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 18:35	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 18:35	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 18:35	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 18:35	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 18:35	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 18:35	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 18:35	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 18:35	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 18:35	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 18:35	WG2173799
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 18:35	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 18:35	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 18:35	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 18:35	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 18:35	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 18:35	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 18:35	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 18:35	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 18:35	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 18:35	WG2173799
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 18:35	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 18:35	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 18:35	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 18:35	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 18:35	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 18:35	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 18:35	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 18:35	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 18:35	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 18:35	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 18:35	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 18:35	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 18:35	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 18:35	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 18:35	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 18:35	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 18:35	WG2173799
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 18:35	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 18:35	WG2173799
Styrene	U	C3	0.109	0.500	1	11/18/2023 18:35	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 18:35	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 18:35	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 18:35	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 18:35	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 18:35	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 18:35	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 18:35	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 18:35	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 18:35	WG2173799
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 18:35	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 18:35	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 18:35	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 18:35	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 18:35	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 18:35	WG2173799
Vinyl chloride	U	C3	0.0273	0.100	1	11/18/2023 18:35	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 18:35	WG2173799
Ethyl Ether	U	J3	0.0170	0.100	1	11/18/2023 18:35	WG2173799
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 18:35	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 18:35	WG2173799
Allyl chloride	U		0.580	1.00	1	11/18/2023 18:35	WG2173799
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 18:35	WG2173799
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 18:35*	WG2173799
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*11/18/2023 18:35*	WG2173799
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/18/2023 18:35*	WG2173799

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 22:46	WG2173848
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 22:46	WG2173848
Benzene	12.3		0.0160	0.0400	1	11/18/2023 22:46	WG2173848
Bromobenzene	U		0.0420	0.500	1	11/18/2023 22:46	WG2173848
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 22:46	WG2173848
Bromoform	U		0.239	1.00	1	11/18/2023 22:46	WG2173848
Bromomethane	U		0.148	0.500	1	11/18/2023 22:46	WG2173848
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 22:46	WG2173848
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 22:46	WG2173848
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 22:46	WG2173848
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 22:46	WG2173848
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 22:46	WG2173848
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 22:46	WG2173848
Chloroethane	U		0.0432	0.200	1	11/18/2023 22:46	WG2173848
Chloroform	0.157	B	0.0166	0.100	1	11/18/2023 22:46	WG2173848
Chloromethane	U		0.0556	0.500	1	11/18/2023 22:46	WG2173848
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 22:46	WG2173848
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 22:46	WG2173848
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 22:46	WG2173848
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 22:46	WG2173848
Dibromomethane	U		0.0400	0.200	1	11/18/2023 22:46	WG2173848
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 22:46	WG2173848
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 22:46	WG2173848
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 22:46	WG2173848
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 22:46	WG2173848
1,1-Dichloroethane	0.0890	J	0.0230	0.100	1	11/18/2023 22:46	WG2173848
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 22:46	WG2173848
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 22:46	WG2173848
cis-1,2-Dichloroethene	0.198		0.0276	0.100	1	11/18/2023 22:46	WG2173848
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 22:46	WG2173848
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 22:46	WG2173848
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 22:46	WG2173848
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 22:46	WG2173848
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 22:46	WG2173848
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 22:46	WG2173848
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 22:46	WG2173848
Di-isopropyl ether	0.593		0.0140	0.0400	1	11/18/2023 22:46	WG2173848
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 22:46	WG2173848
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 22:46	WG2173848
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 22:46	WG2173848
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 22:46	WG2173848
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 22:46	WG2173848
Methylene Chloride	U		0.265	1.00	1	11/18/2023 22:46	WG2173848
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 22:46	WG2173848
Methyl tert-butyl ether	0.822		0.0118	0.0400	1	11/18/2023 22:46	WG2173848
Naphthalene	U		0.124	0.500	1	11/18/2023 22:46	WG2173848
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 22:46	WG2173848
Styrene	U		0.109	0.500	1	11/18/2023 22:46	WG2173848
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 22:46	WG2173848
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 22:46	WG2173848
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 22:46	WG2173848
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 22:46	WG2173848
Toluene	0.0950	J	0.0500	0.200	1	11/18/2023 22:46	WG2173848
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 22:46	WG2173848
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 22:46	WG2173848
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 22:46	WG2173848

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 22:46	WG2173848
Trichloroethene	0.0900		0.0160	0.0400	1	11/18/2023 22:46	WG2173848
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 22:46	WG2173848
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 22:46	WG2173848
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 22:46	WG2173848
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 22:46	WG2173848
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 22:46	WG2173848
Vinyl chloride	19.8		0.0273	0.100	1	11/18/2023 22:46	WG2173848
Xylenes, Total	U		0.191	0.260	1	11/18/2023 22:46	WG2173848
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 22:46	WG2173848
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 22:46	WG2173848
Iodomethane	U		0.242	0.500	1	11/18/2023 22:46	WG2173848
Allyl chloride	U		0.580	1.00	1	11/18/2023 22:46	WG2173848
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 22:46	WG2173848
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 22:46*	WG2173848
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 22:46*	WG2173848
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*11/18/2023 22:46*	WG2173848

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	174000		8450	20000	1	11/20/2023 15:19	WG2173298

Sample Narrative:

L1678545-04 WG2173298: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	17200	T8	379	1000	1	11/26/2023 02:14	WG2177339
Nitrate	150	B T8	48.0	100	1	11/26/2023 02:14	WG2177339
Sulfate	32500	T8	594	5000	1	11/26/2023 02:14	WG2177339

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5310		102	1000	1	12/06/2023 14:17	WG2182046

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2320		281	1000	10	11/22/2023 14:52	WG2174880
Manganese	97.0		0.704	5.00	1	11/22/2023 14:39	WG2174880

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8900		2.87	6.78	10	11/26/2023 17:01	WG2177659
Ethane	1.68		0.296	1.29	1	11/26/2023 15:38	WG2176392
Ethene	95.8		0.422	1.27	1	11/26/2023 15:38	WG2176392

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.24	C5	0.548	1.00	1	11/18/2023 23:06	WG2173848
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 23:06	WG2173848
Benzene	0.0170	J	0.0160	0.0400	1	11/18/2023 23:06	WG2173848
Bromobenzene	U		0.0420	0.500	1	11/18/2023 23:06	WG2173848
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 23:06	WG2173848
Bromoform	U		0.239	1.00	1	11/18/2023 23:06	WG2173848
Bromomethane	U		0.148	0.500	1	11/18/2023 23:06	WG2173848
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 23:06	WG2173848
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 23:06	WG2173848
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 23:06	WG2173848
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 23:06	WG2173848
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 23:06	WG2173848
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 23:06	WG2173848
Chloroethane	U		0.0432	0.200	1	11/18/2023 23:06	WG2173848
Chloroform	U		0.0166	0.100	1	11/18/2023 23:06	WG2173848
Chloromethane	U		0.0556	0.500	1	11/18/2023 23:06	WG2173848
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 23:06	WG2173848
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 23:06	WG2173848
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 23:06	WG2173848
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 23:06	WG2173848

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 23:06	WG2173848
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 23:06	WG2173848
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 23:06	WG2173848
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 23:06	WG2173848
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 23:06	WG2173848
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 23:06	WG2173848
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 23:06	WG2173848
1,1-Dichloroethene	0.0660	J	0.0200	0.100	1	11/18/2023 23:06	WG2173848
cis-1,2-Dichloroethene	12.9		0.0276	0.100	1	11/18/2023 23:06	WG2173848
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 23:06	WG2173848
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 23:06	WG2173848
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 23:06	WG2173848
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 23:06	WG2173848
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 23:06	WG2173848
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 23:06	WG2173848
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 23:06	WG2173848
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 23:06	WG2173848
Ethylbenzene	0.0260	J	0.0212	0.100	1	11/18/2023 23:06	WG2173848
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 23:06	WG2173848
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 23:06	WG2173848
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 23:06	WG2173848
2-Butanone (MEK)	1.47		0.500	1.00	1	11/18/2023 23:06	WG2173848
Methylene Chloride	U		0.265	1.00	1	11/18/2023 23:06	WG2173848
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 23:06	WG2173848
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 23:06	WG2173848
Naphthalene	U		0.124	0.500	1	11/18/2023 23:06	WG2173848
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 23:06	WG2173848
Styrene	U		0.109	0.500	1	11/18/2023 23:06	WG2173848
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 23:06	WG2173848
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 23:06	WG2173848
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 23:06	WG2173848
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 23:06	WG2173848
Toluene	1.07		0.0500	0.200	1	11/18/2023 23:06	WG2173848
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 23:06	WG2173848
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 23:06	WG2173848
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 23:06	WG2173848
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 23:06	WG2173848
Trichloroethene	0.164		0.0160	0.0400	1	11/18/2023 23:06	WG2173848
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 23:06	WG2173848
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 23:06	WG2173848
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 23:06	WG2173848
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 23:06	WG2173848
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 23:06	WG2173848
Vinyl chloride	117		0.273	1.00	10	11/21/2023 11:21	WG2174930
Xylenes, Total	U		0.191	0.260	1	11/18/2023 23:06	WG2173848
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 23:06	WG2173848
Tetrahydrofuran	0.332	J	0.0900	0.500	1	11/18/2023 23:06	WG2173848
Iodomethane	U		0.242	0.500	1	11/18/2023 23:06	WG2173848
Allyl chloride	U		0.580	1.00	1	11/18/2023 23:06	WG2173848
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 23:06	WG2173848
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 23:06*	WG2173848
(S) Toluene-d8	*100*			*75.0-131*		*11/21/2023 11:21*	WG2174930
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 23:06*	WG2173848
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/21/2023 11:21*	WG2174930
(S) 1,2-Dichloroethane-d4	*92.5*			*70.0-130*		*11/18/2023 23:06*	WG2173848
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*11/21/2023 11:21*	WG2174930

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 18:20	WG2173848
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 18:20	WG2173848
Benzene	U		0.0160	0.0400	1	11/18/2023 18:20	WG2173848
Bromobenzene	U		0.0420	0.500	1	11/18/2023 18:20	WG2173848
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 18:20	WG2173848
Bromoform	U		0.239	1.00	1	11/18/2023 18:20	WG2173848
Bromomethane	U		0.148	0.500	1	11/18/2023 18:20	WG2173848
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 18:20	WG2173848
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 18:20	WG2173848
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 18:20	WG2173848
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 18:20	WG2173848
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 18:20	WG2173848
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 18:20	WG2173848
Chloroethane	U		0.0432	0.200	1	11/18/2023 18:20	WG2173848
Chloroform	U		0.0166	0.100	1	11/18/2023 18:20	WG2173848
Chloromethane	U		0.0556	0.500	1	11/18/2023 18:20	WG2173848
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 18:20	WG2173848
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 18:20	WG2173848
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 18:20	WG2173848
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 18:20	WG2173848
Dibromomethane	U		0.0400	0.200	1	11/18/2023 18:20	WG2173848
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 18:20	WG2173848
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 18:20	WG2173848
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 18:20	WG2173848
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 18:20	WG2173848
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 18:20	WG2173848
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 18:20	WG2173848
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 18:20	WG2173848
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 18:20	WG2173848
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 18:20	WG2173848
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 18:20	WG2173848
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 18:20	WG2173848
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 18:20	WG2173848
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 18:20	WG2173848
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 18:20	WG2173848
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 18:20	WG2173848
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 18:20	WG2173848
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 18:20	WG2173848
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 18:20	WG2173848
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 18:20	WG2173848
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 18:20	WG2173848
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 18:20	WG2173848
Methylene Chloride	U		0.265	1.00	1	11/18/2023 18:20	WG2173848
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 18:20	WG2173848
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 18:20	WG2173848
Naphthalene	U		0.124	0.500	1	11/18/2023 18:20	WG2173848
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 18:20	WG2173848
Styrene	U		0.109	0.500	1	11/18/2023 18:20	WG2173848
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 18:20	WG2173848
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 18:20	WG2173848
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 18:20	WG2173848
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 18:20	WG2173848
Toluene	U		0.0500	0.200	1	11/18/2023 18:20	WG2173848
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 18:20	WG2173848
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 18:20	WG2173848
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 18:20	WG2173848

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 18:20	WG2173848
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 18:20	WG2173848
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 18:20	WG2173848
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 18:20	WG2173848
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 18:20	WG2173848
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 18:20	WG2173848
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 18:20	WG2173848
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 18:20	WG2173848
Xylenes, Total	U		0.191	0.260	1	11/18/2023 18:20	WG2173848
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 18:20	WG2173848
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 18:20	WG2173848
Iodomethane	U		0.242	0.500	1	11/18/2023 18:20	WG2173848
Allyl chloride	U		0.580	1.00	1	11/18/2023 18:20	WG2173848
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 18:20	WG2173848
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 18:20*	WG2173848
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/18/2023 18:20*	WG2173848
(S) 1,2-Dichloroethane-d4	*90.3*			*70.0-130*		*11/18/2023 18:20*	WG2173848

Method Blank (MB)

(MB) R4002403-2 11/20/23 12:32

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	U		8450	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1678381-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678381-01 11/20/23 12:51 • (DUP) R4002403-3 11/20/23 12:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	68000	69100	1	1.61		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1678867-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1678867-09 11/20/23 15:52 • (DUP) R4002403-4 11/20/23 15:59

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	304000	305000	1	0.427		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R4002403-1 11/20/23 12:24

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	104000	104	90.0-110	

Sample Narrative:

LCS: Endpoint pH 4.5

Method Blank (MB)

(MB) R4005256-1 11/26/23 00:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		379	1000
Nitrate	74.5	J	48.0	100
Sulfate	U		594	5000

L1678548-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1678548-03 11/26/23 03:01 • (DUP) R4005256-5 11/26/23 03:49

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	3140	2990	1	5.00		15
Nitrate	609	620	1	1.74		15
Sulfate	741	U	1	200	P1	15

L1678699-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1678699-01 11/26/23 07:16 • (DUP) R4005256-6 11/26/23 07:32

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	8560	8580	1	0.305		15
Nitrate	176	122	1	36.2	P1	15
Sulfate	37800	37700	1	0.288		15

Laboratory Control Sample (LCS)

(LCS) R4005256-2 11/26/23 00:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39500	98.8	80.0-120	
Nitrate	8000	7760	97.0	80.0-120	
Sulfate	40000	40500	101	80.0-120	

L1678508-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678508-04 11/26/23 01:10 • (MS) R4005256-3 11/26/23 01:26 • (MSD) R4005256-4 11/26/23 01:42

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	40000	13700	49700	49100	90.1	88.6	10	80.0-120			1.19	15
Nitrate	8000	U	10400	10200	130	127	10	80.0-120	J5	J5	1.95	15
Sulfate	40000	2150000	1750000	1740000	0.000	0.000	10	80.0-120	V	V	0.304	15

Sample Narrative:

OS: Dilution due to matrix.

L1678699-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1678699-01 11/26/23 07:16 • (MS) R4005256-7 11/26/23 07:48

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	40000	8560	47100	96.3	1	80.0-120	
Nitrate	8000	176	8050	98.4	1	80.0-120	
Sulfate	40000	37800	71400	84.0	1	80.0-120	

Method Blank (MB)

(MB) R4009085-2 12/06/23 05:38

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
TOC (Total Organic Carbon)	225	J	102	1000

L1678241-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1678241-08 12/06/23 18:35 • (DUP) R4009085-7 12/06/23 18:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
TOC (Total Organic Carbon)	158000	157000	5	0.763		20

Laboratory Control Sample (LCS)

(LCS) R4009085-1 12/06/23 05:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
TOC (Total Organic Carbon)	25000	25300	101	85.0-115	

L1678241-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678241-06 12/06/23 07:24 • (MS) R4009085-3 12/06/23 07:44 • (MSD) R4009085-4 12/06/23 08:04

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	25000	2810	29000	29400	105	106	1	85.0-115			1.51	20

L1678402-05 Original Sample (OS) • Matrix Spike (MS)

(OS) L1678402-05 12/06/23 12:27 • (MS) R4009085-6 12/06/23 12:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
TOC (Total Organic Carbon)	25000	2350	28300	104	1	85.0-115	

Method Blank (MB)

(MB) R4003556-1 11/22/23 14:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	U		28.1	100
Manganese	U		0.704	5.00

Laboratory Control Sample (LCS)

(LCS) R4003556-2 11/22/23 14:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Iron	1000	1070	107	80.0-120	
Manganese	50.0	55.8	112	80.0-120	

L1678545-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678545-04 11/22/23 14:39 • (MS) R4003556-4 11/22/23 14:46 • (MSD) R4003556-5 11/22/23 14:49

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	1000	2420	3330	3470	90.7	105	1	75.0-125			4.14	20
Manganese	50.0	97.0	144	146	94.7	98.9	1	75.0-125			1.45	20

Method Blank (MB)

(MB) R4004266-2 11/26/23 11:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1678064-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1678064-04 11/26/23 11:23 • (DUP) R4004266-3 11/26/23 14:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

L1678182-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1678182-09 11/26/23 14:12 • (DUP) R4004266-4 11/26/23 16:05

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Ethane	U	U	1	0.000		20
Ethene	U	U	1	0.000		20

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

(LCS) R4004266-1 11/26/23 11:12 • (LCSD) R4004266-5 11/26/23 16:12

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Ethane	129	118	115	91.5	89.1	85.0-115			2.58	20
Ethene	127	116	115	91.3	90.6	85.0-115			0.866	20

Method Blank (MB)

(MB) R4004276-2 11/26/23 16:43

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678

L1678180-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1678180-03 11/26/23 16:47 • (DUP) R4004276-3 11/26/23 17:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	12200	12300	10	0.816		20

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

(LCS) R4004276-1 11/26/23 16:37 • (LCSD) R4004276-4 11/26/23 17:13

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	68.5	66.9	101	98.7	85.0-115			2.36	20

Method Blank (MB)

(MB) R4003456-3 11/18/23 11:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4003456-3 11/18/23 11:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*104*			*75.0-131*
(S) 4-Bromofluorobenzene	*87.7*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*

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

(LCS) R4003456-1 11/18/23 10:02 • (LCSD) R4003456-2 11/18/23 10:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	33.4	36.9	134	148	10.0-160			9.96	31
Acrylonitrile	25.0	21.1	26.0	84.4	104	45.0-153			20.8	22
Benzene	5.00	4.95	4.83	99.0	96.6	70.0-123			2.45	20
Bromobenzene	5.00	5.63	5.41	113	108	73.0-121			3.99	20
Bromodichloromethane	5.00	5.03	5.00	101	100	73.0-121			0.598	20
Bromoform	5.00	4.45	4.31	89.0	86.2	64.0-132			3.20	20
Bromomethane	5.00	4.56	4.43	91.2	88.6	56.0-147			2.89	20
n-Butylbenzene	5.00	4.31	4.23	86.2	84.6	68.0-135			1.87	20
sec-Butylbenzene	5.00	4.92	4.90	98.4	98.0	74.0-130			0.407	20
tert-Butylbenzene	5.00	5.02	4.66	100	93.2	75.0-127			7.44	20
Carbon tetrachloride	5.00	4.89	4.84	97.8	96.8	66.0-128			1.03	20
Chlorobenzene	5.00	4.86	4.92	97.2	98.4	76.0-128			1.23	20
Chlorodibromomethane	5.00	4.89	4.79	97.8	95.8	74.0-127			2.07	20
Chloroethane	5.00	4.26	4.06	85.2	81.2	61.0-134			4.81	20
Chloroform	5.00	5.16	5.14	103	103	72.0-123			0.388	20
Chloromethane	5.00	4.38	4.27	87.6	85.4	51.0-138			2.54	20
2-Chlorotoluene	5.00	5.49	5.34	110	107	75.0-124			2.77	20
4-Chlorotoluene	5.00	5.28	5.11	106	102	75.0-124			3.27	20
1,2-Dibromo-3-Chloropropane	5.00	4.34	4.62	86.8	92.4	59.0-130			6.25	20
1,2-Dibromoethane	5.00	4.96	4.89	99.2	97.8	74.0-128			1.42	20
Dibromomethane	5.00	4.72	5.05	94.4	101	75.0-122			6.76	20
1,2-Dichlorobenzene	5.00	4.40	4.64	88.0	92.8	76.0-124			5.31	20
1,3-Dichlorobenzene	5.00	5.08	5.17	102	103	76.0-125			1.76	20
1,4-Dichlorobenzene	5.00	4.80	4.86	96.0	97.2	77.0-121			1.24	20
Dichlorodifluoromethane	5.00	4.87	4.88	97.4	97.6	43.0-156			0.205	20
1,1-Dichloroethane	5.00	4.65	4.63	93.0	92.6	70.0-127			0.431	20
1,2-Dichloroethane	5.00	4.46	4.72	89.2	94.4	65.0-131			5.66	20
1,1-Dichloroethene	5.00	4.61	4.78	92.2	95.6	65.0-131			3.62	20
cis-1,2-Dichloroethene	5.00	4.83	4.79	96.6	95.8	73.0-125			0.832	20
trans-1,2-Dichloroethene	5.00	5.02	4.99	100	99.8	71.0-125			0.599	20
1,2-Dichloropropane	5.00	4.68	4.56	93.6	91.2	74.0-125			2.60	20
1,1-Dichloropropene	5.00	5.24	4.82	105	96.4	73.0-125			8.35	20
1,3-Dichloropropane	5.00	4.99	4.79	99.8	95.8	80.0-125			4.09	20
cis-1,3-Dichloropropene	5.00	5.02	4.94	100	98.8	76.0-127			1.61	20
trans-1,3-Dichloropropene	5.00	5.04	4.89	101	97.8	73.0-127			3.02	20
2,2-Dichloropropane	5.00	4.47	4.51	89.4	90.2	59.0-135			0.891	20
Di-isopropyl ether	5.00	4.58	4.51	91.6	90.2	60.0-136			1.54	20
Ethylbenzene	5.00	4.79	4.81	95.8	96.2	74.0-126			0.417	20
Hexachloro-1,3-butadiene	5.00	4.42	4.54	88.4	90.8	57.0-150			2.68	20
Isopropylbenzene	5.00	4.32	4.49	86.4	89.8	72.0-127			3.86	20

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

(LCS) R4003456-1 11/18/23 10:02 • (LCSD) R4003456-2 11/18/23 10:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.64	4.60	92.8	92.0	72.0-133			0.866	20
2-Butanone (MEK)	25.0	28.2	32.0	113	128	30.0-160			12.6	24
Methylene Chloride	5.00	4.83	4.63	96.6	92.6	68.0-123			4.23	20
4-Methyl-2-pentanone (MIBK)	25.0	26.5	26.2	106	105	56.0-143			1.14	20
Methyl tert-butyl ether	5.00	4.51	4.90	90.2	98.0	66.0-132			8.29	20
Naphthalene	5.00	3.15	3.58	63.0	71.6	59.0-130			12.8	20
n-Propylbenzene	5.00	5.39	5.22	108	104	74.0-126			3.20	20
Styrene	5.00	3.98	4.10	79.6	82.0	72.0-127			2.97	20
1,1,1,2-Tetrachloroethane	5.00	4.52	4.74	90.4	94.8	74.0-129			4.75	20
1,1,2,2-Tetrachloroethane	5.00	5.70	5.45	114	109	68.0-128			4.48	20
1,1,2-Trichlorotrifluoroethane	5.00	4.90	4.98	98.0	99.6	61.0-139			1.62	20
Tetrachloroethene	5.00	5.15	5.11	103	102	70.0-136			0.780	20
Toluene	5.00	4.96	4.92	99.2	98.4	75.0-121			0.810	20
1,2,3-Trichlorobenzene	5.00	3.79	4.03	75.8	80.6	59.0-139			6.14	20
1,2,4-Trichlorobenzene	5.00	3.72	3.90	74.4	78.0	62.0-137			4.72	20
1,1,1-Trichloroethane	5.00	5.00	4.81	100	96.2	69.0-126			3.87	20
1,1,2-Trichloroethane	5.00	5.09	5.04	102	101	78.0-123			0.987	20
Trichloroethene	5.00	5.03	5.06	101	101	76.0-126			0.595	20
Trichlorofluoromethane	5.00	4.48	3.97	89.6	79.4	61.0-142			12.1	20
1,2,3-Trichloropropane	5.00	6.06	5.74	121	115	67.0-129			5.42	20
1,2,4-Trimethylbenzene	5.00	4.93	4.71	98.6	94.2	70.0-126			4.56	20
1,2,3-Trimethylbenzene	5.00	4.62	4.80	92.4	96.0	74.0-124			3.82	20
1,3,5-Trimethylbenzene	5.00	5.04	4.78	101	95.6	73.0-127			5.30	20
Vinyl chloride	5.00	3.91	3.64	78.2	72.8	63.0-134			7.15	20
Xylenes, Total	15.0	13.4	13.7	89.3	91.3	72.0-127			2.21	20
Ethyl Ether	5.00	4.69	3.82	93.8	76.4	64.0-137		J3	20.4	20
Tetrahydrofuran	5.00	4.45	5.30	89.0	106	37.0-146			17.4	24
Iodomethane	25.0	25.8	26.0	103	104	74.0-134			0.772	20
Allyl chloride	25.0	24.0	24.6	96.0	98.4	70.0-131			2.47	20
Trans-1,4-Dichloro-2-butene	5.00	2.89	3.16	57.8	63.2	45.0-143			8.93	20
(S) Toluene-d8				*103*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*88.8*	*89.3*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*106*	*103*	*70.0-130*				

Method Blank (MB)

(MB) R4002439-3 11/18/23 16:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	0.0550	J	0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4002439-3 11/18/23 16:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*103*			*75.0-131*
(S) 4-Bromofluorobenzene	*101*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*89.5*			*70.0-130*

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

(LCS) R4002439-1 11/18/23 14:32 • (LCSD) R4002439-2 11/18/23 14:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	32.7	27.9	131	112	10.0-160			15.8	31
Acrylonitrile	25.0	24.9	22.9	99.6	91.6	45.0-153			8.37	22
Benzene	5.00	5.18	4.88	104	97.6	70.0-123			5.96	20
Bromobenzene	5.00	5.35	5.20	107	104	73.0-121			2.84	20
Bromodichloromethane	5.00	4.97	4.60	99.4	92.0	73.0-121			7.73	20
Bromoform	5.00	5.44	5.17	109	103	64.0-132			5.09	20
Bromomethane	5.00	5.81	5.34	116	107	56.0-147			8.43	20
n-Butylbenzene	5.00	5.03	5.04	101	101	68.0-135			0.199	20
sec-Butylbenzene	5.00	4.94	4.88	98.8	97.6	74.0-130			1.22	20
tert-Butylbenzene	5.00	5.24	5.35	105	107	75.0-127			2.08	20
Carbon tetrachloride	5.00	5.38	5.02	108	100	66.0-128			6.92	20
Chlorobenzene	5.00	5.33	5.15	107	103	76.0-128			3.44	20
Chlorodibromomethane	5.00	5.65	5.32	113	106	74.0-127			6.02	20
Chloroethane	5.00	5.49	5.33	110	107	61.0-134			2.96	20
Chloroform	5.00	4.85	4.60	97.0	92.0	72.0-123			5.29	20
Chloromethane	5.00	5.11	4.89	102	97.8	51.0-138			4.40	20
2-Chlorotoluene	5.00	5.25	5.17	105	103	75.0-124			1.54	20
4-Chlorotoluene	5.00	5.00	4.93	100	98.6	75.0-124			1.41	20
1,2-Dibromo-3-Chloropropane	5.00	4.57	4.47	91.4	89.4	59.0-130			2.21	20
1,2-Dibromoethane	5.00	5.39	5.16	108	103	74.0-128			4.36	20
Dibromomethane	5.00	5.31	5.14	106	103	75.0-122			3.25	20
1,2-Dichlorobenzene	5.00	5.16	5.13	103	103	76.0-124			0.583	20
1,3-Dichlorobenzene	5.00	5.32	5.18	106	104	76.0-125			2.67	20
1,4-Dichlorobenzene	5.00	5.02	4.91	100	98.2	77.0-121			2.22	20
Dichlorodifluoromethane	5.00	6.37	5.70	127	114	43.0-156			11.1	20
1,1-Dichloroethane	5.00	5.11	4.79	102	95.8	70.0-127			6.46	20
1,2-Dichloroethane	5.00	4.76	4.48	95.2	89.6	65.0-131			6.06	20
1,1-Dichloroethene	5.00	4.90	4.52	98.0	90.4	65.0-131			8.07	20
cis-1,2-Dichloroethene	5.00	5.32	5.05	106	101	73.0-125			5.21	20
trans-1,2-Dichloroethene	5.00	5.34	4.96	107	99.2	71.0-125			7.38	20
1,2-Dichloropropane	5.00	5.21	5.08	104	102	74.0-125			2.53	20
1,1-Dichloropropene	5.00	5.18	4.82	104	96.4	73.0-125			7.20	20
1,3-Dichloropropane	5.00	5.24	5.23	105	105	80.0-125			0.191	20
cis-1,3-Dichloropropene	5.00	5.19	4.98	104	99.6	76.0-127			4.13	20
trans-1,3-Dichloropropene	5.00	4.84	4.65	96.8	93.0	73.0-127			4.00	20
2,2-Dichloropropane	5.00	4.62	4.44	92.4	88.8	59.0-135			3.97	20
Di-isopropyl ether	5.00	4.58	4.32	91.6	86.4	60.0-136			5.84	20
Ethylbenzene	5.00	5.35	5.06	107	101	74.0-126			5.57	20
Hexachloro-1,3-butadiene	5.00	4.72	4.53	94.4	90.6	57.0-150			4.11	20
Isopropylbenzene	5.00	5.05	4.89	101	97.8	72.0-127			3.22	20

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

(LCS) R4002439-1 11/18/23 14:32 • (LCSD) R4002439-2 11/18/23 14:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.84	4.82	96.8	96.4	72.0-133			0.414	20
2-Butanone (MEK)	25.0	26.1	24.4	104	97.6	30.0-160			6.73	24
Methylene Chloride	5.00	5.26	4.89	105	97.8	68.0-123			7.29	20
4-Methyl-2-pentanone (MIBK)	25.0	24.7	23.4	98.8	93.6	56.0-143			5.41	20
Methyl tert-butyl ether	5.00	5.00	4.58	100	91.6	66.0-132			8.77	20
Naphthalene	5.00	4.21	4.37	84.2	87.4	59.0-130			3.73	20
n-Propylbenzene	5.00	5.10	5.12	102	102	74.0-126			0.391	20
Styrene	5.00	5.24	5.05	105	101	72.0-127			3.69	20
1,1,1,2-Tetrachloroethane	5.00	4.79	4.68	95.8	93.6	74.0-129			2.32	20
1,1,2,2-Tetrachloroethane	5.00	4.23	4.19	84.6	83.8	68.0-128			0.950	20
1,1,2-Trichlorotrifluoroethane	5.00	6.27	5.58	125	112	61.0-139			11.6	20
Tetrachloroethene	5.00	5.40	5.12	108	102	70.0-136			5.32	20
Toluene	5.00	5.10	4.94	102	98.8	75.0-121			3.19	20
1,2,3-Trichlorobenzene	5.00	4.08	4.35	81.6	87.0	59.0-139			6.41	20
1,2,4-Trichlorobenzene	5.00	4.54	4.72	90.8	94.4	62.0-137			3.89	20
1,1,1-Trichloroethane	5.00	4.96	4.61	99.2	92.2	69.0-126			7.31	20
1,1,2-Trichloroethane	5.00	5.02	4.86	100	97.2	78.0-123			3.24	20
Trichloroethene	5.00	5.64	5.46	113	109	76.0-126			3.24	20
Trichlorofluoromethane	5.00	6.09	5.54	122	111	61.0-142			9.46	20
1,2,3-Trichloropropane	5.00	4.89	4.81	97.8	96.2	67.0-129			1.65	20
1,2,4-Trimethylbenzene	5.00	4.77	4.78	95.4	95.6	70.0-126			0.209	20
1,2,3-Trimethylbenzene	5.00	4.61	4.65	92.2	93.0	74.0-124			0.864	20
1,3,5-Trimethylbenzene	5.00	4.76	4.82	95.2	96.4	73.0-127			1.25	20
Vinyl chloride	5.00	5.84	5.28	117	106	63.0-134			10.1	20
Xylenes, Total	15.0	16.0	15.8	107	105	72.0-127			1.26	20
Ethyl Ether	5.00	5.04	4.60	101	92.0	64.0-137			9.13	20
Tetrahydrofuran	5.00	4.28	4.15	85.6	83.0	37.0-146			3.08	24
Iodomethane	25.0	26.3	24.7	105	98.8	74.0-134			6.27	20
Allyl chloride	25.0	26.1	25.1	104	100	70.0-131			3.91	20
Trans-1,4-Dichloro-2-butene	5.00	2.54	2.86	50.8	57.2	45.0-143			11.9	20
(S) Toluene-d8				*101*	*101*	*75.0-131*				
(S) 4-Bromofluorobenzene				*101*	*101*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*95.6*	*94.3*	*70.0-130*				

L1678574-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678574-06 11/18/23 22:27 • (MS) R4002439-4 11/19/23 00:22 • (MSD) R4002439-5 11/19/23 00:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	0.884	99.1	96.1	78.6	76.2	1	10.0-160			3.07	40
Acrylonitrile	125	U	100	106	80.0	84.8	1	10.0-160			5.83	40
Benzene	25.0	0.106	21.5	21.8	85.6	86.8	1	10.0-149			1.39	37
Bromobenzene	25.0	U	23.2	24.0	92.8	96.0	1	10.0-156			3.39	38
Bromodichloromethane	25.0	U	21.3	22.0	85.2	88.0	1	10.0-143			3.23	37
Bromoform	25.0	U	23.3	23.9	93.2	95.6	1	10.0-146			2.54	36
Bromomethane	25.0	U	23.6	23.9	94.4	95.6	1	10.0-149			1.26	38
n-Butylbenzene	25.0	U	24.5	25.6	98.0	102	1	10.0-160			4.39	40
sec-Butylbenzene	25.0	U	22.8	23.7	91.2	94.8	1	10.0-159			3.87	39
tert-Butylbenzene	25.0	U	23.1	24.1	92.4	96.4	1	10.0-156			4.24	39
Carbon tetrachloride	25.0	U	22.8	23.4	91.2	93.6	1	10.0-145			2.60	37
Chlorobenzene	25.0	U	22.7	23.4	90.8	93.6	1	10.0-152			3.04	39
Chlorodibromomethane	25.0	U	24.1	25.1	96.4	100	1	10.0-146			4.07	37
Chloroethane	25.0	U	23.2	23.0	92.8	92.0	1	10.0-146			0.866	40
Chloroform	25.0	0.130	21.0	21.1	83.5	83.9	1	10.0-146			0.475	37
Chloromethane	25.0	U	20.4	20.2	81.6	80.8	1	10.0-159			0.985	37
2-Chlorotoluene	25.0	U	22.3	23.0	89.2	92.0	1	10.0-159			3.09	38
4-Chlorotoluene	25.0	U	22.1	22.9	88.4	91.6	1	10.0-155			3.56	39
1,2-Dibromo-3-Chloropropane	25.0	U	21.7	22.8	86.8	91.2	1	10.0-151			4.94	39
1,2-Dibromoethane	25.0	U	23.1	24.5	92.4	98.0	1	10.0-148			5.88	34
Dibromomethane	25.0	U	22.6	23.4	90.4	93.6	1	10.0-147			3.48	35
1,2-Dichlorobenzene	25.0	U	22.5	23.2	90.0	92.8	1	10.0-155			3.06	37
1,3-Dichlorobenzene	25.0	U	22.7	23.7	90.8	94.8	1	10.0-153			4.31	38
1,4-Dichlorobenzene	25.0	U	21.7	22.6	86.8	90.4	1	10.0-151			4.06	38
Dichlorodifluoromethane	25.0	U	27.0	26.4	108	106	1	10.0-160			2.25	35
1,1-Dichloroethane	25.0	U	21.7	22.5	86.8	90.0	1	10.0-147			3.62	37
1,2-Dichloroethane	25.0	0.116	19.5	20.0	77.5	79.5	1	10.0-148			2.53	35
1,1-Dichloroethene	25.0	0.0340	21.0	21.2	83.9	84.7	1	10.0-155			0.948	37
cis-1,2-Dichloroethene	25.0	14.0	36.1	37.1	88.4	92.4	1	10.0-149			2.73	37
trans-1,2-Dichloroethene	25.0	U	22.1	22.4	88.4	89.6	1	10.0-150			1.35	37
1,2-Dichloropropane	25.0	U	22.4	23.4	89.6	93.6	1	10.0-148			4.37	37
1,1-Dichloropropene	25.0	U	21.8	22.6	87.2	90.4	1	10.0-153			3.60	35
1,3-Dichloropropane	25.0	U	22.9	24.3	91.6	97.2	1	10.0-154			5.93	35
cis-1,3-Dichloropropene	25.0	U	22.8	23.5	91.2	94.0	1	10.0-151			3.02	37
trans-1,3-Dichloropropene	25.0	U	21.9	22.9	87.6	91.6	1	10.0-148			4.46	37
2,2-Dichloropropane	25.0	U	22.3	21.1	89.2	84.4	1	10.0-138			5.53	36
Di-isopropyl ether	25.0	U	19.5	19.9	78.0	79.6	1	10.0-147			2.03	36
Ethylbenzene	25.0	U	22.8	23.3	91.2	93.2	1	10.0-160			2.17	38
Hexachloro-1,3-butadiene	25.0	U	24.3	23.9	97.2	95.6	1	10.0-160			1.66	40
Isopropylbenzene	25.0	U	21.8	22.6	87.2	90.4	1	10.0-155			3.60	38

L1678574-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1678574-06 11/18/23 22:27 • (MS) R4002439-4 11/19/23 00:22 • (MSD) R4002439-5 11/19/23 00:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	25.0	U	22.7	23.8	90.8	95.2	1	10.0-160			4.73	40
2-Butanone (MEK)	125	U	85.8	87.5	68.6	70.0	1	10.0-160			1.96	40
Methylene Chloride	25.0	U	22.3	23.0	89.2	92.0	1	10.0-141			3.09	37
4-Methyl-2-pentanone (MIBK)	125	U	109	116	87.2	92.8	1	10.0-160			6.22	35
Methyl tert-butyl ether	25.0	U	20.8	19.9	83.2	79.6	1	11.0-147			4.42	35
Naphthalene	25.0	U	20.4	22.1	81.6	88.4	1	10.0-160			8.00	36
n-Propylbenzene	25.0	U	23.0	23.8	92.0	95.2	1	10.0-158			3.42	38
Styrene	25.0	U	21.9	22.3	87.6	89.2	1	10.0-160			1.81	40
1,1,1,2-Tetrachloroethane	25.0	U	20.8	21.3	83.2	85.2	1	10.0-149			2.38	39
1,1,2,2-Tetrachloroethane	25.0	U	21.1	22.1	84.4	88.4	1	10.0-160			4.63	35
1,1,2-Trichlorotrifluoroethane	25.0	U	28.2	29.2	113	117	1	10.0-160			3.48	36
Tetrachloroethene	25.0	0.204	23.4	23.9	92.8	94.8	1	10.0-156			2.11	39
Toluene	25.0	U	21.5	22.2	86.0	88.8	1	10.0-156			3.20	38
1,2,3-Trichlorobenzene	25.0	U	21.1	22.3	84.4	89.2	1	10.0-160			5.53	40
1,2,4-Trichlorobenzene	25.0	U	21.7	23.2	86.8	92.8	1	10.0-160			6.68	40
1,1,1-Trichloroethane	25.0	U	21.0	21.3	84.0	85.2	1	10.0-144			1.42	35
1,1,2-Trichloroethane	25.0	U	21.4	22.7	85.6	90.8	1	10.0-160			5.90	35
Trichloroethene	25.0	40.6	62.4	64.3	87.2	94.8	1	10.0-156			3.00	38
Trichlorofluoromethane	25.0	U	27.4	27.7	110	111	1	10.0-160			1.09	40
1,2,3-Trichloropropane	25.0	U	22.2	23.2	88.8	92.8	1	10.0-156			4.41	35
1,2,4-Trimethylbenzene	25.0	U	21.1	21.9	84.4	87.6	1	10.0-160			3.72	36
1,2,3-Trimethylbenzene	25.0	U	20.5	21.6	82.0	86.4	1	10.0-160			5.23	36
1,3,5-Trimethylbenzene	25.0	U	21.4	22.4	85.6	89.6	1	10.0-160			4.57	38
Vinyl chloride	25.0	U	24.0	23.7	96.0	94.8	1	10.0-160			1.26	37
Xylenes, Total	75.0	U	65.8	70.8	87.7	94.4	1	10.0-160			7.32	38
Ethyl Ether	25.0	U	20.9	22.1	83.6	88.4	1	10.0-160			5.58	31
Tetrahydrofuran	25.0	U	19.3	19.6	77.2	78.4	1	10.0-158			1.54	33
Iodomethane	125	U	107	108	85.6	86.4	1	10.0-160			0.930	38
Allyl chloride	125	U	113	114	90.4	91.2	1	10.0-160			0.881	30
Trans-1,4-Dichloro-2-butene	25.0	U	8.46	7.20	33.8	28.8	1	10.0-152			16.1	36
(S) Toluene-d8					*99.4*	*99.9*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*101*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*100*	*99.1*		*70.0-130*				

Method Blank (MB)

(MB) R4003263-3 11/21/23 08:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Vinyl chloride	U		0.0273	0.100
(S) Toluene-d8	*99.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*105*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*

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

(LCS) R4003263-1 11/21/23 07:32 • (LCSD) R4003263-2 11/21/23 07:51

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl chloride	5.00	4.59	4.13	91.8	82.6	63.0-134			10.6	20
(S) Toluene-d8				*99.4*	*97.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*104*	*104*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*97.6*	*96.3*	*70.0-130*				

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
B	The same analyte is found in the associated blank.
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
C5	The reported concentration is an estimate. The continuing calibration standard associated with this data responded high. Data is likely to show a high bias concerning the result.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Email To:

Pres Chk

Report to:
Erik Hedberg

jessica.babb@nv5.com;natalie.wisdom@nv5.com;erik.hedberg@nv5.com

Project Description:
American Linen

City/State Collected: Seattle, WA

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project #
443022-1413001.10.701.02

Lab Project #
PESENVSWA-ALP

Collected by (print):
Osmin Monroy

Site/Facility ID #

P.O. #
443018-1413001.05.601

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

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

Quote #

Date Results Needed: STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	~~FERUSFE 250mlAmb-HCl~~	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				Remarks	Sample # (lab only)
FMW-129-111423	Grab	GW	—	11/14/23	1047	3							X					-01
MW106-111423		GW	—	↓	1355	3							X					-02
FMW-140-111423		GW	—	↓	1631	3							X					-03
MW-348-111523		GW	—	11/15/23	1026	10	X	X		X	X	X	X					-04
TB-111523	—	GW	—	↓	—	1							X					-05
		GW																
		GW																
		GW																
		GW																
		GW																

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1167654

F031

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1035102**
PM: **546 - Jared Starkey**
PB:

Shipped Via:

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

Remarks: lab QA/QC required (batch QC ok)

pH _____ Temp _____
Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking # 552859467900

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No (HCL / MeoH / TBR)	If preservation required by Login: Date/Time
	11/15/23	1345		1	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: 4.4 °C Bottles Received: 9	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 11/16/23 Time: 0900	Hold: Condition: NCF / OK
			Christopher L. Gallin		

ANALYTICAL REPORT

November 22, 2023

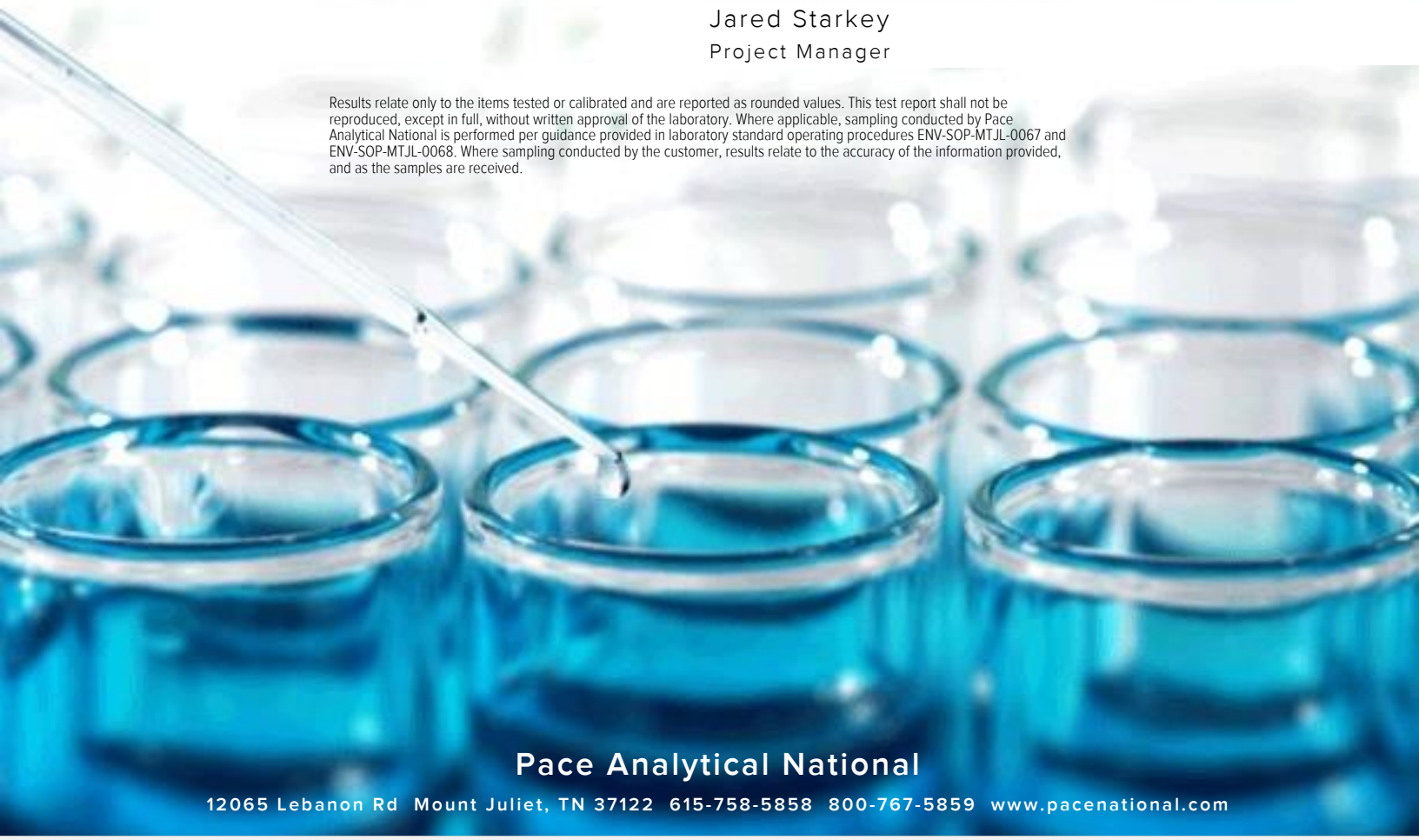
PES Environmental, Inc.- WA

Sample Delivery Group:	L1679290
Samples Received:	11/17/2023
Project Number:	
Description:	American Linen- Q3 2023

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

SV-24-111623 L1679290-01 Air

			Collected by	Collected date/time	Received date/time
				11/16/23 15:10	11/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2175324	1	11/22/23 01:28	11/22/23 01:28	MNP	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.

Jared Starkey
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	7.13	16.9		1	WG2175324
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175324
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2175324
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175324
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175324
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175324
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175324
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175324
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2175324
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175324
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175324
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175324
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175324
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175324
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175324
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175324
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175324
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175324
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175324
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175324
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175324
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175324
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2175324
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175324
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175324
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175324
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175324
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175324
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175324
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175324
Ethanol	64-17-5	46.10	2.50	4.71	10.5	19.8		1	WG2175324
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2175324
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2175324
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2175324
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2175324
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175324
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175324
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175324
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175324
n-Hexane	110-54-3	86.20	0.630	2.22	6.84	24.1		1	WG2175324
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175324
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2175324
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175324
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	6.05	17.8		1	WG2175324
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175324
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175324
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175324
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175324
2-Propanol	67-63-0	60.10	1.25	3.07	9.95	24.5		1	WG2175324
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175324
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175324
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175324
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.32	8.96		1	WG2175324
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175324
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2175324
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175324

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2175324
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175324
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175324
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2175324
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175324
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2175324
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2175324
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175324
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175324
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	ND		1	WG2175324
m&p-Xylene	1330-20-7	106	0.400	1.73	0.541	2.35		1	WG2175324
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2175324
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*192*		J1		WG2175324

Sample Narrative:

L1679290-01 WG2175324: Surrogate failure due to matrix interference

Method Blank (MB)

(MB) R4003339-3 11/21/23 10:25

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.630
Ethanol	0.376	J	0.265	2.50
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R4003339-3 11/21/23 10:25

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.630
Xylenes, Total	U		0.135	0.600
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*103*			*60.0-140*

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

(LCS) R4003339-1 11/21/23 09:09 • (LCSD) R4003339-2 11/21/23 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.49	3.55	93.1	94.7	70.0-130			1.70	25
Allyl chloride	3.75	3.41	3.38	90.9	90.1	70.0-130			0.884	25
Benzene	3.75	3.37	3.40	89.9	90.7	70.0-130			0.886	25
Benzyl Chloride	3.75	3.45	3.46	92.0	92.3	70.0-152			0.289	25

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

(LCS) R4003339-1 11/21/23 09:09 • (LCSD) R4003339-2 11/21/23 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	3.75	3.46	3.53	92.3	94.1	70.0-130			2.00	25
Bromoform	3.75	3.28	3.31	87.5	88.3	70.0-130			0.910	25
Bromomethane	3.75	3.32	3.41	88.5	90.9	70.0-130			2.67	25
1,3-Butadiene	3.75	3.91	3.96	104	106	70.0-130			1.27	25
Carbon disulfide	3.75	3.02	3.05	80.5	81.3	70.0-130			0.988	25
Carbon tetrachloride	3.75	3.37	3.37	89.9	89.9	70.0-130			0.000	25
Chlorobenzene	3.75	3.51	3.53	93.6	94.1	70.0-130			0.568	25
Chloroethane	3.75	3.45	3.55	92.0	94.7	70.0-130			2.86	25
Chloroform	3.75	3.45	3.53	92.0	94.1	70.0-130			2.29	25
Chloromethane	3.75	4.01	4.15	107	111	70.0-130			3.43	25
2-Chlorotoluene	3.75	3.41	3.44	90.9	91.7	70.0-130			0.876	25
Cyclohexane	3.75	3.31	3.32	88.3	88.5	70.0-130			0.302	25
Dibromochloromethane	3.75	3.51	3.52	93.6	93.9	70.0-130			0.284	25
1,2-Dibromoethane	3.75	3.58	3.64	95.5	97.1	70.0-130			1.66	25
1,2-Dichlorobenzene	3.75	3.39	3.39	90.4	90.4	70.0-130			0.000	25
1,3-Dichlorobenzene	3.75	3.40	3.42	90.7	91.2	70.0-130			0.587	25
1,4-Dichlorobenzene	3.75	3.52	3.57	93.9	95.2	70.0-130			1.41	25
1,2-Dichloroethane	3.75	3.50	3.49	93.3	93.1	70.0-130			0.286	25
1,1-Dichloroethane	3.75	3.59	3.57	95.7	95.2	70.0-130			0.559	25
1,1-Dichloroethene	3.75	3.53	3.57	94.1	95.2	70.0-130			1.13	25
cis-1,2-Dichloroethene	3.75	3.58	3.66	95.5	97.6	70.0-130			2.21	25
trans-1,2-Dichloroethene	3.75	3.57	3.61	95.2	96.3	70.0-130			1.11	25
1,2-Dichloropropane	3.75	3.58	3.61	95.5	96.3	70.0-130			0.834	25
cis-1,3-Dichloropropene	3.75	3.48	3.52	92.8	93.9	70.0-130			1.14	25
trans-1,3-Dichloropropene	3.75	3.51	3.53	93.6	94.1	70.0-130			0.568	25
1,4-Dioxane	3.75	3.50	3.49	93.3	93.1	70.0-140			0.286	25
Ethanol	3.75	3.98	4.01	106	107	55.0-148			0.751	25
Ethylbenzene	3.75	3.52	3.55	93.9	94.7	70.0-130			0.849	25
4-Ethyltoluene	3.75	3.46	3.50	92.3	93.3	70.0-130			1.15	25
Trichlorofluoromethane	3.75	3.29	3.37	87.7	89.9	70.0-130			2.40	25
Dichlorodifluoromethane	3.75	3.60	3.58	96.0	95.5	64.0-139			0.557	25
1,1,2-Trichlorotrifluoroethane	3.75	3.31	3.36	88.3	89.6	70.0-130			1.50	25
1,2-Dichlorotetrafluoroethane	3.75	3.55	3.63	94.7	96.8	70.0-130			2.23	25
Heptane	3.75	3.70	3.78	98.7	101	70.0-130			2.14	25
Hexachloro-1,3-butadiene	3.75	2.78	2.79	74.1	74.4	70.0-151			0.359	25
n-Hexane	3.75	3.69	3.71	98.4	98.9	70.0-130			0.541	25
Isopropylbenzene	3.75	3.39	3.43	90.4	91.5	70.0-130			1.17	25
Methylene Chloride	3.75	3.67	3.73	97.9	99.5	70.0-130			1.62	25
Methyl Butyl Ketone	3.75	3.64	3.72	97.1	99.2	70.0-149			2.17	25
2-Butanone (MEK)	3.75	3.70	3.74	98.7	99.7	70.0-130			1.08	25

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

(LCS) R4003339-1 11/21/23 09:09 • (LCSD) R4003339-2 11/21/23 09:48

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	3.68	3.78	98.1	101	70.0-139			2.68	25
Methyl methacrylate	3.75	3.78	3.85	101	103	70.0-130			1.83	25
MTBE	3.75	3.41	3.45	90.9	92.0	70.0-130			1.17	25
Naphthalene	3.75	3.34	3.28	89.1	87.5	70.0-159			1.81	25
2-Propanol	3.75	3.59	3.69	95.7	98.4	70.0-139			2.75	25
Propene	3.75	3.79	3.79	101	101	64.0-144			0.000	25
Styrene	3.75	3.40	3.47	90.7	92.5	70.0-130			2.04	25
1,1,2,2-Tetrachloroethane	3.75	3.51	3.53	93.6	94.1	70.0-130			0.568	25
Tetrachloroethylene	3.75	3.20	3.24	85.3	86.4	70.0-130			1.24	25
Tetrahydrofuran	3.75	3.82	3.93	102	105	70.0-137			2.84	25
Toluene	3.75	3.47	3.50	92.5	93.3	70.0-130			0.861	25
1,2,4-Trichlorobenzene	3.75	3.07	3.00	81.9	80.0	70.0-160			2.31	25
1,1,1-Trichloroethane	3.75	3.34	3.40	89.1	90.7	70.0-130			1.78	25
1,1,2-Trichloroethane	3.75	3.44	3.50	91.7	93.3	70.0-130			1.73	25
Trichloroethylene	3.75	3.38	3.40	90.1	90.7	70.0-130			0.590	25
1,2,4-Trimethylbenzene	3.75	3.39	3.42	90.4	91.2	70.0-130			0.881	25
1,3,5-Trimethylbenzene	3.75	3.34	3.38	89.1	90.1	70.0-130			1.19	25
2,2,4-Trimethylpentane	3.75	3.72	3.80	99.2	101	70.0-130			2.13	25
Vinyl chloride	3.75	3.79	3.57	101	95.2	70.0-130			5.98	25
Vinyl Bromide	3.75	3.33	3.44	88.8	91.7	70.0-130			3.25	25
Vinyl acetate	3.75	3.64	3.68	97.1	98.1	70.0-130			1.09	25
Xylenes, Total	11.3	10.1	10.2	89.4	90.3	70.0-130			0.985	25
m&p-Xylene	7.50	6.77	6.85	90.3	91.3	70.0-130			1.17	25
o-Xylene	3.75	3.33	3.34	88.8	89.1	70.0-130			0.300	25
(S) 1,4-Bromofluorobenzene				*104*	*104*	*60.0-140*				

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.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky [1 6]	KY90010	South Carolina	84004002
Kentucky [2]	16	South Dakota	n/a
Louisiana	AI30792	Tennessee [1 4]	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas [5]	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 [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.

Pace® Location Requested (City/State):

Air CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

D031

Scan QR code for instructions

L1679290

Company Name: PES Environmental, Inc.- WA	Contact/Report To: Jessica Babb
Street Address: 1215 Fourth Ave., Suite 1350 Seattle, WA 98161	Phone #: 206-529-3980
	E-Mail: jessica.babb@nv5.com;natalie.wisdom@nv5.com
City, State Zip:	Cc E-Mail: Erik.Hedberg@NV5.com
Customer Project #:	Invoice to:
Project Name: American Linen- Q3 2023	Invoice E-Mail:
Site Collection Info/Facility ID (as applicable): PESENVSWA-AL	Purchase Order # (if applicable):
Time Zone Collected: [ ]AK [ ]PT [ ]MT [ ]CT [ ]ET	Quote #:
	State origin of sample(s):

Proj. Manager: 546 - Jared Starkey

AcctNum / Client ID: PESENVSWA

Table #:

Profile / Template: T239822

Prelog / Bottle Ord. ID: P1030585

Data Deliverables:
[ ] Level II [ ] Level III [ ]Level IV
[ ] EQUIS
[ ] Other_____

Regulatory Program (CAA, RCRA, etc.) as applicable:

Rush (Pre-approval required): 2 Day 3 day 5 day Other_____

Date Results Requested: STD

Permit # as applicable:

Units for Reporting: ug/m³ PPBV mg/m³ PPMV

* Matrix Codes (Insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)

Customer Sample ID	Matrix *	Summa Canister ID	Flow Controller ID	Begin Collection Date	Begin Collection Time	End Collection Date	End Collection Time	Canister Pressure / Vacuum: Start Pressure / Vacuum (in Hg)	Canister Pressure / Vacuum: End Pressure / Vacuum (in Hg)	PUF / FILTER: Duration (minutes)	PUF / FILTER: Flow Rate m³/min or L/min	PUF / FILTER: Total Volume Sampled m³ or L	Analyses Requested: TO-15 Summa	Sample Comment
SV-24-111623	SV	028674	011393	11/16/23	1505	11/16/23	1510	-29	-3	5	200	1	X	moisture in vapor sampling tubing -01
													X	
													X	

Sample Receipt Checklist
COC Seal Present/Intact: __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Size: Airs 1L 6L 1.4L
Tage Color: G M P B
Tubing Shunt
6727 1903 4413
T/P#: _____

OK

Customer Remarks / Special Conditions / Possible Hazards:
1413001.10.701.03

Collected By:
Printed Name:
Signature:

Additional Instructions from Pace®:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C):

Relinquished by/Company: (Signature)	Date/Time: 11/13/23	Received by/Company: (Signature)	Date/Time: Tracking Number:
Relinquished by/Company: (Signature)	Date/Time: 11/16/23 1640	Received by/Company: (Signature)	Date/Time: Delivered by: In- Person Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: FedEX UPS Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 11/17/23 0900 Page:____ of:____

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

November 23, 2023

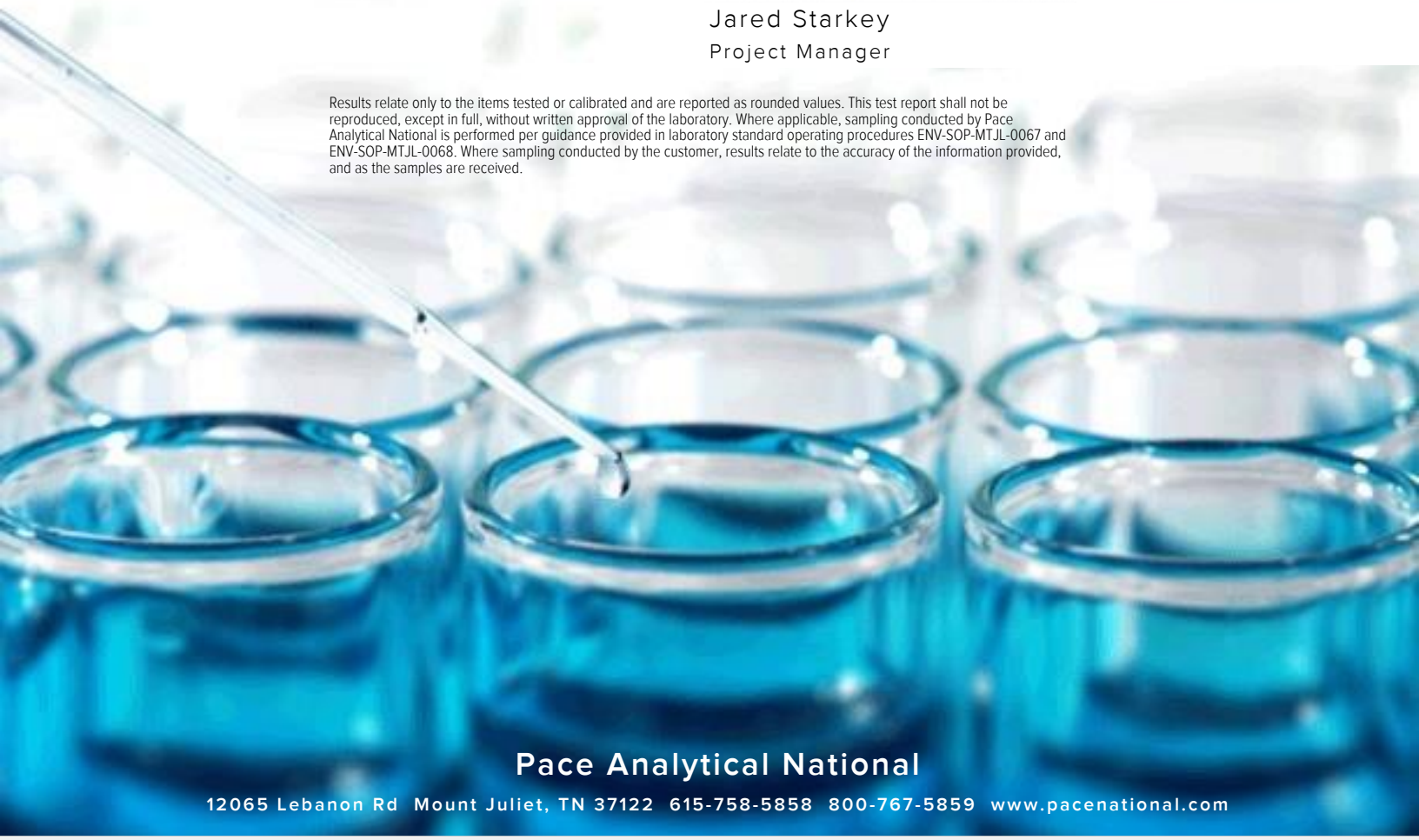
PES Environmental, Inc.- WA

Sample Delivery Group:	L1679329
Samples Received:	11/17/2023
Project Number:	
Description:	American Linen- Q4 2023

Report To: Jessica Babb
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

SV01-111623 L1679329-01 Air

Collected by	Collected date/time	Received date/time
	11/16/23 10:48	11/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2175526	1	11/21/23 17:56	11/21/23 17:56	DAH	Mt. Juliet, TN

SV-18-111623 L1679329-02 Air

Collected by	Collected date/time	Received date/time
	11/16/23 12:08	11/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2175526	1	11/21/23 18:39	11/21/23 18:39	DAH	Mt. Juliet, TN

SV-910-111623 L1679329-03 Air

Collected by	Collected date/time	Received date/time
	11/16/23 12:10	11/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2175526	1	11/21/23 19:23	11/21/23 19:23	DAH	Mt. Juliet, TN

SV-17-111623 L1679329-04 Air

Collected by	Collected date/time	Received date/time
	11/16/23 13:42	11/17/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2175526	1	11/21/23 20:06	11/21/23 20:06	DAH	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.

Jared Starkey
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.1	26.4		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	0.935	4.55		1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.899	3.60		1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	86.9	164	E	1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.275	1.36		1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	1.04	3.67		1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	11.1	38.5		1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.53	7.46		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	12.8	31.5		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.611	4.15		1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	0.806	3.04		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	2.72	14.8		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	ND		1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	0.402	1.74		1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.3*				WG2175526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	ND		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	0.376	1.20		1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.554	1.72	B	1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	13.7	54.9		1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	3.83	7.22	B	1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.597	2.07	B	1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	ND	ND		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	3.77	20.5		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	5.55	25.9		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	30.4	77.7		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	ND		1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.5*				WG2175526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	85.9	204		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	0.493	1.57		1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.445	1.39	B	1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	13.1	52.5		1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	21.0	39.6		1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	0.723	3.13		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.406	1.99		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	0.633	2.23		1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND	ND		1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.88	8.49		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	10.0	24.6		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	63.1	186		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	2.65	9.98		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	3.67	20.0		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.400	1.96		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	5.04	23.5		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	29.6	75.7		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	3.86	16.8		1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	2.90	12.6		1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	0.957	4.15		1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*106*				WG2175526

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

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	3.73	8.86		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.685	2.13	B	1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	1.39	5.57		1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	14.6	27.5		1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.257	1.44		1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.356	1.76		1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	4.25	14.8		1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	3.84	9.44		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.748	5.08		1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	ND		1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.1*				WG2175526

Method Blank (MB)

(MB) R4003519-3 11/21/23 15:41

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	0.122	J	0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	U		0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.630
Ethanol	1.16	J	0.265	2.50
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R4003519-3 11/21/23 15:41

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	0.127	J	0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
2,2,4-Trimethylpentane	U		0.133	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.630
Xylenes, Total	U		0.135	0.600
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*96.1*			*60.0-140*

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

(LCS) R4003519-1 11/21/23 11:25 • (LCSD) R4003519-2 11/21/23 12:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.49	3.57	93.1	95.2	70.0-130			2.27	25
Allyl chloride	3.75	4.10	4.14	109	110	70.0-130			0.971	25
Benzene	3.75	3.92	3.94	105	105	70.0-130			0.509	25
Benzyl Chloride	3.75	3.87	4.03	103	107	70.0-152			4.05	25

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

(LCS) R4003519-1 11/21/23 11:25 • (LCSD) R4003519-2 11/21/23 12:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromodichloromethane	3.75	4.00	4.09	107	109	70.0-130			2.22	25
Bromoform	3.75	3.78	3.87	101	103	70.0-130			2.35	25
Bromomethane	3.75	3.87	3.88	103	103	70.0-130			0.258	25
1,3-Butadiene	3.75	4.39	4.49	117	120	70.0-130			2.25	25
Carbon disulfide	3.75	3.76	3.71	100	98.9	70.0-130			1.34	25
Carbon tetrachloride	3.75	3.99	3.87	106	103	70.0-130			3.05	25
Chlorobenzene	3.75	3.84	3.95	102	105	70.0-130			2.82	25
Chloroethane	3.75	4.07	4.06	109	108	70.0-130			0.246	25
Chloroform	3.75	3.96	3.96	106	106	70.0-130			0.000	25
Chloromethane	3.75	4.49	4.49	120	120	70.0-130			0.000	25
2-Chlorotoluene	3.75	3.72	3.92	99.2	105	70.0-130			5.24	25
Cyclohexane	3.75	3.90	4.00	104	107	70.0-130			2.53	25
Dibromochloromethane	3.75	4.01	4.08	107	109	70.0-130			1.73	25
1,2-Dibromoethane	3.75	3.94	4.03	105	107	70.0-130			2.26	25
1,2-Dichlorobenzene	3.75	3.78	3.98	101	106	70.0-130			5.15	25
1,3-Dichlorobenzene	3.75	3.73	3.98	99.5	106	70.0-130			6.49	25
1,4-Dichlorobenzene	3.75	3.86	3.97	103	106	70.0-130			2.81	25
1,2-Dichloroethane	3.75	4.17	4.15	111	111	70.0-130			0.481	25
1,1-Dichloroethane	3.75	4.21	4.18	112	111	70.0-130			0.715	25
1,1-Dichloroethene	3.75	3.88	3.85	103	103	70.0-130			0.776	25
cis-1,2-Dichloroethene	3.75	4.25	4.21	113	112	70.0-130			0.946	25
trans-1,2-Dichloroethene	3.75	4.15	4.17	111	111	70.0-130			0.481	25
1,2-Dichloropropane	3.75	4.26	4.18	114	111	70.0-130			1.90	25
cis-1,3-Dichloropropene	3.75	4.02	3.99	107	106	70.0-130			0.749	25
trans-1,3-Dichloropropene	3.75	3.88	3.98	103	106	70.0-130			2.54	25
1,4-Dioxane	3.75	3.93	4.09	105	109	70.0-140			3.99	25
Ethanol	3.75	3.45	3.43	92.0	91.5	55.0-148			0.581	25
Ethylbenzene	3.75	3.73	3.79	99.5	101	70.0-130			1.60	25
4-Ethyltoluene	3.75	3.94	3.89	105	104	70.0-130			1.28	25
Trichlorofluoromethane	3.75	3.76	3.69	100	98.4	70.0-130			1.88	25
Dichlorodifluoromethane	3.75	3.93	4.07	105	109	64.0-139			3.50	25
1,1,2-Trichlorotrifluoroethane	3.75	3.74	3.74	99.7	99.7	70.0-130			0.000	25
1,2-Dichlorotetrafluoroethane	3.75	3.93	4.06	105	108	70.0-130			3.25	25
Heptane	3.75	4.00	4.08	107	109	70.0-130			1.98	25
Hexachloro-1,3-butadiene	3.75	3.64	3.71	97.1	98.9	70.0-151			1.90	25
n-Hexane	3.75	4.18	4.29	111	114	70.0-130			2.60	25
Isopropylbenzene	3.75	3.93	4.00	105	107	70.0-130			1.77	25
Methylene Chloride	3.75	4.48	4.43	119	118	70.0-130			1.12	25
Methyl Butyl Ketone	3.75	4.48	4.61	119	123	70.0-149			2.86	25
2-Butanone (MEK)	3.75	4.02	3.95	107	105	70.0-130			1.76	25

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

(LCS) R4003519-1 11/21/23 11:25 • (LCSD) R4003519-2 11/21/23 12:09

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
4-Methyl-2-pentanone (MIBK)	3.75	4.52	4.66	121	124	70.0-139			3.05	25
Methyl methacrylate	3.75	3.99	4.00	106	107	70.0-130			0.250	25
MTBE	3.75	3.95	3.96	105	106	70.0-130			0.253	25
Naphthalene	3.75	3.97	4.04	106	108	70.0-159			1.75	25
2-Propanol	3.75	4.22	4.07	113	109	70.0-139			3.62	25
Propene	3.75	4.43	4.63	118	123	64.0-144			4.42	25
Styrene	3.75	3.89	3.94	104	105	70.0-130			1.28	25
1,1,2,2-Tetrachloroethane	3.75	3.89	4.10	104	109	70.0-130			5.26	25
Tetrachloroethylene	3.75	3.82	3.88	102	103	70.0-130			1.56	25
Tetrahydrofuran	3.75	4.59	4.65	122	124	70.0-137			1.30	25
Toluene	3.75	3.99	3.99	106	106	70.0-130			0.000	25
1,2,4-Trichlorobenzene	3.75	3.80	3.76	101	100	70.0-160			1.06	25
1,1,1-Trichloroethane	3.75	3.98	3.94	106	105	70.0-130			1.01	25
1,1,2-Trichloroethane	3.75	4.03	4.12	107	110	70.0-130			2.21	25
Trichloroethylene	3.75	4.11	4.07	110	109	70.0-130			0.978	25
1,2,4-Trimethylbenzene	3.75	3.83	3.89	102	104	70.0-130			1.55	25
1,3,5-Trimethylbenzene	3.75	3.63	3.97	96.8	106	70.0-130			8.95	25
2,2,4-Trimethylpentane	3.75	4.28	4.34	114	116	70.0-130			1.39	25
Vinyl chloride	3.75	4.24	4.21	113	112	70.0-130			0.710	25
Vinyl Bromide	3.75	3.75	3.76	100	100	70.0-130			0.266	25
Vinyl acetate	3.75	4.67	4.75	125	127	70.0-130			1.70	25
Xylenes, Total	11.3	11.5	11.6	102	103	70.0-130			0.866	25
m&p-Xylene	7.50	7.73	7.61	103	101	70.0-130			1.56	25
o-Xylene	3.75	3.74	3.95	99.7	105	70.0-130			5.46	25
(S) 1,4-Bromofluorobenzene				*93.2*	*94.9*	*60.0-140*				

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.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.

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.

Pace® Location Requested (City/State):

Air CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

D041

Scan QR code for instructions

Company Name: PES Environmental, Inc.- WA	Contact/Report To: Jessica Babb
Street Address: 1215 Fourth Ave., Suite 1350 Seattle, WA 98161	Phone #: 206-529-3980
City, State Zip:	E-Mail: jessica.babb@nv5.com;natalie.wisdom@nv5.com
Customer Project #:	Cc E-Mail: Erik.Hedberg@NV5.com
Project Name: Q4 American Linen- ~~Q3~~ 2023	Invoice to:
Site Collection Info/Facility ID (as applicable): PESENVSWA-AL	Invoice E-Mail:
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET	Purchase Order # (if applicable):
Data Deliverables: [ ] Level II [ ] Level III [ ] Level IV [ ] EQUIS [ ] Other	Quote #:
Regulatory Program (CAA, RCRA, etc.) as applicable:	State origin of sample(s):
Rush (Pre-approval required): 2 Day 3 day 5 day Other	Permit # as applicable:
Date Results Requested: STD	Units for Reporting: ug/m³ PPBV mg/m³ PPMV

L1679329

Proj. Manager: 546 - Jared Starkey

AcctNum / Client ID: PESENVSWA

Table #:

Profile / Template: T239822

Prelog / Bottle Ord. ID: P1030585

Lab Use Only

* Matrix Codes (Insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)

Customer Sample ID	Matrix *	Summa Canister ID	Flow Controller ID	Begin Collection Date	Begin Collection Time	End Collection Date	End Collection Time	Field Information: Canister Pressure / Vacuum — Start Pressure / Vacuum (in Hg)	Field Information: Canister Pressure / Vacuum — End Pressure / Vacuum (in Hg)	Field Information: PUF / FILTER — Duration (minutes)	Field Information: PUF / FILTER — Flow Rate m³/min or L/min	Field Information: PUF / FILTER — Total Volume Sampled m³ or L	Analyses Requested: TO-15 Summa	Sample Comment
SV01-111623	SV	021616	028496	11/16/23	1042	11/16/23	1048	-26	-5	6	200	1 L	X	-01
SV-18-111623		021899	011423		1202		1208	-30	-5	6			X	-02
SV-910-111623		022769	028817		1202		1210	-29	-5	8			X	-03
SV-17-111623		022026	011352		1338		1342	-27	-4.5	4			X	-04
~~SV-24-111623~~		~~028674~~	011383		1506		1510	-29	-3	5			X	visible moisture in vapor line/tube
													X	
													X	
													X	
													X	
													X	
													X	

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Size: 1L 6L 1.4L
Tage Color: G M P B
Tubing Shunt

Not Used

T/P#:

QC

Customer Remarks / Special Conditions / Possible Hazards:

1413001.10.701.03

Collected By: Osmin Monroy			
Printed Name: Osmin Monroy			
Signature:			
Relinquished by/Company: (Signature)	Date/Time: 11/16/23	Received by/Company: (Signature)	
Relinquished by/Company: (Signature) PES/NV5	Date/Time: 11/13/23 1640	Received by/Company: (Signature)	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 11/17/23 0900

Additional Instructions from Pace®:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C):

Tracking Number:

Delivered by: In- Person Courier FedEX UPS Other

Page: ____ of: ____

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

December 04, 2023

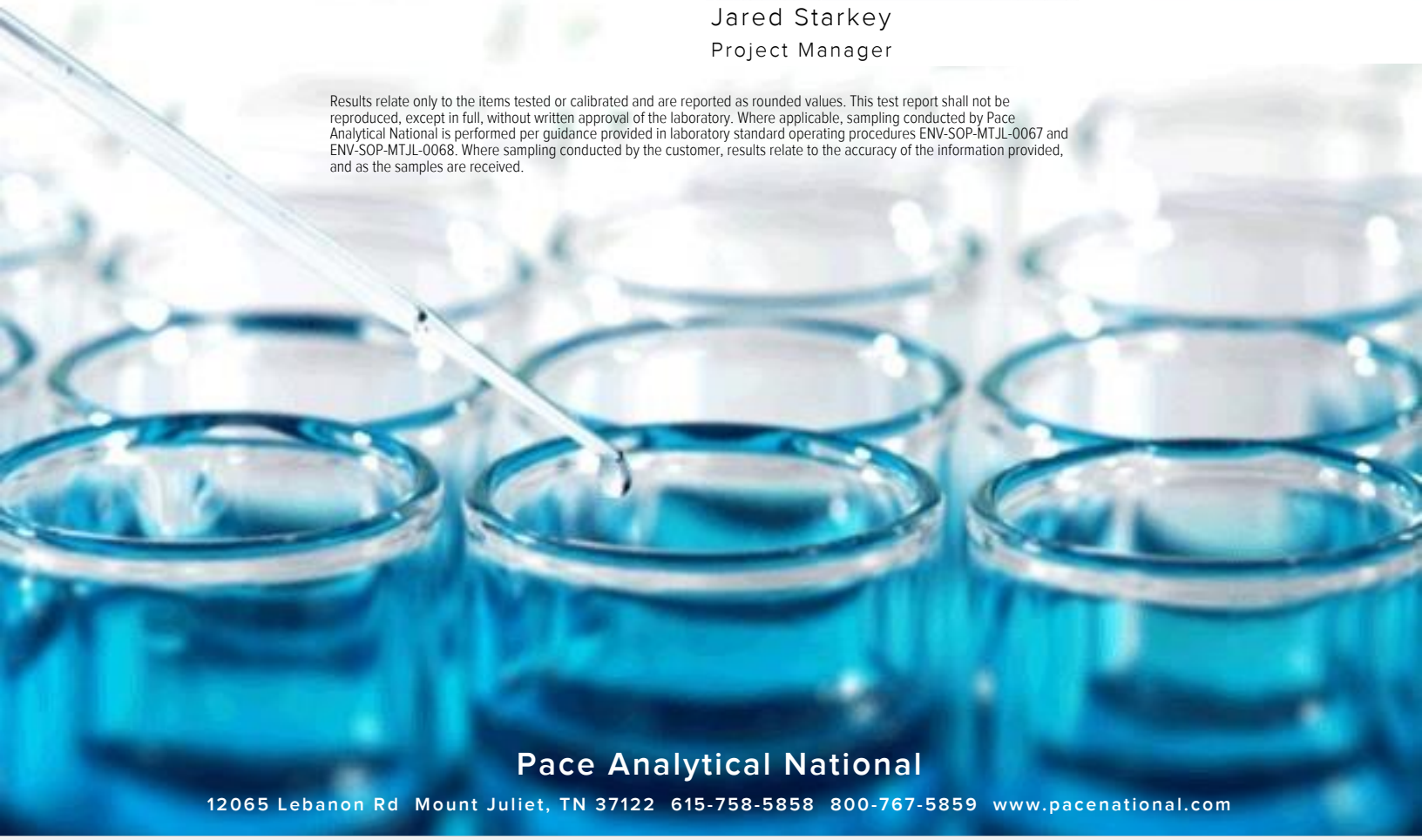
PES Environmental, Inc.- WA

Sample Delivery Group:	L1679682
Samples Received:	11/18/2023
Project Number:	443022-413001.10.701
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

TABLE OF CONTENTS

SAMPLE SUMMARY

TB-111723 L1679682-01 Air

Collected by	Collected date/time	Received date/time
	11/17/23 10:50	11/18/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (MS) by Method TO-15	WG2175367	1	11/21/23 18:22	11/21/23 18:22	MNP	Mt. Juliet, TN
Volatile Organic Compounds (MS) by Method TO-15	WG2180204	10	11/30/23 14:03	11/30/23 14:03	DAH	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.

Jared Starkey
Project Manager

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	2.50	5.94		1	WG2175367
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175367
Benzene	71-43-2	78.10	0.200	0.639	15.8	50.5		1	WG2175367
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175367
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175367
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175367
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175367
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175367
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2175367
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175367
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175367
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175367
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175367
Chloromethane	74-87-3	50.50	0.200	0.413	0.454	0.938		1	WG2175367
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175367
Cyclohexane	110-82-7	84.20	0.200	0.689	12.5	43.0		1	WG2175367
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175367
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175367
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175367
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175367
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175367
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175367
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND	ND		1	WG2175367
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175367
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175367
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175367
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175367
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175367
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175367
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175367
Ethanol	64-17-5	46.10	2.50	4.71	14.7	27.7		1	WG2175367
Ethylbenzene	100-41-4	106	0.200	0.867	5.93	25.7		1	WG2175367
4-Ethyltoluene	622-96-8	120	0.200	0.982	1.60	7.85		1	WG2175367
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.225	1.26		1	WG2175367
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.430	2.13		1	WG2175367
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175367
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175367
Heptane	142-82-5	100	0.200	0.818	15.7	64.2		1	WG2175367
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175367
n-Hexane	110-54-3	86.20	0.630	2.22	8.52	30.0		1	WG2175367
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175367
Methylene Chloride	75-09-2	84.90	0.200	0.694	1.29	4.48		1	WG2175367
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175367
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2175367
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175367
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175367
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175367
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175367
2-Propanol	67-63-0	60.10	1.25	3.07	3.01	7.40		1	WG2175367
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175367
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175367
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175367
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2175367
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175367
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2175367
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175367

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2175367
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175367
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175367
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	5.41	26.6		1	WG2175367
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	4.75	23.3		1	WG2175367
2,2,4-Trimethylpentane	540-84-1	114.22	2.00	9.34	656	3060		10	WG2180204
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2175367
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175367
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175367
Xylenes, Total	1330-20-7	106.16	0.600	2.61	37.9	165		1	WG2175367
m&p-Xylene	1330-20-7	106	0.400	1.73	35.9	156		1	WG2175367
o-Xylene	95-47-6	106	0.200	0.867	2.02	8.76		1	WG2175367
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*105*				WG2175367
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*91.1*				WG2180204

Method Blank (MB)

(MB) R4006294-3 11/21/23 11:25

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Acetone	U		0.584	1.25
Allyl chloride	U		0.114	0.200
Benzene	U		0.0715	0.200
Benzyl Chloride	U		0.0598	0.200
Bromodichloromethane	U		0.0702	0.200
Bromoform	U		0.0732	0.600
Bromomethane	U		0.0982	0.200
1,3-Butadiene	U		0.104	2.00
Carbon disulfide	U		0.102	0.200
Carbon tetrachloride	U		0.0732	0.200
Chlorobenzene	U		0.0832	0.200
Chloroethane	U		0.0996	0.200
Chloroform	U		0.0717	0.200
Chloromethane	U		0.103	0.200
2-Chlorotoluene	U		0.0828	0.200
Cyclohexane	U		0.0753	0.200
Dibromochloromethane	U		0.0727	0.200
1,2-Dibromoethane	U		0.0721	0.200
1,2-Dichlorobenzene	U		0.128	0.200
1,3-Dichlorobenzene	U		0.182	0.200
1,4-Dichlorobenzene	0.0559	J	0.0557	0.200
1,2-Dichloroethane	U		0.0700	0.200
1,1-Dichloroethane	U		0.0723	0.200
1,1-Dichloroethene	U		0.0762	0.200
cis-1,2-Dichloroethene	U		0.0784	0.200
trans-1,2-Dichloroethene	U		0.0673	0.200
1,2-Dichloropropane	U		0.0760	0.200
cis-1,3-Dichloropropene	U		0.0689	0.200
trans-1,3-Dichloropropene	U		0.0728	0.200
1,4-Dioxane	U		0.0833	0.630
Ethanol	0.363	J	0.265	2.50
Ethylbenzene	U		0.0835	0.200
4-Ethyltoluene	U		0.0783	0.200
Trichlorofluoromethane	U		0.0819	0.200
Dichlorodifluoromethane	U		0.137	0.200
1,1,2-Trichlorotrifluoroethane	U		0.0793	0.200
1,2-Dichlorotetrafluoroethane	U		0.0890	0.200
Heptane	U		0.104	0.200
Hexachloro-1,3-butadiene	U		0.105	0.630
n-Hexane	U		0.206	0.630

Method Blank (MB)

(MB) R4006294-3 11/21/23 11:25

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
Isopropylbenzene	U		0.0777	0.200
Methylene Chloride	U		0.0979	0.200
Methyl Butyl Ketone	U		0.133	1.25
2-Butanone (MEK)	U		0.0814	1.25
4-Methyl-2-pentanone (MIBK)	U		0.0765	1.25
Methyl methacrylate	U		0.0876	0.200
MTBE	U		0.0647	0.200
Naphthalene	U		0.350	0.630
2-Propanol	U		0.264	1.25
Propene	U		0.0932	1.25
Styrene	U		0.0788	0.200
1,1,2,2-Tetrachloroethane	U		0.0743	0.200
Tetrachloroethylene	U		0.0814	0.200
Tetrahydrofuran	U		0.0734	0.200
Toluene	U		0.0870	0.500
1,2,4-Trichlorobenzene	U		0.148	0.630
1,1,1-Trichloroethane	U		0.0736	0.200
1,1,2-Trichloroethane	U		0.0775	0.200
Trichloroethylene	U		0.0680	0.200
1,2,4-Trimethylbenzene	U		0.0764	0.200
1,3,5-Trimethylbenzene	U		0.0779	0.200
Vinyl chloride	U		0.0949	0.200
Vinyl Bromide	U		0.0852	0.200
Vinyl acetate	U		0.116	0.630
Xylenes, Total	U		0.135	0.600
m&p-Xylene	U		0.135	0.400
o-Xylene	U		0.0828	0.200
(S) 1,4-Bromofluorobenzene	*98.2*			*60.0-140*

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

(LCS) R4006294-1 11/21/23 10:33 • (LCSD) R4006294-2 11/21/23 11:00

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	3.75	3.64	3.67	97.1	97.9	70.0-130			0.821	25
Allyl chloride	3.75	3.51	3.54	93.6	94.4	70.0-130			0.851	25
Benzene	3.75	3.70	3.63	98.7	96.8	70.0-130			1.91	25
Benzyl Chloride	3.75	3.84	3.76	102	100	70.0-152			2.11	25
Bromodichloromethane	3.75	3.73	3.69	99.5	98.4	70.0-130			1.08	25

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

(LCS) R4006294-1 11/21/23 10:33 • (LCSD) R4006294-2 11/21/23 11:00

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromoform	3.75	3.64	3.51	97.1	93.6	70.0-130			3.64	25
Bromomethane	3.75	3.87	3.86	103	103	70.0-130			0.259	25
1,3-Butadiene	3.75	3.47	3.54	92.5	94.4	70.0-130			2.00	25
Carbon disulfide	3.75	3.77	3.73	101	99.5	70.0-130			1.07	25
Carbon tetrachloride	3.75	3.79	3.82	101	102	70.0-130			0.788	25
Chlorobenzene	3.75	3.92	3.82	105	102	70.0-130			2.58	25
Chloroethane	3.75	3.59	3.69	95.7	98.4	70.0-130			2.75	25
Chloroform	3.75	3.76	3.74	100	99.7	70.0-130			0.533	25
Chloromethane	3.75	3.47	3.48	92.5	92.8	70.0-130			0.288	25
2-Chlorotoluene	3.75	3.77	3.77	101	101	70.0-130			0.000	25
Cyclohexane	3.75	3.71	3.63	98.9	96.8	70.0-130			2.18	25
Dibromochloromethane	3.75	3.86	3.77	103	101	70.0-130			2.36	25
1,2-Dibromoethane	3.75	3.90	3.92	104	105	70.0-130			0.512	25
1,2-Dichlorobenzene	3.75	3.97	3.90	106	104	70.0-130			1.78	25
1,3-Dichlorobenzene	3.75	4.00	3.98	107	106	70.0-130			0.501	25
1,4-Dichlorobenzene	3.75	4.01	3.98	107	106	70.0-130			0.751	25
1,2-Dichloroethane	3.75	3.91	3.79	104	101	70.0-130			3.12	25
1,1-Dichloroethane	3.75	3.59	3.54	95.7	94.4	70.0-130			1.40	25
1,1-Dichloroethene	3.75	3.77	3.81	101	102	70.0-130			1.06	25
cis-1,2-Dichloroethene	3.75	3.61	3.54	96.3	94.4	70.0-130			1.96	25
trans-1,2-Dichloroethene	3.75	3.62	3.56	96.5	94.9	70.0-130			1.67	25
1,2-Dichloropropane	3.75	3.66	3.55	97.6	94.7	70.0-130			3.05	25
cis-1,3-Dichloropropene	3.75	3.95	3.96	105	106	70.0-130			0.253	25
trans-1,3-Dichloropropene	3.75	3.80	3.79	101	101	70.0-130			0.264	25
1,4-Dioxane	3.75	3.85	3.84	103	102	70.0-140			0.260	25
Ethanol	3.75	3.75	3.73	100	99.5	55.0-148			0.535	25
Ethylbenzene	3.75	3.84	3.75	102	100	70.0-130			2.37	25
4-Ethyltoluene	3.75	3.81	3.84	102	102	70.0-130			0.784	25
Trichlorofluoromethane	3.75	4.11	4.08	110	109	70.0-130			0.733	25
Dichlorodifluoromethane	3.75	3.99	3.98	106	106	64.0-139			0.251	25
1,1,2-Trichlorotrifluoroethane	3.75	4.02	4.03	107	107	70.0-130			0.248	25
1,2-Dichlorotetrafluoroethane	3.75	3.96	3.96	106	106	70.0-130			0.000	25
Heptane	3.75	3.51	3.49	93.6	93.1	70.0-130			0.571	25
Hexachloro-1,3-butadiene	3.75	3.77	3.74	101	99.7	70.0-151			0.799	25
n-Hexane	3.75	3.42	3.44	91.2	91.7	70.0-130			0.583	25
Isopropylbenzene	3.75	3.90	3.85	104	103	70.0-130			1.29	25
Methylene Chloride	3.75	3.72	3.64	99.2	97.1	70.0-130			2.17	25
Methyl Butyl Ketone	3.75	3.92	3.93	105	105	70.0-149			0.255	25
2-Butanone (MEK)	3.75	3.64	3.57	97.1	95.2	70.0-130			1.94	25
4-Methyl-2-pentanone (MIBK)	3.75	3.81	3.55	102	94.7	70.0-139			7.07	25

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

(LCS) R4006294-1 11/21/23 10:33 • (LCSD) R4006294-2 11/21/23 11:00

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methyl methacrylate	3.75	3.63	3.65	96.8	97.3	70.0-130			0.549	25
MTBE	3.75	3.68	3.66	98.1	97.6	70.0-130			0.545	25
Naphthalene	3.75	4.02	4.00	107	107	70.0-159			0.499	25
2-Propanol	3.75	3.58	3.55	95.5	94.7	70.0-139			0.842	25
Propene	3.75	3.32	3.31	88.5	88.3	64.0-144			0.302	25
Styrene	3.75	3.79	3.76	101	100	70.0-130			0.795	25
1,1,2,2-Tetrachloroethane	3.75	3.73	3.71	99.5	98.9	70.0-130			0.538	25
Tetrachloroethylene	3.75	3.88	3.85	103	103	70.0-130			0.776	25
Tetrahydrofuran	3.75	3.47	3.45	92.5	92.0	70.0-137			0.578	25
Toluene	3.75	3.81	3.75	102	100	70.0-130			1.59	25
1,2,4-Trichlorobenzene	3.75	4.05	4.07	108	109	70.0-160			0.493	25
1,1,1-Trichloroethane	3.75	3.81	3.79	102	101	70.0-130			0.526	25
1,1,2-Trichloroethane	3.75	3.86	3.77	103	101	70.0-130			2.36	25
Trichloroethylene	3.75	3.89	3.86	104	103	70.0-130			0.774	25
1,2,4-Trimethylbenzene	3.75	3.85	3.78	103	101	70.0-130			1.83	25
1,3,5-Trimethylbenzene	3.75	3.78	3.76	101	100	70.0-130			0.531	25
Vinyl chloride	3.75	3.72	3.78	99.2	101	70.0-130			1.60	25
Vinyl Bromide	3.75	3.97	3.97	106	106	70.0-130			0.000	25
Vinyl acetate	3.75	2.94	2.89	78.4	77.1	70.0-130			1.72	25
Xylenes, Total	11.3	11.4	11.4	101	101	70.0-130			0.000	25
m&p-Xylene	7.50	7.64	7.62	102	102	70.0-130			0.262	25
o-Xylene	3.75	3.80	3.79	101	101	70.0-130			0.264	25
(S) 1,4-Bromofluorobenzene				*97.0*	*98.5*	*60.0-140*				

Method Blank (MB)

(MB) R4006955-3 11/30/23 10:33

Analyte	MB Result ppbv	MB Qualifier	MB MDL ppbv	MB RDL ppbv
2,2,4-Trimethylpentane	U		0.133	0.200
(S) 1,4-Bromofluorobenzene	*90.3*			*60.0-140*

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

(LCS) R4006955-1 11/30/23 09:11 • (LCSD) R4006955-2 11/30/23 09:54

Analyte	Spike Amount ppbv	LCS Result ppbv	LCSD Result ppbv	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2,2,4-Trimethylpentane	3.75	3.75	3.81	100	102	70.0-130			1.59	25
(S) 1,4-Bromofluorobenzene				*90.3*	*88.8*	*60.0-140*				

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.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state “ND” (Not Detected) or “BDL” (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.

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.

Pace® Location Requested (City/State):

Air CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here

Scan QR code for instructions

J181

Company Name: PES Environmental, Inc. - WA	Contact/Report To: Erik Hedberg
Street Address: 2101 Fourth Ave, Suite 1310	Phone #: 206-529-3980
City, State Zip: Seattle, WA 98121	E-Mail: erik.hedberg@nv5.com
Customer Project #: 443022-1413001.10.701.03	Cc E-Mail: jessica.babb@nv5.com; natalie.wisdom@nv5.com
Project Name: American Linen	Invoice to: Accounts Payable
Site Collection Info/Facility ID (as applicable):	Invoice E-Mail: PES-Accounting@nv5.com
Time Zone Collected: [ ] AK [ ] PT [ ] MT [ ] CT [ ] ET	Purchase Order # (if applicable): PESENVSWA-ALP
	Quote #:
	State origin of sample(s):

Data Deliverables:

[ ] Level II [ ] Level III [ ] Level IV

[ ] EQUIS

[ ] Other_____

Regulatory Program (CAA, RCRA, etc.) as applicable:

Rush (Pre-approval required): 2 Day 3 day 5 day Other_____

Date Results Requested: STD

Permit # as applicable:

Units for Reporting: ug/m³ PPBV mg/m³ PPMV

* Matrix Codes (Insert in Matrix box below): Ambient (A), Indoor (I), Soil Vapor (SV), Other (O)

Field Information

Analyses Requested

Lab Use Only

Proj. Manager:

AcctNum / Client ID:

Table #:

Profile / Template:

Prelog / Bottle Ord. ID: 11091682

Customer Sample ID	Matrix *	Summa Canister ID	Flow Controller ID	Begin Collection Date	Begin Collection Time	End Collection Date	End Collection Time	Canister Pressure / Vacuum: Start Pressure / Vacuum (in Hg)	Canister Pressure / Vacuum: End Pressure / Vacuum (in Hg)	PUF / FILTER: Duration (minutes)	PUF / FILTER: Flow Rate m³/min or L/min	PUF / FILTER: Total Volume Sampled m³ or L	TO-15 Summa			Sample Comment
TB-111723	SV	05496	029109	11/17/23	10:44	11/17/23	10:50	-30	-5	6	200	1L	X			-01

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N

1 Airs
Size: 1L 6L 1.4L
Tage Color: G W P B
Tubing ___ Shunt ___

T/P#: _____

Customer Remarks / Special Conditions / Possible Hazards:

* All other Summas were not used. We are returning them

Collected By:

Printed Name:

Signature:

Additional Instructions from Pace®:

Coolers: Thermometer ID: Correction Factor (°C): Obs. Temp. (°C): Corrected Temp. (°C):

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Tracking Number:
	111723 / 1410			
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	Delivered by: In- Person Courier
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:	FedEX UPS Other
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time: 11/18/23 0900	Page:____ of:____

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace® Terms and Conditions found at https://www.pacelabs.com/resource-library/resource/pace-terms-and-conditions/

ANALYTICAL REPORT

December 11, 2023

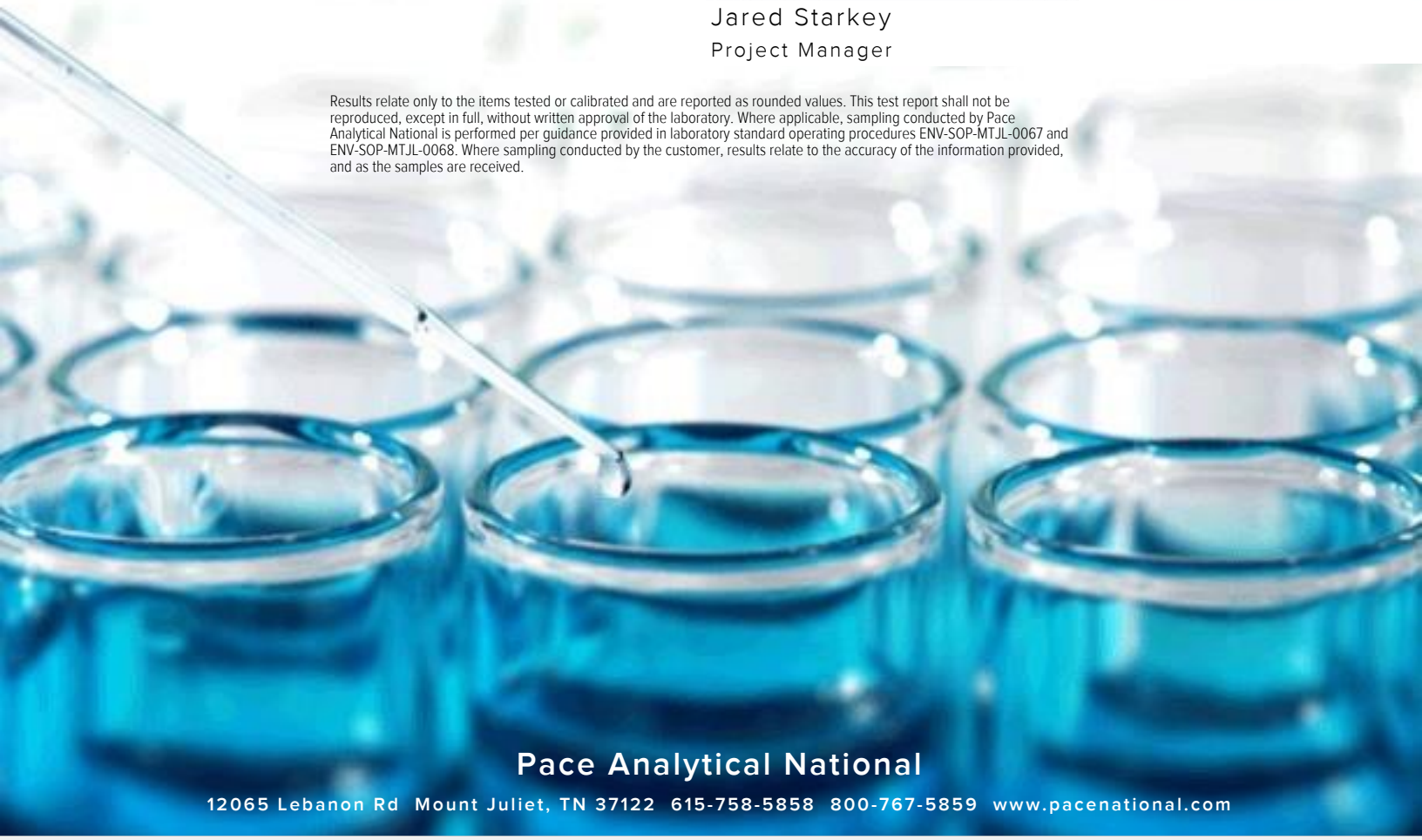
PES Environmental, Inc.- WA

Sample Delivery Group:	L1684448
Samples Received:	12/05/2023
Project Number:	443022-1413001.10.70
Description:	American Linen

Report To: Erik Hedberg
2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Entire Report Reviewed By:

Jared Starkey
Project Manager



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

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SAMPLE SUMMARY

MW112R-120423 L1684448-01 GW

Collected by: Osmin Monroy
Collected date/time: 12/04/23 10:56
Received date/time: 12/05/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2186766	1	12/11/23 01:05	12/11/23 01:05	DWR	Mt. Juliet, TN

MW-343-120423 L1684448-02 GW

Collected by: Osmin Monroy
Collected date/time: 12/04/23 12:55
Received date/time: 12/05/23 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260D	WG2186766	1	12/11/23 01:24	12/11/23 01:24	DWR	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.

Jared Starkey
Project Manager

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.54	C3	0.548	1.00	1	12/11/2023 01:05	WG2186766
Acrylonitrile	U		0.0760	0.500	1	12/11/2023 01:05	WG2186766
Benzene	U		0.0160	0.0400	1	12/11/2023 01:05	WG2186766
Bromobenzene	U		0.0420	0.500	1	12/11/2023 01:05	WG2186766
Bromodichloromethane	U		0.0315	0.100	1	12/11/2023 01:05	WG2186766
Bromoform	U		0.239	1.00	1	12/11/2023 01:05	WG2186766
Bromomethane	U		0.148	0.500	1	12/11/2023 01:05	WG2186766
n-Butylbenzene	U		0.153	0.500	1	12/11/2023 01:05	WG2186766
sec-Butylbenzene	U		0.101	0.500	1	12/11/2023 01:05	WG2186766
tert-Butylbenzene	U		0.0620	0.200	1	12/11/2023 01:05	WG2186766
Carbon tetrachloride	U		0.0432	0.200	1	12/11/2023 01:05	WG2186766
Chlorobenzene	U		0.0229	0.100	1	12/11/2023 01:05	WG2186766
Chlorodibromomethane	U		0.0180	0.100	1	12/11/2023 01:05	WG2186766
Chloroethane	U		0.0432	0.200	1	12/11/2023 01:05	WG2186766
Chloroform	U		0.0166	0.100	1	12/11/2023 01:05	WG2186766
Chloromethane	U		0.0556	0.500	1	12/11/2023 01:05	WG2186766
2-Chlorotoluene	U		0.0368	0.100	1	12/11/2023 01:05	WG2186766
4-Chlorotoluene	U		0.0452	0.200	1	12/11/2023 01:05	WG2186766
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/11/2023 01:05	WG2186766
1,2-Dibromoethane	U		0.0210	0.100	1	12/11/2023 01:05	WG2186766
Dibromomethane	U		0.0400	0.200	1	12/11/2023 01:05	WG2186766
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/11/2023 01:05	WG2186766
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/11/2023 01:05	WG2186766
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/11/2023 01:05	WG2186766
Dichlorodifluoromethane	U		0.0327	0.100	1	12/11/2023 01:05	WG2186766
1,1-Dichloroethane	U		0.0230	0.100	1	12/11/2023 01:05	WG2186766
1,2-Dichloroethane	U		0.0190	0.100	1	12/11/2023 01:05	WG2186766
1,1-Dichloroethene	U		0.0200	0.100	1	12/11/2023 01:05	WG2186766
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/11/2023 01:05	WG2186766
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/11/2023 01:05	WG2186766
1,2-Dichloropropane	U		0.0508	0.200	1	12/11/2023 01:05	WG2186766
1,1-Dichloropropene	U		0.0280	0.100	1	12/11/2023 01:05	WG2186766
1,3-Dichloropropane	U		0.0700	0.200	1	12/11/2023 01:05	WG2186766
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/11/2023 01:05	WG2186766
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/11/2023 01:05	WG2186766
2,2-Dichloropropane	U		0.0317	0.100	1	12/11/2023 01:05	WG2186766
Di-isopropyl ether	U		0.0140	0.0400	1	12/11/2023 01:05	WG2186766
Ethylbenzene	U		0.0212	0.100	1	12/11/2023 01:05	WG2186766
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/11/2023 01:05	WG2186766
Isopropylbenzene	U		0.0345	0.100	1	12/11/2023 01:05	WG2186766
p-Isopropyltoluene	U		0.0932	0.200	1	12/11/2023 01:05	WG2186766
2-Butanone (MEK)	U	C3	0.500	1.00	1	12/11/2023 01:05	WG2186766
Methylene Chloride	U		0.265	1.00	1	12/11/2023 01:05	WG2186766
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/11/2023 01:05	WG2186766
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/11/2023 01:05	WG2186766
Naphthalene	U	C3	0.124	0.500	1	12/11/2023 01:05	WG2186766
n-Propylbenzene	U		0.0472	0.200	1	12/11/2023 01:05	WG2186766
Styrene	U		0.109	0.500	1	12/11/2023 01:05	WG2186766
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/11/2023 01:05	WG2186766
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/11/2023 01:05	WG2186766
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/11/2023 01:05	WG2186766
Tetrachloroethene	U		0.0280	0.100	1	12/11/2023 01:05	WG2186766
Toluene	0.197	J	0.0500	0.200	1	12/11/2023 01:05	WG2186766
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	12/11/2023 01:05	WG2186766
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	12/11/2023 01:05	WG2186766
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/11/2023 01:05	WG2186766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/11/2023 01:05	WG2186766
Trichloroethene	U		0.0160	0.0400	1	12/11/2023 01:05	WG2186766
Trichlorofluoromethane	U		0.0200	0.100	1	12/11/2023 01:05	WG2186766
1,2,3-Trichloropropane	U		0.204	0.500	1	12/11/2023 01:05	WG2186766
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/11/2023 01:05	WG2186766
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/11/2023 01:05	WG2186766
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/11/2023 01:05	WG2186766
Vinyl chloride	U		0.0273	0.100	1	12/11/2023 01:05	WG2186766
Xylenes, Total	U		0.191	0.260	1	12/11/2023 01:05	WG2186766
Ethyl Ether	U		0.0170	0.100	1	12/11/2023 01:05	WG2186766
Tetrahydrofuran	U	C3	0.0900	0.500	1	12/11/2023 01:05	WG2186766
Iodomethane	U		0.242	0.500	1	12/11/2023 01:05	WG2186766
Allyl chloride	U		0.580	1.00	1	12/11/2023 01:05	WG2186766
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	12/11/2023 01:05	WG2186766
(S) Toluene-d8	*105*			*75.0-131*		*12/11/2023 01:05*	WG2186766
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/11/2023 01:05*	WG2186766
(S) 1,2-Dichloroethane-d4	*86.3*			*70.0-130*		*12/11/2023 01:05*	WG2186766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	C3	0.548	1.00	1	12/11/2023 01:24	WG2186766
Acrylonitrile	U		0.0760	0.500	1	12/11/2023 01:24	WG2186766
Benzene	0.0910		0.0160	0.0400	1	12/11/2023 01:24	WG2186766
Bromobenzene	U		0.0420	0.500	1	12/11/2023 01:24	WG2186766
Bromodichloromethane	U		0.0315	0.100	1	12/11/2023 01:24	WG2186766
Bromoform	U		0.239	1.00	1	12/11/2023 01:24	WG2186766
Bromomethane	U		0.148	0.500	1	12/11/2023 01:24	WG2186766
n-Butylbenzene	U		0.153	0.500	1	12/11/2023 01:24	WG2186766
sec-Butylbenzene	U		0.101	0.500	1	12/11/2023 01:24	WG2186766
tert-Butylbenzene	U		0.0620	0.200	1	12/11/2023 01:24	WG2186766
Carbon tetrachloride	U		0.0432	0.200	1	12/11/2023 01:24	WG2186766
Chlorobenzene	U		0.0229	0.100	1	12/11/2023 01:24	WG2186766
Chlorodibromomethane	U		0.0180	0.100	1	12/11/2023 01:24	WG2186766
Chloroethane	U		0.0432	0.200	1	12/11/2023 01:24	WG2186766
Chloroform	U		0.0166	0.100	1	12/11/2023 01:24	WG2186766
Chloromethane	U		0.0556	0.500	1	12/11/2023 01:24	WG2186766
2-Chlorotoluene	U		0.0368	0.100	1	12/11/2023 01:24	WG2186766
4-Chlorotoluene	U		0.0452	0.200	1	12/11/2023 01:24	WG2186766
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/11/2023 01:24	WG2186766
1,2-Dibromoethane	U		0.0210	0.100	1	12/11/2023 01:24	WG2186766
Dibromomethane	U		0.0400	0.200	1	12/11/2023 01:24	WG2186766
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/11/2023 01:24	WG2186766
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/11/2023 01:24	WG2186766
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/11/2023 01:24	WG2186766
Dichlorodifluoromethane	U		0.0327	0.100	1	12/11/2023 01:24	WG2186766
1,1-Dichloroethane	U		0.0230	0.100	1	12/11/2023 01:24	WG2186766
1,2-Dichloroethane	U		0.0190	0.100	1	12/11/2023 01:24	WG2186766
1,1-Dichloroethene	U		0.0200	0.100	1	12/11/2023 01:24	WG2186766
cis-1,2-Dichloroethene	2.88		0.0276	0.100	1	12/11/2023 01:24	WG2186766
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/11/2023 01:24	WG2186766
1,2-Dichloropropane	U		0.0508	0.200	1	12/11/2023 01:24	WG2186766
1,1-Dichloropropene	U		0.0280	0.100	1	12/11/2023 01:24	WG2186766
1,3-Dichloropropane	U		0.0700	0.200	1	12/11/2023 01:24	WG2186766
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/11/2023 01:24	WG2186766
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/11/2023 01:24	WG2186766
2,2-Dichloropropane	U		0.0317	0.100	1	12/11/2023 01:24	WG2186766
Di-isopropyl ether	0.0480		0.0140	0.0400	1	12/11/2023 01:24	WG2186766
Ethylbenzene	U		0.0212	0.100	1	12/11/2023 01:24	WG2186766
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/11/2023 01:24	WG2186766
Isopropylbenzene	U		0.0345	0.100	1	12/11/2023 01:24	WG2186766
p-Isopropyltoluene	U		0.0932	0.200	1	12/11/2023 01:24	WG2186766
2-Butanone (MEK)	U	C3	0.500	1.00	1	12/11/2023 01:24	WG2186766
Methylene Chloride	U		0.265	1.00	1	12/11/2023 01:24	WG2186766
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/11/2023 01:24	WG2186766
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/11/2023 01:24	WG2186766
Naphthalene	U	C3	0.124	0.500	1	12/11/2023 01:24	WG2186766
n-Propylbenzene	U		0.0472	0.200	1	12/11/2023 01:24	WG2186766
Styrene	U		0.109	0.500	1	12/11/2023 01:24	WG2186766
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/11/2023 01:24	WG2186766
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/11/2023 01:24	WG2186766
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/11/2023 01:24	WG2186766
Tetrachloroethene	U		0.0280	0.100	1	12/11/2023 01:24	WG2186766
Toluene	U		0.0500	0.200	1	12/11/2023 01:24	WG2186766
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	12/11/2023 01:24	WG2186766
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	12/11/2023 01:24	WG2186766
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/11/2023 01:24	WG2186766

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/11/2023 01:24	WG2186766
Trichloroethene	U		0.0160	0.0400	1	12/11/2023 01:24	WG2186766
Trichlorofluoromethane	U		0.0200	0.100	1	12/11/2023 01:24	WG2186766
1,2,3-Trichloropropane	U		0.204	0.500	1	12/11/2023 01:24	WG2186766
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/11/2023 01:24	WG2186766
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/11/2023 01:24	WG2186766
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/11/2023 01:24	WG2186766
Vinyl chloride	5.06		0.0273	0.100	1	12/11/2023 01:24	WG2186766
Xylenes, Total	U		0.191	0.260	1	12/11/2023 01:24	WG2186766
Ethyl Ether	U		0.0170	0.100	1	12/11/2023 01:24	WG2186766
Tetrahydrofuran	U	C3	0.0900	0.500	1	12/11/2023 01:24	WG2186766
Iodomethane	U		0.242	0.500	1	12/11/2023 01:24	WG2186766
Allyl chloride	U		0.580	1.00	1	12/11/2023 01:24	WG2186766
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	12/11/2023 01:24	WG2186766
(S) Toluene-d8	*102*			*75.0-131*		*12/11/2023 01:24*	WG2186766
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/11/2023 01:24*	WG2186766
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*12/11/2023 01:24*	WG2186766

Method Blank (MB)

(MB) R4010598-3 12/10/23 20:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		0.548	1.00
Acrylonitrile	U		0.0760	0.500
Benzene	U		0.0160	0.0400
Bromobenzene	U		0.0420	0.500
Bromodichloromethane	U		0.0315	0.100
Bromoform	U		0.239	1.00
Bromomethane	U		0.148	0.500
n-Butylbenzene	U		0.153	0.500
sec-Butylbenzene	U		0.101	0.500
tert-Butylbenzene	U		0.0620	0.200
Carbon tetrachloride	U		0.0432	0.200
Chlorobenzene	U		0.0229	0.100
Chlorodibromomethane	U		0.0180	0.100
Chloroethane	U		0.0432	0.200
Chloroform	U		0.0166	0.100
Chloromethane	U		0.0556	0.500
2-Chlorotoluene	U		0.0368	0.100
4-Chlorotoluene	U		0.0452	0.200
1,2-Dibromo-3-Chloropropane	U		0.204	1.00
1,2-Dibromoethane	U		0.0210	0.100
Dibromomethane	U		0.0400	0.200
1,2-Dichlorobenzene	U		0.0580	0.200
1,3-Dichlorobenzene	U		0.0680	0.200
1,4-Dichlorobenzene	U		0.0788	0.200
Dichlorodifluoromethane	U		0.0327	0.100
1,1-Dichloroethane	U		0.0230	0.100
1,2-Dichloroethane	U		0.0190	0.100
1,1-Dichloroethene	U		0.0200	0.100
cis-1,2-Dichloroethene	U		0.0276	0.100
trans-1,2-Dichloroethene	U		0.0572	0.200
1,2-Dichloropropane	U		0.0508	0.200
1,1-Dichloropropene	U		0.0280	0.100
1,3-Dichloropropane	U		0.0700	0.200
cis-1,3-Dichloropropene	U		0.0271	0.100
trans-1,3-Dichloropropene	U		0.0612	0.200
2,2-Dichloropropane	U		0.0317	0.100
Di-isopropyl ether	U		0.0140	0.0400
Ethylbenzene	U		0.0212	0.100
Hexachloro-1,3-butadiene	U		0.508	1.00
Isopropylbenzene	U		0.0345	0.100

Method Blank (MB)

(MB) R4010598-3 12/10/23 20:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
p-Isopropyltoluene	U		0.0932	0.200
2-Butanone (MEK)	U		0.500	1.00
Methylene Chloride	U		0.265	1.00
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00
Methyl tert-butyl ether	U		0.0118	0.0400
Naphthalene	U		0.124	0.500
n-Propylbenzene	U		0.0472	0.200
Styrene	U		0.109	0.500
1,1,1,2-Tetrachloroethane	U		0.0200	0.100
1,1,2,2-Tetrachloroethane	U		0.0156	0.100
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100
Tetrachloroethene	U		0.0280	0.100
Toluene	U		0.0500	0.200
1,2,3-Trichlorobenzene	U		0.0250	0.500
1,2,4-Trichlorobenzene	U		0.193	0.500
1,1,1-Trichloroethane	U		0.0110	0.100
1,1,2-Trichloroethane	U		0.0353	0.100
Trichloroethene	U		0.0160	0.0400
Trichlorofluoromethane	U		0.0200	0.100
1,2,3-Trichloropropane	U		0.204	0.500
1,2,4-Trimethylbenzene	U		0.0464	0.200
1,2,3-Trimethylbenzene	U		0.0460	0.200
1,3,5-Trimethylbenzene	U		0.0432	0.200
Vinyl chloride	U		0.0273	0.100
Xylenes, Total	U		0.191	0.260
Ethyl Ether	U		0.0170	0.100
Tetrahydrofuran	U		0.0900	0.500
Iodomethane	U		0.242	0.500
Allyl chloride	U		0.580	1.00
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200
(S) Toluene-d8	*105*			*75.0-131*
(S) 4-Bromofluorobenzene	*102*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*82.2*			*70.0-130*

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

(LCS) R4010598-1 12/10/23 18:51 • (LCSD) R4010598-2 12/10/23 19:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	17.4	17.0	69.6	68.0	10.0-160			2.33	31
Acrylonitrile	25.0	20.4	19.4	81.6	77.6	45.0-153			5.03	22
Benzene	5.00	4.90	4.65	98.0	93.0	70.0-123			5.24	20
Bromobenzene	5.00	4.95	4.92	99.0	98.4	73.0-121			0.608	20
Bromodichloromethane	5.00	4.76	4.55	95.2	91.0	73.0-121			4.51	20
Bromoform	5.00	4.69	4.74	93.8	94.8	64.0-132			1.06	20
Bromomethane	5.00	5.40	5.05	108	101	56.0-147			6.70	20
n-Butylbenzene	5.00	4.33	3.99	86.6	79.8	68.0-135			8.17	20
sec-Butylbenzene	5.00	4.51	4.34	90.2	86.8	74.0-130			3.84	20
tert-Butylbenzene	5.00	5.30	4.47	106	89.4	75.0-127			17.0	20
Carbon tetrachloride	5.00	5.48	5.18	110	104	66.0-128			5.63	20
Chlorobenzene	5.00	5.17	5.21	103	104	76.0-128			0.771	20
Chlorodibromomethane	5.00	4.82	4.72	96.4	94.4	74.0-127			2.10	20
Chloroethane	5.00	5.45	5.10	109	102	61.0-134			6.64	20
Chloroform	5.00	4.77	4.83	95.4	96.6	72.0-123			1.25	20
Chloromethane	5.00	4.05	3.81	81.0	76.2	51.0-138			6.11	20
2-Chlorotoluene	5.00	4.62	4.50	92.4	90.0	75.0-124			2.63	20
4-Chlorotoluene	5.00	4.62	4.51	92.4	90.2	75.0-124			2.41	20
1,2-Dibromo-3-Chloropropane	5.00	4.29	4.28	85.8	85.6	59.0-130			0.233	20
1,2-Dibromoethane	5.00	4.95	4.99	99.0	99.8	74.0-128			0.805	20
Dibromomethane	5.00	5.15	5.11	103	102	75.0-122			0.780	20
1,2-Dichlorobenzene	5.00	4.76	4.68	95.2	93.6	76.0-124			1.69	20
1,3-Dichlorobenzene	5.00	4.86	4.75	97.2	95.0	76.0-125			2.29	20
1,4-Dichlorobenzene	5.00	4.73	4.67	94.6	93.4	77.0-121			1.28	20
Dichlorodifluoromethane	5.00	4.76	4.16	95.2	83.2	43.0-156			13.5	20
1,1-Dichloroethane	5.00	4.81	4.56	96.2	91.2	70.0-127			5.34	20
1,2-Dichloroethane	5.00	4.28	4.08	85.6	81.6	65.0-131			4.78	20
1,1-Dichloroethene	5.00	4.58	4.75	91.6	95.0	65.0-131			3.64	20
cis-1,2-Dichloroethene	5.00	5.29	5.28	106	106	73.0-125			0.189	20
trans-1,2-Dichloroethene	5.00	5.51	5.43	110	109	71.0-125			1.46	20
1,2-Dichloropropane	5.00	4.85	4.61	97.0	92.2	74.0-125			5.07	20
1,1-Dichloropropene	5.00	4.78	4.75	95.6	95.0	73.0-125			0.630	20
1,3-Dichloropropane	5.00	4.76	4.67	95.2	93.4	80.0-125			1.91	20
cis-1,3-Dichloropropene	5.00	4.55	4.51	91.0	90.2	76.0-127			0.883	20
trans-1,3-Dichloropropene	5.00	4.35	4.26	87.0	85.2	73.0-127			2.09	20
2,2-Dichloropropane	5.00	5.59	5.59	112	112	59.0-135			0.000	20
Di-isopropyl ether	5.00	4.24	4.12	84.8	82.4	60.0-136			2.87	20
Ethylbenzene	5.00	5.16	5.21	103	104	74.0-126			0.964	20
Hexachloro-1,3-butadiene	5.00	5.11	4.82	102	96.4	57.0-150			5.84	20
Isopropylbenzene	5.00	5.29	5.28	106	106	72.0-127			0.189	20

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

(LCS) R4010598-1 12/10/23 18:51 • (LCSD) R4010598-2 12/10/23 19:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	4.47	4.35	89.4	87.0	72.0-133			2.72	20
2-Butanone (MEK)	25.0	19.6	17.3	78.4	69.2	30.0-160			12.5	24
Methylene Chloride	5.00	4.85	4.89	97.0	97.8	68.0-123			0.821	20
4-Methyl-2-pentanone (MIBK)	25.0	20.4	20.8	81.6	83.2	56.0-143			1.94	20
Methyl tert-butyl ether	5.00	5.09	4.71	102	94.2	66.0-132			7.76	20
Naphthalene	5.00	3.78	3.75	75.6	75.0	59.0-130			0.797	20
n-Propylbenzene	5.00	4.57	4.43	91.4	88.6	74.0-126			3.11	20
Styrene	5.00	4.91	4.95	98.2	99.0	72.0-127			0.811	20
1,1,1,2-Tetrachloroethane	5.00	5.02	5.19	100	104	74.0-129			3.33	20
1,1,2,2-Tetrachloroethane	5.00	4.60	4.49	92.0	89.8	68.0-128			2.42	20
1,1,2-Trichlorotrifluoroethane	5.00	5.08	5.53	102	111	61.0-139			8.48	20
Tetrachloroethene	5.00	5.48	5.44	110	109	70.0-136			0.733	20
Toluene	5.00	5.08	5.10	102	102	75.0-121			0.393	20
1,2,3-Trichlorobenzene	5.00	3.52	3.53	70.4	70.6	59.0-139			0.284	20
1,2,4-Trichlorobenzene	5.00	3.97	3.97	79.4	79.4	62.0-137			0.000	20
1,1,1-Trichloroethane	5.00	5.06	5.04	101	101	69.0-126			0.396	20
1,1,2-Trichloroethane	5.00	5.40	5.25	108	105	78.0-123			2.82	20
Trichloroethene	5.00	5.07	4.95	101	99.0	76.0-126			2.40	20
Trichlorofluoromethane	5.00	4.49	4.68	89.8	93.6	61.0-142			4.14	20
1,2,3-Trichloropropane	5.00	4.89	4.65	97.8	93.0	67.0-129			5.03	20
1,2,4-Trimethylbenzene	5.00	4.50	4.34	90.0	86.8	70.0-126			3.62	20
1,2,3-Trimethylbenzene	5.00	4.28	4.24	85.6	84.8	74.0-124			0.939	20
1,3,5-Trimethylbenzene	5.00	4.36	4.31	87.2	86.2	73.0-127			1.15	20
Vinyl chloride	5.00	4.60	4.30	92.0	86.0	63.0-134			6.74	20
Xylenes, Total	15.0	15.9	15.9	106	106	72.0-127			0.000	20
Ethyl Ether	5.00	4.54	4.77	90.8	95.4	64.0-137			4.94	20
Tetrahydrofuran	5.00	3.37	3.21	67.4	64.2	37.0-146			4.86	24
Iodomethane	25.0	25.7	25.2	103	101	74.0-134			1.96	20
Allyl chloride	25.0	23.5	24.1	94.0	96.4	70.0-131			2.52	20
Trans-1,4-Dichloro-2-butene	5.00	2.53	2.69	50.6	53.8	45.0-143			6.13	20
(S) Toluene-d8				*103*	*102*	*75.0-131*				
(S) 4-Bromofluorobenzene				*102*	*105*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*87.2*	*88.9*	*70.0-130*				

QUALITY CONTROL SUMMARY

L1684448-01,02

L1683704-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1683704-04 12/11/23 00:27 • (MS) R4010598-4 12/11/23 04:35 • (MSD) R4010598-5 12/11/23 04:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	1.13	15.4	15.8	57.1	58.7	1	10.0-160			2.56	40
Acrylonitrile	25.0	U	23.4	24.9	93.6	99.6	1	10.0-160			6.21	40
Benzene	5.00	U	5.89	6.08	118	122	1	10.0-149			3.17	37
Bromobenzene	5.00	U	6.09	6.43	122	129	1	10.0-156			5.43	38
Bromodichloromethane	5.00	U	5.86	5.98	117	120	1	10.0-143			2.03	37
Bromoform	5.00	U	5.89	6.12	118	122	1	10.0-146			3.83	36
Bromomethane	5.00	U	5.78	5.84	116	117	1	10.0-149			1.03	38
n-Butylbenzene	5.00	U	5.50	5.38	110	108	1	10.0-160			2.21	40
sec-Butylbenzene	5.00	U	6.03	5.83	121	117	1	10.0-159			3.37	39
tert-Butylbenzene	5.00	U	5.89	6.03	118	121	1	10.0-156			2.35	39
Carbon tetrachloride	5.00	U	7.27	7.36	145	147	1	10.0-145		J5	1.23	37
Chlorobenzene	5.00	U	6.48	6.71	130	134	1	10.0-152			3.49	39
Chlorodibromomethane	5.00	U	5.97	6.34	119	127	1	10.0-146			6.01	37
Chloroethane	5.00	U	6.83	6.41	137	128	1	10.0-146			6.34	40
Chloroform	5.00	U	6.05	6.14	121	123	1	10.0-146			1.48	37
Chloromethane	5.00	U	5.26	5.19	105	104	1	10.0-159			1.34	37
2-Chlorotoluene	5.00	U	5.82	6.09	116	122	1	10.0-159			4.53	38
4-Chlorotoluene	5.00	U	5.68	5.88	114	118	1	10.0-155			3.46	39
1,2-Dibromo-3-Chloropropane	5.00	U	5.03	5.80	101	116	1	10.0-151			14.2	39
1,2-Dibromoethane	5.00	U	6.02	6.38	120	128	1	10.0-148			5.81	34
Dibromomethane	5.00	U	6.04	6.36	121	127	1	10.0-147			5.16	35
1,2-Dichlorobenzene	5.00	U	5.72	6.11	114	122	1	10.0-155			6.59	37
1,3-Dichlorobenzene	5.00	U	5.95	6.30	119	126	1	10.0-153			5.71	38
1,4-Dichlorobenzene	5.00	U	5.68	6.14	114	123	1	10.0-151			7.78	38
Dichlorodifluoromethane	5.00	U	6.80	6.82	136	136	1	10.0-160			0.294	35
1,1-Dichloroethane	5.00	U	5.80	5.85	116	117	1	10.0-147			0.858	37
1,2-Dichloroethane	5.00	U	4.90	5.16	98.0	103	1	10.0-148			5.17	35
1,1-Dichloroethene	5.00	U	6.22	6.29	124	126	1	10.0-155			1.12	37
cis-1,2-Dichloroethene	5.00	U	6.69	6.94	134	139	1	10.0-149			3.67	37
trans-1,2-Dichloroethene	5.00	U	6.80	6.80	136	136	1	10.0-150			0.000	37
1,2-Dichloropropane	5.00	U	5.78	6.08	116	122	1	10.0-148			5.06	37
1,1-Dichloropropene	5.00	U	6.40	6.40	128	128	1	10.0-153			0.000	35
1,3-Dichloropropane	5.00	U	5.85	6.14	117	123	1	10.0-154			4.84	35
cis-1,3-Dichloropropene	5.00	U	5.51	5.53	110	111	1	10.0-151			0.362	37
trans-1,3-Dichloropropene	5.00	U	5.24	5.41	105	108	1	10.0-148			3.19	37
2,2-Dichloropropane	5.00	U	6.81	6.78	136	136	1	10.0-138			0.442	36
Di-isopropyl ether	5.00	U	4.71	5.13	94.2	103	1	10.0-147			8.54	36
Ethylbenzene	5.00	U	6.78	6.92	136	138	1	10.0-160			2.04	38
Hexachloro-1,3-butadiene	5.00	U	6.79	6.17	136	123	1	10.0-160			9.57	40
Isopropylbenzene	5.00	U	6.79	7.01	136	140	1	10.0-155			3.19	38

L1683704-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1683704-04 12/11/23 00:27 • (MS) R4010598-4 12/11/23 04:35 • (MSD) R4010598-5 12/11/23 04:55

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
p-Isopropyltoluene	5.00	U	5.80	5.79	116	116	1	10.0-160			0.173	40
2-Butanone (MEK)	25.0	U	19.6	20.3	78.4	81.2	1	10.0-160			3.51	40
Methylene Chloride	5.00	U	5.55	5.98	111	120	1	10.0-141			7.46	37
4-Methyl-2-pentanone (MIBK)	25.0	U	24.8	26.7	99.2	107	1	10.0-160			7.38	35
Methyl tert-butyl ether	5.00	U	5.14	5.81	103	116	1	11.0-147			12.2	35
Naphthalene	5.00	U	4.29	4.85	85.8	97.0	1	10.0-160			12.3	36
n-Propylbenzene	5.00	U	5.87	5.72	117	114	1	10.0-158			2.59	38
Styrene	5.00	U	5.94	6.36	119	127	1	10.0-160			6.83	40
1,1,1,2-Tetrachloroethane	5.00	U	6.18	6.91	124	138	1	10.0-149			11.2	39
1,1,2,2-Tetrachloroethane	5.00	U	5.60	6.16	112	123	1	10.0-160			9.52	35
1,1,2-Trichlorotrifluoroethane	5.00	U	7.13	7.30	143	146	1	10.0-160			2.36	36
Tetrachloroethene	5.00	U	7.22	7.59	144	152	1	10.0-156			5.00	39
Toluene	5.00	0.464	6.90	7.29	129	137	1	10.0-156			5.50	38
1,2,3-Trichlorobenzene	5.00	U	4.16	4.47	83.2	89.4	1	10.0-160			7.18	40
1,2,4-Trichlorobenzene	5.00	U	4.70	4.81	94.0	96.2	1	10.0-160			2.31	40
1,1,1-Trichloroethane	5.00	U	6.97	6.98	139	140	1	10.0-144			0.143	35
1,1,2-Trichloroethane	5.00	U	6.34	6.86	127	137	1	10.0-160			7.88	35
Trichloroethene	5.00	0.564	6.73	6.92	123	127	1	10.0-156			2.78	38
Trichlorofluoromethane	5.00	U	2.74	2.31	54.8	46.2	1	10.0-160			17.0	40
1,2,3-Trichloropropane	5.00	U	5.68	6.29	114	126	1	10.0-156			10.2	35
1,2,4-Trimethylbenzene	5.00	U	5.56	5.92	111	118	1	10.0-160			6.27	36
1,2,3-Trimethylbenzene	5.00	U	5.35	5.47	107	109	1	10.0-160			2.22	36
1,3,5-Trimethylbenzene	5.00	U	5.60	5.78	112	116	1	10.0-160			3.16	38
Vinyl chloride	5.00	U	5.90	6.00	118	120	1	10.0-160			1.68	37
Xylenes, Total	15.0	U	17.1	21.1	114	141	1	10.0-160			20.9	38
Ethyl Ether	5.00	U	5.42	5.45	108	109	1	10.0-160			0.552	31
Tetrahydrofuran	5.00	U	4.07	4.13	81.4	82.6	1	10.0-158			1.46	33
Iodomethane	25.0	U	31.0	32.2	124	129	1	10.0-160			3.80	38
Allyl chloride	25.0	U	29.9	29.4	120	118	1	10.0-160			1.69	30
Trans-1,4-Dichloro-2-butene	5.00	U	2.38	2.47	47.6	49.4	1	10.0-152			3.71	36
(S) Toluene-d8					*102*	*103*		*75.0-131*				
(S) 4-Bromofluorobenzene					*101*	*102*		*67.0-138*				
(S) 1,2-Dichloroethane-d4					*88.8*	*84.6*		*70.0-130*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

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

Qualifier	Description
C3	The reported concentration is an estimate. The continuing calibration standard associated with this data responded low. Method sensitivity check is acceptable.
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.

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.

Company Name/Address:
PES Environmental, Inc.- WA

2101 Fourth Ave., Suite 1310
Seattle, WA 98121

Billing Information:
Attn: Accounts Payable
2101 4th Avenue, Suite 1310
Seattle, WA 98121

Email To:
jessica.babb@nv5.com;natalie.wisdom@nv5.com;erik.hedberg@nv5.com

Report to:
Erik Hedberg

Project Description:
American Linen

City/State Collected:

Please Circle: PT MT CT ET

Phone: **206-529-3980**

Client Project #
443022-1413001.10.701.02

Lab Project #
PESENVSWA-ALP

Collected by (print):
osmin Monroy

Collected by (signature):

Immediately Packed on Ice N ___ Y ✓

Site/Facility ID #

P.O. #
443018-1413001.05.601

Quote #

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

Date Results Needed
STD

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	ALK 125mlHDPE-NoPres	Cl-, Nitrate, So4 125mlHDPE-NoPres	FERUSFE 250mlAmb-HCl	Fe, Mn by 6020 250mlHDPE-HNO3	RSK175LL 40mlAmb-HCl	TOC 9060 250mlAmb-HCl	V8260ULLC 40mlAmb-HCl				Remarks	Sample # (lab only)
MW12R-120423	Grab	GW	—	12/04/23	1056	3							X					-01
MW-343-120423	Grab	GW	—	12/04/23	1255	3							X					-02
		GW				NA 12/5												
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																
		GW																

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN
12065 Lebanon Rd Mount Juliet, TN 37122
Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1684448
E079

Acctnum: **PESENVSWA**
Template: **T240736**
Prelogin: **P1035102**
PM: **546 - Jared Starkey**
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 # 6528 5947 0526

Sample Receipt Checklist

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

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes (No) HCL / MeoH TBR	
	12/04/23	1300			
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: C 1.8 °C 2.3 Bottles Received: 6	If preservation required by Login: Date/Time
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 12/5/23 Time: 900	Hold: / Condition: NCF / (OK)

MEMORANDUM

TO: Project File **DATE:** February 13, 2024

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 443022-1413001.10.701.04

TASK: EIM Data Validation Level EPA2A for Group 1 – 4th Quarter November – December 2023

LAB: Pace Sample Delivery Group (SDGs): L1672476, L1672953, L1673440, L1673441, and L1673473

Twenty-seven groundwater samples (including one field duplicate) were collected October 31, November 1, and 2, 2023, from monitoring wells associated with fourth quarter sampling event at American Linen in Seattle, WA. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Standard Method (SM) 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A;
- Ferrous Iron by SM 3500 Fe B-2011; and
- Metals (iron and manganese) by USEPA Method 6020B.

Fourth quarter analytical results are reported in eighteen SDGs and were validated in four groups. Group 1 consists of five SDGs (L1672476, L1672953, L1673440, L1673441, and L1673473). The quality assurance review of the laboratory data associated with Group 1 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (USEPA, 2020) and USEPA National Functional Guidelines for Inorganic

Superfund Methods Data Review (USEPA, 2020). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested with the following issues:

- SDG L1672476: Review of chain of custody shows samples as MW125-103123 and MW105-103123 (SDG L1672476-04, and -07) but samples are identified in the deliverables (laboratory report and electronic data deliverables) as MW-125-103123 and MW-105-103123. NV5 confirmed that the that the chain of custody identifications are correct. Per NV5 request, Pace revised both sample identifications and reissued the associated deliverables on February 9, 2024.

- SDG L1672476: Review of sample receipt records indicates that Pace received ten containers for sample MW105-103123 however only VOC analyses were requested. PES confirmed that sample MW105-103123 should only be analyzed for VOCs.

- SDG L1673440: Review of the chain of custody shows that VOC analyses were requested on samples MW-172-110223 and MW-176-110223 (SDG L1673440-02, and -03) however VOC analyses on these two samples were not performed. Pace confirmed that this was due to a log-in error at sample receiving on February 15, 2024. Ferrous iron analyses were not requested on the chain of custody but these were performed on samples MW-172-110223 and MW-176-110223.

Commented [JC1]: This needs to be addressed in the report.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. The samples were received in good condition. No data are qualified based upon the sample collection and preservation information with the following exception:

- SDG L1673441: Review of the case narrative indicates that sample MW-182-110223 pH exceeded recommended preservation criteria (pH < 2) for VOCs by EPA Method 8260D. Refer to the section on Holding Times for additional details. **VOC results for sample MW-182-110223 are estimated and qualified (UJ/J) because analysis was performed past the seven day hold time for an unpreserved sample.**

Holding Times

USEPA Method 8260D:
The samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters (7 days for unpreserved waters) from the date of collection. All holding time criteria are met with one exception:

- SDG L1673441: **VOC results for sample MW-182-110223 are estimated and qualified (UJ/J) because analysis was performed outside of the recommended seven day hold time for an unpreserved sample.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The samples were analyzed within the USEPA recommended holding time for alkalinity (14 days) chloride (28 days), sulfate (28 days), nitrate (48 hours), and TOC (28 days) for the preserved water sample from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B and Ferrous Iron:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met. All samples were analyzed for ferrous iron within 24 hours with the following exceptions:

- SDG L1673440: Samples MW-172-110223 and MW-176-110223 were analyzed for ferrous iron approximately 24 hours past the 24-hour recommended hold time and laboratory qualified (T8). **Samples MW-172-110223 and MW-176-110223 ferrous iron results are qualified as estimated with low bias (J-) due to hold time exceedance.**

- SDG L1673473: Samples MW-166-110223, MW-168-110223, MW-999-110223, MW-173-110223, and MW-175-110223 were analyzed for ferrous iron approximately 24 hours past the 24-hour recommended hold time and laboratory qualified (T8). **Sample MW-166-110223, MW-168-110223, MW-999-110223, MW-173-110223, and MW-175-110223 ferrous iron results are qualified as estimated with low bias (J-) due to hold time exceedance.**

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCVs are below laboratory acceptance criteria and showing potential low bias. **Associated sample results with laboratory qualified (C3) results are estimated with potential low bias and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for several compounds. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCVs are above laboratory acceptance criteria and showing potential high bias. **Associated sample results (detects) with laboratory qualified (C5) results are estimated with potential high bias and qualified (J+).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs).

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. Method blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1672476	WG2162421	9056A	Nitrate	51.1	J	100	µg/L	**YES**
L1672476	WG2170716	9060A	TOC	126	J	1000	µg/L	NO
L1673440	WG2164204	9056A	Nitrate	49.7	J	100	µg/L	**YES**
L1673440	WG2164204	9056A	Chloride	610	J	1000	µg/L	NO
L1673441	WG2164204	9056A	Nitrate	49.7	J	100	µg/L	**YES**
L1673441	WG2164204	9056A	Chloride	610	J	1000	µg/L	NO
L1673441	WG2164210	9056A	Nitrate	49.9	J	100	µg/L	**YES**
L1673441	WG2172250	9060A	TOC	141	J	1000	µg/L	NO
L1673473	WG2164204	9056A	Nitrate	49.7	J	100	µg/L	**YES**
L1673473	WG2164204	9056A	Chloride	610	J	1000	µg/L	NO
L1673473	WG2164210	9056A	Nitrate	49.9	J	100	µg/L	**YES**
L1673473	WG2172250	9060A	TOC	141	J	1000	µg/L	NO

The target analytes were detected in the method blanks below the RDLs. No action is taken on this basis since associated sample results are greater than the RDLs with the following exceptions:

- Low levels of nitrate were detected in the method blanks. **Per NFG, associated samples with detections below the RDL are qualified (U) as non-detects due to method blank contamination as follows:**

SDG	Sample Identification	Analyte	Sample Result	DV Qualifier
L1672476	BB-8-103123	Nitrate	< RDL	U
L1672476	R-MW5-103123	Nitrate	< RDL	U
L1673440	MW-172-110223	Nitrate	< RDL	U
L1673440	MW-176-110223	Nitrate	< RDL	U
L1673441	MW-184-110223	Nitrate	< RDL	U
L1673441	MW-187-110223	Nitrate	< RDL	U
L1673473	MW-175-110223	Nitrate	< RDL	U

Trip Blank Results

USEPA Method 8260D:
Trip blanks were not collected and submitted for VOC analysis.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
A field, rinsate, and/or equipment blank were not collected.

Field Duplicate Analyses

Field duplicate sample pair is as follows:

- SDG L1673473: Samples MW-168-110223 and MW-999-110223

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (or ± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair with the following exceptions:

- SDG L1673473: Nitrate, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride RPDs exceed criteria (30%) for the field duplicate pair. **Nitrate, cis-1,2-dichloroethene, trans-1,2-dichloroethene, and vinyl chloride results for samples MW-168-110223 and MW-999-110223 are estimated (J/UJ).**

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

Ferrous Iron:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to laboratory control sample results for precision and accuracy results.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to laboratory control sample and laboratory duplicate results for precision and accuracy results.

General Chemistry (Chloride, Sulfate, Nitrate, and TOC), and Metals (Iron, Manganese, and Ferrous Iron):

MS or MS/MSD analyses were performed on client and/or on non-client samples within the analytical batches. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following discussion:

- SDG L1673440: Metals (manganese and iron) MS/MSD analyses was performed on sample MW-170-110223. Manganese MS/MSD % Rs are outside of acceptance criteria however, per NFG, no action is needed since sample MW-170-110223 manganese concentration is four times greater than the spiked amount.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for this SDG was provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy but the associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

- The associated EDDs identify ferrous iron as iron in the EDD field descriptor *Result Parameter Name*. Ferrous iron (iron by phenanthroline) is analyzed by Standard Methods 3500-Fe B (listed as SM3500FeB in the EDD) under the EDD field descriptor *Result Method*.

Compound Identification and Quantitation Limits

Results of the analyses are reported based on laboratory RDLs for all compounds. RDLs for all targets or selected compounds are elevated in several samples due to method-required dilutions.

Per NV5's request the associated EDDs show result reporting limits (also known as reported detection limit (RDL) or practical quantitation limit (PQL)) and result detection limits (also referred to as method detection limit (MDL)) instead of defaulting to the RDL when reporting the MDL

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020); and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/05/2023 01:20	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 01:20	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 01:20	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 01:20	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 01:20	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 01:20	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 01:20	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 01:20	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 01:20	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 01:20	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 01:20	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 01:20	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 01:20	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 01:20	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 01:20	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 01:20	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 01:20	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 01:20	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 01:20	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 01:20	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 01:20	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 01:20	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 01:20	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 01:20	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 01:20	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 01:20	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 01:20	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 01:20	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 01:20	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 01:20	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 01:20	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 01:20	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 01:20	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 01:20	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 01:20	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 01:20	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 01:20	WG2164648
Ethylbenzene	0.0750	J	0.0212	0.100	1	11/05/2023 01:20	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 01:20	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 01:20	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 01:20	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 01:20	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 01:20	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 01:20	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 01:20	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 01:20	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 01:20	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 01:20	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 01:20	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 01:20	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 01:20	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 01:20	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 01:20	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 01:20	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 01:20	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 01:20	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 01:20	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 01:20	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 01:20	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 01:20	WG2164648
1,2,4-Trimethylbenzene	0.0710	J	0.0464	0.200	1	11/05/2023 01:20	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 01:20	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 01:20	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 01:20	WG2164648
Xylenes, Total	0.287		0.191	0.260	1	11/05/2023 01:20	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 01:20	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 01:20	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 01:20	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 01:20	WG2164648
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/05/2023 01:20	WG2164648
(S) Toluene-d8	*97.8*			*75.0-131*		*11/05/2023 01:20*	WG2164648
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*11/05/2023 01:20*	WG2164648
(S) 1,2-Dichloroethane-d4	*97.4*			*70.0-130*		*11/05/2023 01:20*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.61		0.548	1.00	1	11/05/2023 01:40	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 01:40	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 01:40	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 01:40	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 01:40	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 01:40	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 01:40	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 01:40	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 01:40	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 01:40	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 01:40	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 01:40	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 01:40	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 01:40	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 01:40	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 01:40	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 01:40	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 01:40	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 01:40	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 01:40	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 01:40	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 01:40	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 01:40	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 01:40	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 01:40	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 01:40	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 01:40	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 01:40	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 01:40	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 01:40	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 01:40	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 01:40	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 01:40	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 01:40	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 01:40	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 01:40	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 01:40	WG2164648
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 01:40	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 01:40	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 01:40	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 01:40	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 01:40	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 01:40	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 01:40	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 01:40	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 01:40	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 01:40	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 01:40	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 01:40	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 01:40	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 01:40	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 01:40	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 01:40	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 01:40	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 01:40	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 01:40	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 01:40	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 01:40	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 01:40	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 01:40	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 01:40	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 01:40	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 01:40	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 01:40	WG2164648
Xylenes, Total	U		0.191	0.260	1	11/05/2023 01:40	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 01:40	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 01:40	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 01:40	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 01:40	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/05/2023 01:40	WG2164648
(S) Toluene-d8	*103*			*75.0-131*		*11/05/2023 01:40*	WG2164648
(S) 4-Bromofluorobenzene	*93.6*			*67.0-138*		*11/05/2023 01:40*	WG2164648
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*11/05/2023 01:40*	WG2164648

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	274000		8450	20000	1	11/07/2023 12:12	WG2164812

Sample Narrative:
L1672476-03 WG2164812: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31200		379	1000	1	11/02/2023 04:10	WG2162421
Nitrate	72.9	U ~~B J~~	48.0	100	1	11/02/2023 04:10	WG2162421
Sulfate	67800		594	5000	1	11/02/2023 04:10	WG2162421

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2940		102	1000	1	11/15/2023 12:35	WG2170716

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1200		28.1	100	1	11/04/2023 19:02	WG2162563
Manganese	6710		35.2	250	50	11/06/2023 01:40	WG2162563

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	22800		2.87	6.78	10	11/07/2023 14:20	WG2166209
Ethane	1.93		0.296	1.29	1	11/07/2023 09:25	WG2165206
Ethene	U		0.422	1.27	1	11/07/2023 09:25	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	20.2		5.48	10.0	10	11/05/2023 04:51	WG2164648
Acrylonitrile	U		0.760	5.00	10	11/05/2023 04:51	WG2164648
Benzene	U		0.160	0.400	10	11/05/2023 04:51	WG2164648
Bromobenzene	U		0.420	5.00	10	11/05/2023 04:51	WG2164648
Bromodichloromethane	U		0.315	1.00	10	11/05/2023 04:51	WG2164648
Bromoform	U		2.39	10.0	10	11/05/2023 04:51	WG2164648
Bromomethane	U		1.48	5.00	10	11/05/2023 04:51	WG2164648
n-Butylbenzene	U		1.53	5.00	10	11/05/2023 04:51	WG2164648
sec-Butylbenzene	U		1.01	5.00	10	11/05/2023 04:51	WG2164648
tert-Butylbenzene	U		0.620	2.00	10	11/05/2023 04:51	WG2164648
Carbon tetrachloride	U		0.432	2.00	10	11/05/2023 04:51	WG2164648
Chlorobenzene	U		0.229	1.00	10	11/05/2023 04:51	WG2164648
Chlorodibromomethane	U		0.180	1.00	10	11/05/2023 04:51	WG2164648
Chloroethane	U		0.432	2.00	10	11/05/2023 04:51	WG2164648
Chloroform	U		0.166	1.00	10	11/05/2023 04:51	WG2164648
Chloromethane	U	UJ C3	0.556	5.00	10	11/05/2023 04:51	WG2164648
2-Chlorotoluene	U		0.368	1.00	10	11/05/2023 04:51	WG2164648
4-Chlorotoluene	U		0.452	2.00	10	11/05/2023 04:51	WG2164648
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/05/2023 04:51	WG2164648
1,2-Dibromoethane	U		0.210	1.00	10	11/05/2023 04:51	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.400	2.00	10	11/05/2023 04:51	WG2164648
1,2-Dichlorobenzene	U		0.580	2.00	10	11/05/2023 04:51	WG2164648
1,3-Dichlorobenzene	U		0.680	2.00	10	11/05/2023 04:51	WG2164648
1,4-Dichlorobenzene	U		0.788	2.00	10	11/05/2023 04:51	WG2164648
Dichlorodifluoromethane	U		0.327	1.00	10	11/05/2023 04:51	WG2164648
1,1-Dichloroethane	U		0.230	1.00	10	11/05/2023 04:51	WG2164648
1,2-Dichloroethane	U		0.190	1.00	10	11/05/2023 04:51	WG2164648
1,1-Dichloroethene	U		0.200	1.00	10	11/05/2023 04:51	WG2164648
cis-1,2-Dichloroethene	26.6		0.276	1.00	10	11/05/2023 04:51	WG2164648
trans-1,2-Dichloroethene	U		0.572	2.00	10	11/05/2023 04:51	WG2164648
1,2-Dichloropropane	U		0.508	2.00	10	11/05/2023 04:51	WG2164648
1,1-Dichloropropene	U		0.280	1.00	10	11/05/2023 04:51	WG2164648
1,3-Dichloropropane	U		0.700	2.00	10	11/05/2023 04:51	WG2164648
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/05/2023 04:51	WG2164648
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/05/2023 04:51	WG2164648
2,2-Dichloropropane	U		0.317	1.00	10	11/05/2023 04:51	WG2164648
Di-isopropyl ether	U		0.140	0.400	10	11/05/2023 04:51	WG2164648
Ethylbenzene	U		0.212	1.00	10	11/05/2023 04:51	WG2164648
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/05/2023 04:51	WG2164648
Isopropylbenzene	U		0.345	1.00	10	11/05/2023 04:51	WG2164648
p-Isopropyltoluene	U		0.932	2.00	10	11/05/2023 04:51	WG2164648
2-Butanone (MEK)	U		5.00	10.0	10	11/05/2023 04:51	WG2164648
Methylene Chloride	3.22	J	2.65	10.0	10	11/05/2023 04:51	WG2164648
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/05/2023 04:51	WG2164648
Methyl tert-butyl ether	U		0.118	0.400	10	11/05/2023 04:51	WG2164648
Naphthalene	U	UJ C3	1.24	5.00	10	11/05/2023 04:51	WG2164648
n-Propylbenzene	U		0.472	2.00	10	11/05/2023 04:51	WG2164648
Styrene	U		1.09	5.00	10	11/05/2023 04:51	WG2164648
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/05/2023 04:51	WG2164648
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/05/2023 04:51	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/05/2023 04:51	WG2164648
Tetrachloroethene	139		0.280	1.00	10	11/05/2023 04:51	WG2164648
Toluene	U		0.500	2.00	10	11/05/2023 04:51	WG2164648
1,2,3-Trichlorobenzene	U		0.250	5.00	10	11/05/2023 04:51	WG2164648
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/05/2023 04:51	WG2164648
1,1,1-Trichloroethane	U		0.110	1.00	10	11/05/2023 04:51	WG2164648
1,1,2-Trichloroethane	U		0.353	1.00	10	11/05/2023 04:51	WG2164648
Trichloroethene	45.8		0.160	0.400	10	11/05/2023 04:51	WG2164648
Trichlorofluoromethane	U		0.200	1.00	10	11/05/2023 04:51	WG2164648
1,2,3-Trichloropropane	U		2.04	5.00	10	11/05/2023 04:51	WG2164648
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/05/2023 04:51	WG2164648
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/05/2023 04:51	WG2164648
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/05/2023 04:51	WG2164648
Vinyl chloride	U		0.273	1.00	10	11/05/2023 04:51	WG2164648
Xylenes, Total	U		1.91	2.60	10	11/05/2023 04:51	WG2164648
Ethyl Ether	U		0.170	1.00	10	11/05/2023 04:51	WG2164648
Tetrahydrofuran	U		0.900	5.00	10	11/05/2023 04:51	WG2164648
Iodomethane	U		2.42	5.00	10	11/05/2023 04:51	WG2164648
Allyl chloride	U		5.80	10.0	10	11/05/2023 04:51	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.560	2.00	10	11/05/2023 04:51	WG2164648
(S) Toluene-d8	*98.8*			*75.0-131*		*11/05/2023 04:51*	WG2164648
(S) 4-Bromofluorobenzene	*91.5*			*67.0-138*		*11/05/2023 04:51*	WG2164648
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/05/2023 04:51*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.43		0.548	1.00	1	11/05/2023 01:59	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 01:59	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 01:59	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 01:59	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 01:59	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 01:59	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 01:59	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 01:59	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 01:59	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 01:59	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 01:59	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 01:59	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 01:59	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 01:59	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 01:59	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 01:59	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 01:59	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 01:59	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 01:59	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 01:59	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 01:59	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 01:59	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 01:59	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 01:59	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 01:59	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 01:59	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 01:59	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 01:59	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 01:59	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 01:59	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 01:59	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 01:59	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 01:59	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 01:59	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 01:59	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 01:59	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 01:59	WG2164648
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 01:59	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 01:59	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 01:59	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 01:59	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 01:59	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 01:59	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 01:59	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 01:59	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 01:59	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 01:59	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 01:59	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 01:59	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 01:59	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 01:59	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 01:59	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 01:59	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 01:59	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 01:59	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 01:59	WG2164648

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/05/2023 01:59	WG2164648
Trichloroethene	U			0.0160	0.0400	1	11/05/2023 01:59	WG2164648
Trichlorofluoromethane	U			0.0200	0.100	1	11/05/2023 01:59	WG2164648
1,2,3-Trichloropropane	U			0.204	0.500	1	11/05/2023 01:59	WG2164648
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/05/2023 01:59	WG2164648
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/05/2023 01:59	WG2164648
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/05/2023 01:59	WG2164648
Vinyl chloride	U			0.0273	0.100	1	11/05/2023 01:59	WG2164648
Xylenes, Total	U			0.191	0.260	1	11/05/2023 01:59	WG2164648
Ethyl Ether	U			0.0170	0.100	1	11/05/2023 01:59	WG2164648
Tetrahydrofuran	U			0.0900	0.500	1	11/05/2023 01:59	WG2164648
Iodomethane	U			0.242	0.500	1	11/05/2023 01:59	WG2164648
Allyl chloride	U			0.580	1.00	1	11/05/2023 01:59	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/05/2023 01:59	WG2164648
(S) Toluene-d8	*102*				*75.0-131*		*11/05/2023 01:59*	WG2164648
(S) 4-Bromofluorobenzene	*94.1*				*67.0-138*		*11/05/2023 01:59*	WG2164648
(S) 1,2-Dichloroethane-d4	*100*				*70.0-130*		*11/05/2023 01:59*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.89		0.548	1.00	1	11/05/2023 02:18	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 02:18	WG2164648
Benzene	0.0460		0.0160	0.0400	1	11/05/2023 02:18	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 02:18	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 02:18	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 02:18	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 02:18	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 02:18	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 02:18	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 02:18	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 02:18	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 02:18	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 02:18	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 02:18	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 02:18	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 02:18	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 02:18	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 02:18	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 02:18	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 02:18	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 02:18	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 02:18	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 02:18	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 02:18	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 02:18	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 02:18	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 02:18	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 02:18	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 02:18	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 02:18	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 02:18	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 02:18	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 02:18	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 02:18	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 02:18	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 02:18	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 02:18	WG2164648
Ethylbenzene	0.181		0.0212	0.100	1	11/05/2023 02:18	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 02:18	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 02:18	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 02:18	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 02:18	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 02:18	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 02:18	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 02:18	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 02:18	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 02:18	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 02:18	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 02:18	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 02:18	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 02:18	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 02:18	WG2164648
Toluene	0.745		0.0500	0.200	1	11/05/2023 02:18	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 02:18	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 02:18	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 02:18	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 02:18	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 02:18	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 02:18	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 02:18	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 02:18	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 02:18	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 02:18	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 02:18	WG2164648
Xylenes, Total	1.12		0.191	0.260	1	11/05/2023 02:18	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 02:18	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 02:18	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 02:18	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 02:18	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/05/2023 02:18	WG2164648
(S) Toluene-d8	*96.5*			*75.0-131*		*11/05/2023 02:18*	WG2164648
(S) 4-Bromofluorobenzene	*92.1*			*67.0-138*		*11/05/2023 02:18*	WG2164648
(S) 1,2-Dichloroethane-d4	*95.9*			*70.0-130*		*11/05/2023 02:18*	WG2164648

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	144000		8450	20000	1	11/07/2023 12:20	WG2164812

Sample Narrative:
L1672476-06 WG2164812: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	29000		379	1000	1	11/02/2023 04:23	WG2162421
Nitrate	54.8	U ~~B J~~	48.0	100	1	11/02/2023 04:23	WG2162421
Sulfate	8940		594	5000	1	11/02/2023 04:23	WG2162421

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4810		102	1000	1	11/15/2023 12:56	WG2170716

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	10700		281	1000	10	11/06/2023 01:43	WG2162563
Manganese	1860		7.04	50.0	10	11/06/2023 01:43	WG2162563

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	183		0.287	0.678	1	11/07/2023 09:31	WG2165206
Ethane	U		0.296	1.29	1	11/07/2023 09:31	WG2165206
Ethene	U		0.422	1.27	1	11/07/2023 09:31	WG2165206

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.05		0.548	1.00	1	11/05/2023 02:37	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 02:37	WG2164648
Benzene	0.0380	J	0.0160	0.0400	1	11/05/2023 02:37	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 02:37	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 02:37	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 02:37	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 02:37	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 02:37	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 02:37	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 02:37	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 02:37	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 02:37	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 02:37	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 02:37	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 02:37	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 02:37	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 02:37	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 02:37	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 02:37	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 02:37	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 02:37	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 02:37	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 02:37	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 02:37	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 02:37	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 02:37	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 02:37	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 02:37	WG2164648
cis-1,2-Dichloroethene	0.237		0.0276	0.100	1	11/05/2023 02:37	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 02:37	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 02:37	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 02:37	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 02:37	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 02:37	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 02:37	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 02:37	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 02:37	WG2164648
Ethylbenzene	0.124		0.0212	0.100	1	11/05/2023 02:37	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 02:37	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 02:37	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 02:37	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 02:37	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 02:37	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 02:37	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 02:37	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 02:37	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 02:37	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 02:37	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 02:37	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 02:37	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 02:37	WG2164648
Tetrachloroethene	0.208		0.0280	0.100	1	11/05/2023 02:37	WG2164648
Toluene	0.411		0.0500	0.200	1	11/05/2023 02:37	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 02:37	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 02:37	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 02:37	WG2164648
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 02:37	WG2164648
Trichloroethene	0.132		0.0160	0.0400	1	11/05/2023 02:37	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 02:37	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 02:37	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 02:37	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 02:37	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 02:37	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 02:37	WG2164648
Xylenes, Total	0.731		0.191	0.260	1	11/05/2023 02:37	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 02:37	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 02:37	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 02:37	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 02:37	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/05/2023 02:37	WG2164648
(S) Toluene-d8	*101*			*75.0-131*		*11/05/2023 02:37*	WG2164648
(S) 4-Bromofluorobenzene	*91.2*			*67.0-138*		*11/05/2023 02:37*	WG2164648
(S) 1,2-Dichloroethane-d4	*92.0*			*70.0-130*		*11/05/2023 02:37*	WG2164648

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.85		0.548	1.00	1	11/05/2023 02:56	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 02:56	WG2164648
Benzene	0.0380	J	0.0160	0.0400	1	11/05/2023 02:56	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 02:56	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 02:56	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 02:56	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 02:56	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 02:56	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 02:56	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 02:56	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 02:56	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 02:56	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 02:56	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 02:56	WG2164648
Chloroform	0.0660	J	0.0166	0.100	1	11/05/2023 02:56	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 02:56	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 02:56	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 02:56	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 02:56	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 02:56	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 02:56	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 02:56	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 02:56	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 02:56	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 02:56	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 02:56	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 02:56	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 02:56	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 02:56	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 02:56	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 02:56	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 02:56	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 02:56	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 02:56	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 02:56	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 02:56	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 02:56	WG2164648
Ethylbenzene	0.240		0.0212	0.100	1	11/05/2023 02:56	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 02:56	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 02:56	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 02:56	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 02:56	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 02:56	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 02:56	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 02:56	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 02:56	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 02:56	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 02:56	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 02:56	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 02:56	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 02:56	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 02:56	WG2164648
Toluene	0.0870	J	0.0500	0.200	1	11/05/2023 02:56	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 02:56	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 02:56	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 02:56	WG2164648

JC 2/13/24

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

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/05/2023 02:56	WG2164648
Trichloroethene	0.0380		J	0.0160	0.0400	1	11/05/2023 02:56	WG2164648
Trichlorofluoromethane	U			0.0200	0.100	1	11/05/2023 02:56	WG2164648
1,2,3-Trichloropropane	U			0.204	0.500	1	11/05/2023 02:56	WG2164648
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/05/2023 02:56	WG2164648
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/05/2023 02:56	WG2164648
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/05/2023 02:56	WG2164648
Vinyl chloride	U			0.0273	0.100	1	11/05/2023 02:56	WG2164648
Xylenes, Total	0.893			0.191	0.260	1	11/05/2023 02:56	WG2164648
Ethyl Ether	U			0.0170	0.100	1	11/05/2023 02:56	WG2164648
Tetrahydrofuran	U			0.0900	0.500	1	11/05/2023 02:56	WG2164648
Iodomethane	U			0.242	0.500	1	11/05/2023 02:56	WG2164648
Allyl chloride	U			0.580	1.00	1	11/05/2023 02:56	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/05/2023 02:56	WG2164648
(S) Toluene-d8	*99.4*				*75.0-131*		*11/05/2023 02:56*	WG2164648
(S) 4-Bromofluorobenzene	*92.8*				*67.0-138*		*11/05/2023 02:56*	WG2164648
(S) 1,2-Dichloroethane-d4	*98.3*				*70.0-130*		*11/05/2023 02:56*	WG2164648

JC 2/13/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.44		0.548	1.00	1	11/05/2023 03:15	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 03:15	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 03:15	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 03:15	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 03:15	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 03:15	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 03:15	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 03:15	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 03:15	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 03:15	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 03:15	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 03:15	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 03:15	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 03:15	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 03:15	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 03:15	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 03:15	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 03:15	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 03:15	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 03:15	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 03:15	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 03:15	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 03:15	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 03:15	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 03:15	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 03:15	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 03:15	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 03:15	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 03:15	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 03:15	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 03:15	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 03:15	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 03:15	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 03:15	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 03:15	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 03:15	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 03:15	WG2164648
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 03:15	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 03:15	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 03:15	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 03:15	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 03:15	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 03:15	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 03:15	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 03:15	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 03:15	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 03:15	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 03:15	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 03:15	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 03:15	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 03:15	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 03:15	WG2164648
Toluene	U		0.0500	0.200	1	11/05/2023 03:15	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 03:15	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 03:15	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 03:15	WG2164648

JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 03:15	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 03:15	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 03:15	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 03:15	WG2164648
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 03:15	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 03:15	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 03:15	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 03:15	WG2164648
Xylenes, Total	U		0.191	0.260	1	11/05/2023 03:15	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 03:15	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 03:15	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 03:15	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 03:15	WG2164648
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/05/2023 03:15	WG2164648
(S) Toluene-d8	*97.6*			*75.0-131*		*11/05/2023 03:15*	WG2164648
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*11/05/2023 03:15*	WG2164648
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*11/05/2023 03:15*	WG2164648

JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/05/2023 03:34	WG2164648
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 03:34	WG2164648
Benzene	U		0.0160	0.0400	1	11/05/2023 03:34	WG2164648
Bromobenzene	U		0.0420	0.500	1	11/05/2023 03:34	WG2164648
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 03:34	WG2164648
Bromoform	U		0.239	1.00	1	11/05/2023 03:34	WG2164648
Bromomethane	U		0.148	0.500	1	11/05/2023 03:34	WG2164648
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 03:34	WG2164648
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 03:34	WG2164648
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 03:34	WG2164648
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 03:34	WG2164648
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 03:34	WG2164648
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 03:34	WG2164648
Chloroethane	U		0.0432	0.200	1	11/05/2023 03:34	WG2164648
Chloroform	U		0.0166	0.100	1	11/05/2023 03:34	WG2164648
Chloromethane	U	UJ C3	0.0556	0.500	1	11/05/2023 03:34	WG2164648
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 03:34	WG2164648
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 03:34	WG2164648
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 03:34	WG2164648
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 03:34	WG2164648
Dibromomethane	U		0.0400	0.200	1	11/05/2023 03:34	WG2164648
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 03:34	WG2164648
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 03:34	WG2164648
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 03:34	WG2164648
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 03:34	WG2164648
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 03:34	WG2164648
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 03:34	WG2164648
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 03:34	WG2164648
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/05/2023 03:34	WG2164648
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 03:34	WG2164648
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 03:34	WG2164648
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 03:34	WG2164648
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 03:34	WG2164648
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 03:34	WG2164648
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 03:34	WG2164648
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 03:34	WG2164648
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 03:34	WG2164648
Ethylbenzene	0.0430	J	0.0212	0.100	1	11/05/2023 03:34	WG2164648
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 03:34	WG2164648
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 03:34	WG2164648
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 03:34	WG2164648
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 03:34	WG2164648
Methylene Chloride	U		0.265	1.00	1	11/05/2023 03:34	WG2164648
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 03:34	WG2164648
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 03:34	WG2164648
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 03:34	WG2164648
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 03:34	WG2164648
Styrene	U		0.109	0.500	1	11/05/2023 03:34	WG2164648
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 03:34	WG2164648
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 03:34	WG2164648
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 03:34	WG2164648
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 03:34	WG2164648
Toluene	0.290		0.0500	0.200	1	11/05/2023 03:34	WG2164648
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 03:34	WG2164648
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 03:34	WG2164648
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 03:34	WG2164648

JC 1/12/24

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 03:34	WG2164648
Trichloroethene	U		0.0160	0.0400	1	11/05/2023 03:34	WG2164648
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 03:34	WG2164648
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 03:34	WG2164648
1,2,4-Trimethylbenzene	0.0820	J	0.0464	0.200	1	11/05/2023 03:34	WG2164648
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 03:34	WG2164648
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 03:34	WG2164648
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 03:34	WG2164648
Xylenes, Total	0.331		0.191	0.260	1	11/05/2023 03:34	WG2164648
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 03:34	WG2164648
Tetrahydrofuran	U		0.0900	0.500	1	11/05/2023 03:34	WG2164648
Iodomethane	U		0.242	0.500	1	11/05/2023 03:34	WG2164648
Allyl chloride	U		0.580	1.00	1	11/05/2023 03:34	WG2164648
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/05/2023 03:34	WG2164648
(S) Toluene-d8	*98.7*			*75.0-131*		*11/05/2023 03:34*	WG2164648
(S) 4-Bromofluorobenzene	*91.3*			*67.0-138*		*11/05/2023 03:34*	WG2164648
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 03:34*	WG2164648

JC 1/12/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	983000		8450	20000	1	11/07/2023 11:17	WG2165877

Sample Narrative:

L1672953-01 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	213000		1900	5000	5	11/03/2023 04:04	WG2163525
Nitrate	84.6	J	48.0	100	1	11/03/2023 01:30	WG2163525
Sulfate	U		594	5000	1	11/03/2023 01:30	WG2163525

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15600		102	1000	1	11/16/2023 03:04	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	20000		28.1	100	1	11/09/2023 11:19	WG2165351
Manganese	2930		0.704	5.00	1	11/09/2023 11:19	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16500		2.87	6.78	10	11/07/2023 14:25	WG2166209
Ethane	21.1		0.296	1.29	1	11/07/2023 09:37	WG2165206
Ethene	233		0.422	1.27	1	11/07/2023 09:37	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		27.4	50.0	50	11/05/2023 13:55	WG2164649
Acrylonitrile	U		3.80	25.0	50	11/05/2023 13:55	WG2164649
Benzene	U		0.800	2.00	50	11/05/2023 13:55	WG2164649
Bromobenzene	U		2.10	25.0	50	11/05/2023 13:55	WG2164649
Bromodichloromethane	U		1.58	5.00	50	11/05/2023 13:55	WG2164649
Bromoform	U		12.0	50.0	50	11/05/2023 13:55	WG2164649
Bromomethane	U		7.40	25.0	50	11/05/2023 13:55	WG2164649
n-Butylbenzene	U		7.65	25.0	50	11/05/2023 13:55	WG2164649
sec-Butylbenzene	U		5.05	25.0	50	11/05/2023 13:55	WG2164649
tert-Butylbenzene	U		3.10	10.0	50	11/05/2023 13:55	WG2164649
Carbon tetrachloride	U		2.16	10.0	50	11/05/2023 13:55	WG2164649
Chlorobenzene	U		1.15	5.00	50	11/05/2023 13:55	WG2164649
Chlorodibromomethane	U		0.900	5.00	50	11/05/2023 13:55	WG2164649
Chloroethane	23.6		2.16	10.0	50	11/05/2023 13:55	WG2164649
Chloroform	U		0.830	5.00	50	11/05/2023 13:55	WG2164649
Chloromethane	U		2.78	25.0	50	11/05/2023 13:55	WG2164649
2-Chlorotoluene	U		1.84	5.00	50	11/05/2023 13:55	WG2164649
4-Chlorotoluene	U		2.26	10.0	50	11/05/2023 13:55	WG2164649
1,2-Dibromo-3-Chloropropane	U		10.2	50.0	50	11/05/2023 13:55	WG2164649
1,2-Dibromoethane	U		1.05	5.00	50	11/05/2023 13:55	WG2164649

JC 2/13/24

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			2.00	10.0	50	11/05/2023 13:55	WG2164649
1,2-Dichlorobenzene	U			2.90	10.0	50	11/05/2023 13:55	WG2164649
1,3-Dichlorobenzene	U			3.40	10.0	50	11/05/2023 13:55	WG2164649
1,4-Dichlorobenzene	U			3.94	10.0	50	11/05/2023 13:55	WG2164649
Dichlorodifluoromethane	U			1.64	5.00	50	11/05/2023 13:55	WG2164649
1,1-Dichloroethane	U			1.15	5.00	50	11/05/2023 13:55	WG2164649
1,2-Dichloroethane	U			0.950	5.00	50	11/05/2023 13:55	WG2164649
1,1-Dichloroethene	6.65			1.00	5.00	50	11/05/2023 13:55	WG2164649
cis-1,2-Dichloroethene	1570			1.38	5.00	50	11/05/2023 13:55	WG2164649
trans-1,2-Dichloroethene	6.10		J	2.86	10.0	50	11/05/2023 13:55	WG2164649
1,2-Dichloropropane	U			2.54	10.0	50	11/05/2023 13:55	WG2164649
1,1-Dichloropropene	U			1.40	5.00	50	11/05/2023 13:55	WG2164649
1,3-Dichloropropane	U			3.50	10.0	50	11/05/2023 13:55	WG2164649
cis-1,3-Dichloropropene	U			1.36	5.00	50	11/05/2023 13:55	WG2164649
trans-1,3-Dichloropropene	U			3.06	10.0	50	11/05/2023 13:55	WG2164649
2,2-Dichloropropane	U			1.59	5.00	50	11/05/2023 13:55	WG2164649
Di-isopropyl ether	U			0.700	2.00	50	11/05/2023 13:55	WG2164649
Ethylbenzene	U			1.06	5.00	50	11/05/2023 13:55	WG2164649
Hexachloro-1,3-butadiene	U			25.4	50.0	50	11/05/2023 13:55	WG2164649
Isopropylbenzene	U			1.73	5.00	50	11/05/2023 13:55	WG2164649
p-Isopropyltoluene	U			4.66	10.0	50	11/05/2023 13:55	WG2164649
2-Butanone (MEK)	U			25.0	50.0	50	11/05/2023 13:55	WG2164649
Methylene Chloride	U			13.3	50.0	50	11/05/2023 13:55	WG2164649
4-Methyl-2-pentanone (MIBK)	U			20.0	50.0	50	11/05/2023 13:55	WG2164649
Methyl tert-butyl ether	U			0.590	2.00	50	11/05/2023 13:55	WG2164649
Naphthalene	U	UJ	C3	6.20	25.0	50	11/05/2023 13:55	WG2164649
n-Propylbenzene	U			2.36	10.0	50	11/05/2023 13:55	WG2164649
Styrene	U			5.45	25.0	50	11/05/2023 13:55	WG2164649
1,1,1,2-Tetrachloroethane	U			1.00	5.00	50	11/05/2023 13:55	WG2164649
1,1,2,2-Tetrachloroethane	U			0.780	5.00	50	11/05/2023 13:55	WG2164649
1,1,2-Trichlorotrifluoroethane	U			1.35	5.00	50	11/05/2023 13:55	WG2164649
Tetrachloroethene	3.85		J	1.40	5.00	50	11/05/2023 13:55	WG2164649
Toluene	U			2.50	10.0	50	11/05/2023 13:55	WG2164649
1,2,3-Trichlorobenzene	U			1.25	25.0	50	11/05/2023 13:55	WG2164649
1,2,4-Trichlorobenzene	U			9.65	25.0	50	11/05/2023 13:55	WG2164649
1,1,1-Trichloroethane	U			0.550	5.00	50	11/05/2023 13:55	WG2164649
1,1,2-Trichloroethane	U			1.77	5.00	50	11/05/2023 13:55	WG2164649
Trichloroethene	2.05			0.800	2.00	50	11/05/2023 13:55	WG2164649
Trichlorofluoromethane	U			1.00	5.00	50	11/05/2023 13:55	WG2164649
1,2,3-Trichloropropane	U			10.2	25.0	50	11/05/2023 13:55	WG2164649
1,2,4-Trimethylbenzene	U			2.32	10.0	50	11/05/2023 13:55	WG2164649
1,2,3-Trimethylbenzene	U			2.30	10.0	50	11/05/2023 13:55	WG2164649
1,3,5-Trimethylbenzene	U			2.16	10.0	50	11/05/2023 13:55	WG2164649
Vinyl chloride	1770			1.36	5.00	50	11/05/2023 13:55	WG2164649
Xylenes, Total	U			9.55	13.0	50	11/05/2023 13:55	WG2164649
Ethyl Ether	U			0.850	5.00	50	11/05/2023 13:55	WG2164649
Tetrahydrofuran	U			4.50	25.0	50	11/05/2023 13:55	WG2164649
Iodomethane	U			12.1	25.0	50	11/05/2023 13:55	WG2164649
Allyl chloride	U			29.0	50.0	50	11/05/2023 13:55	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ	C3	2.80	10.0	50	11/05/2023 13:55	WG2164649
(S) Toluene-d8	*99.3*				*75.0-131*		*11/05/2023 13:55*	WG2164649
(S) 4-Bromofluorobenzene	*88.2*				*67.0-138*		*11/05/2023 13:55*	WG2164649
(S) 1,2-Dichloroethane-d4	*98.9*				*70.0-130*		*11/05/2023 13:55*	WG2164649

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	441000		8450	20000	1	11/07/2023 11:21	WG2165877

Sample Narrative:

L1672953-02 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	78600		379	1000	1	11/03/2023 02:29	WG2163540
Nitrate	119		48.0	100	1	11/03/2023 02:29	WG2163540
Sulfate	U		594	5000	1	11/03/2023 02:29	WG2163540

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10100		102	1000	1	11/16/2023 03:25	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	6790		28.1	100	1	11/09/2023 11:22	WG2165351
Manganese	764		0.704	5.00	1	11/09/2023 11:22	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27400		2.87	6.78	10	11/07/2023 14:29	WG2166209
Ethane	661		0.296	1.29	1	11/07/2023 09:49	WG2165206
Ethene	1430		0.422	1.27	1	11/07/2023 09:49	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	163	J	110	200	200	11/05/2023 14:14	WG2164649
Acrylonitrile	U		15.2	100	200	11/05/2023 14:14	WG2164649
Benzene	U		3.20	8.00	200	11/05/2023 14:14	WG2164649
Bromobenzene	U		8.40	100	200	11/05/2023 14:14	WG2164649
Bromodichloromethane	U		6.30	20.0	200	11/05/2023 14:14	WG2164649
Bromoform	U		47.8	200	200	11/05/2023 14:14	WG2164649
Bromomethane	U		29.6	100	200	11/05/2023 14:14	WG2164649
n-Butylbenzene	U		30.6	100	200	11/05/2023 14:14	WG2164649
sec-Butylbenzene	U		20.2	100	200	11/05/2023 14:14	WG2164649
tert-Butylbenzene	U		12.4	40.0	200	11/05/2023 14:14	WG2164649
Carbon tetrachloride	U		8.64	40.0	200	11/05/2023 14:14	WG2164649
Chlorobenzene	U		4.58	20.0	200	11/05/2023 14:14	WG2164649
Chlorodibromomethane	U		3.60	20.0	200	11/05/2023 14:14	WG2164649
Chloroethane	U		8.64	40.0	200	11/05/2023 14:14	WG2164649
Chloroform	U		3.32	20.0	200	11/05/2023 14:14	WG2164649
Chloromethane	U		11.1	100	200	11/05/2023 14:14	WG2164649
2-Chlorotoluene	U		7.36	20.0	200	11/05/2023 14:14	WG2164649
4-Chlorotoluene	U		9.04	40.0	200	11/05/2023 14:14	WG2164649
1,2-Dibromo-3-Chloropropane	U		40.8	200	200	11/05/2023 14:14	WG2164649
1,2-Dibromoethane	U		4.20	20.0	200	11/05/2023 14:14	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		8.00	40.0	200	11/05/2023 14:14	WG2164649
1,2-Dichlorobenzene	U		11.6	40.0	200	11/05/2023 14:14	WG2164649
1,3-Dichlorobenzene	U		13.6	40.0	200	11/05/2023 14:14	WG2164649
1,4-Dichlorobenzene	U		15.8	40.0	200	11/05/2023 14:14	WG2164649
Dichlorodifluoromethane	U		6.54	20.0	200	11/05/2023 14:14	WG2164649
1,1-Dichloroethane	U		4.60	20.0	200	11/05/2023 14:14	WG2164649
1,2-Dichloroethane	U		3.80	20.0	200	11/05/2023 14:14	WG2164649
1,1-Dichloroethene	5.60	J	4.00	20.0	200	11/05/2023 14:14	WG2164649
cis-1,2-Dichloroethene	2610		5.52	20.0	200	11/05/2023 14:14	WG2164649
trans-1,2-Dichloroethene	12.8	J	11.4	40.0	200	11/05/2023 14:14	WG2164649
1,2-Dichloropropane	U		10.2	40.0	200	11/05/2023 14:14	WG2164649
1,1-Dichloropropene	U		5.60	20.0	200	11/05/2023 14:14	WG2164649
1,3-Dichloropropane	U		14.0	40.0	200	11/05/2023 14:14	WG2164649
cis-1,3-Dichloropropene	U		5.42	20.0	200	11/05/2023 14:14	WG2164649
trans-1,3-Dichloropropene	U		12.2	40.0	200	11/05/2023 14:14	WG2164649
2,2-Dichloropropane	U		6.34	20.0	200	11/05/2023 14:14	WG2164649
Di-isopropyl ether	U		2.80	8.00	200	11/05/2023 14:14	WG2164649
Ethylbenzene	U		4.24	20.0	200	11/05/2023 14:14	WG2164649
Hexachloro-1,3-butadiene	U		102	200	200	11/05/2023 14:14	WG2164649
Isopropylbenzene	U		6.90	20.0	200	11/05/2023 14:14	WG2164649
p-Isopropyltoluene	U		18.6	40.0	200	11/05/2023 14:14	WG2164649
2-Butanone (MEK)	U		100	200	200	11/05/2023 14:14	WG2164649
Methylene Chloride	U		53.0	200	200	11/05/2023 14:14	WG2164649
4-Methyl-2-pentanone (MIBK)	U		80.0	200	200	11/05/2023 14:14	WG2164649
Methyl tert-butyl ether	U		2.36	8.00	200	11/05/2023 14:14	WG2164649
Naphthalene	U	UJ C3	24.8	100	200	11/05/2023 14:14	WG2164649
n-Propylbenzene	U		9.44	40.0	200	11/05/2023 14:14	WG2164649
Styrene	U		21.8	100	200	11/05/2023 14:14	WG2164649
1,1,1,2-Tetrachloroethane	U		4.00	20.0	200	11/05/2023 14:14	WG2164649
1,1,2,2-Tetrachloroethane	U		3.12	20.0	200	11/05/2023 14:14	WG2164649
1,1,2-Trichlorotrifluoroethane	U		5.40	20.0	200	11/05/2023 14:14	WG2164649
Tetrachloroethene	418		5.60	20.0	200	11/05/2023 14:14	WG2164649
Toluene	U		10.0	40.0	200	11/05/2023 14:14	WG2164649
1,2,3-Trichlorobenzene	U		5.00	100	200	11/05/2023 14:14	WG2164649
1,2,4-Trichlorobenzene	U		38.6	100	200	11/05/2023 14:14	WG2164649
1,1,1-Trichloroethane	U		2.20	20.0	200	11/05/2023 14:14	WG2164649
1,1,2-Trichloroethane	U		7.06	20.0	200	11/05/2023 14:14	WG2164649
Trichloroethene	61.8		3.20	8.00	200	11/05/2023 14:14	WG2164649
Trichlorofluoromethane	U		4.00	20.0	200	11/05/2023 14:14	WG2164649
1,2,3-Trichloropropane	U		40.8	100	200	11/05/2023 14:14	WG2164649
1,2,4-Trimethylbenzene	U		9.28	40.0	200	11/05/2023 14:14	WG2164649
1,2,3-Trimethylbenzene	U		9.20	40.0	200	11/05/2023 14:14	WG2164649
1,3,5-Trimethylbenzene	U		8.64	40.0	200	11/05/2023 14:14	WG2164649
Vinyl chloride	1170		5.46	20.0	200	11/05/2023 14:14	WG2164649
Xylenes, Total	U		38.2	52.0	200	11/05/2023 14:14	WG2164649
Ethyl Ether	U		3.40	20.0	200	11/05/2023 14:14	WG2164649
Tetrahydrofuran	U		18.0	100	200	11/05/2023 14:14	WG2164649
Iodomethane	U		48.4	100	200	11/05/2023 14:14	WG2164649
Allyl chloride	U		116	200	200	11/05/2023 14:14	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ C3	11.2	40.0	200	11/05/2023 14:14	WG2164649
(S) Toluene-d8	*98.3*			*75.0-131*		*11/05/2023 14:14*	WG2164649
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*		*11/05/2023 14:14*	WG2164649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 14:14*	WG2164649

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	441000		8450	20000	1	11/07/2023 11:28	WG2165877

Sample Narrative:

L1672953-03 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	37100		379	1000	1	11/03/2023 02:42	WG2163540
Nitrate	86.4	J	48.0	100	1	11/03/2023 02:42	WG2163540
Sulfate	5130		594	5000	1	11/03/2023 02:42	WG2163540

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10100		102	1000	1	11/16/2023 03:47	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2550		28.1	100	1	11/09/2023 11:25	WG2165351
Manganese	743		0.704	5.00	1	11/09/2023 11:25	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	9510		2.87	6.78	10	11/07/2023 14:36	WG2166209
Ethane	156		0.296	1.29	1	11/07/2023 09:56	WG2165206
Ethene	5.45		0.422	1.27	1	11/07/2023 09:56	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.96	J+ C5	0.548	1.00	1	11/05/2023 11:41	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 11:41	WG2164649
Benzene	U		0.0160	0.0400	1	11/05/2023 11:41	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 11:41	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 11:41	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 11:41	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 11:41	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 11:41	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 11:41	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 11:41	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 11:41	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 11:41	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 11:41	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 11:41	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 11:41	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 11:41	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 11:41	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 11:41	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 11:41	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 11:41	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 11:41	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 11:41	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 11:41	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 11:41	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 11:41	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 11:41	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 11:41	WG2164649
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 11:41	WG2164649
cis-1,2-Dichloroethene	0.223		0.0276	0.100	1	11/05/2023 11:41	WG2164649
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/05/2023 11:41	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 11:41	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 11:41	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 11:41	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 11:41	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 11:41	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 11:41	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 11:41	WG2164649
Ethylbenzene	U		0.0212	0.100	1	11/05/2023 11:41	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 11:41	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 11:41	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 11:41	WG2164649
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 11:41	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 11:41	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 11:41	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 11:41	WG2164649
Naphthalene	U	UJ C3	0.124	0.500	1	11/05/2023 11:41	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 11:41	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 11:41	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 11:41	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 11:41	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 11:41	WG2164649
Tetrachloroethene	U		0.0280	0.100	1	11/05/2023 11:41	WG2164649
Toluene	U		0.0500	0.200	1	11/05/2023 11:41	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 11:41	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 11:41	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 11:41	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 11:41	WG2164649
Trichloroethene	0.0190	J	0.0160	0.0400	1	11/05/2023 11:41	WG2164649
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 11:41	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 11:41	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 11:41	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 11:41	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 11:41	WG2164649
Vinyl chloride	0.260		0.0273	0.100	1	11/05/2023 11:41	WG2164649
Xylenes, Total	U		0.191	0.260	1	11/05/2023 11:41	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 11:41	WG2164649
Tetrahydrofuran	0.274	J	0.0900	0.500	1	11/05/2023 11:41	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 11:41	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 11:41	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/05/2023 11:41	WG2164649
(S) Toluene-d8	*98.8*			*75.0-131*		*11/05/2023 11:41*	WG2164649
(S) 4-Bromofluorobenzene	*89.7*			*67.0-138*		*11/05/2023 11:41*	WG2164649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 11:41*	WG2164649

JC 2/13/24

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	585000		8450	20000	1	11/07/2023 11:34	WG2165877

Sample Narrative:

L1672953-04 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	75500		379	1000	1	11/03/2023 02:55	WG2163540
Nitrate	89.0	J	48.0	100	1	11/03/2023 02:55	WG2163540
Sulfate	16200		594	5000	1	11/03/2023 02:55	WG2163540

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10500		102	1000	1	11/16/2023 04:08	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2510		28.1	100	1	11/09/2023 11:29	WG2165351
Manganese	1550		0.704	5.00	1	11/09/2023 11:29	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	32600		2.87	6.78	10	11/07/2023 14:43	WG2166209
Ethane	4.79		0.296	1.29	1	11/07/2023 10:03	WG2165206
Ethene	437		0.422	1.27	1	11/07/2023 10:03	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		54.8	100	100	11/05/2023 14:33	WG2164649
Acrylonitrile	U		7.60	50.0	100	11/05/2023 14:33	WG2164649
Benzene	U		1.60	4.00	100	11/05/2023 14:33	WG2164649
Bromobenzene	U		4.20	50.0	100	11/05/2023 14:33	WG2164649
Bromodichloromethane	U		3.15	10.0	100	11/05/2023 14:33	WG2164649
Bromoform	U		23.9	100	100	11/05/2023 14:33	WG2164649
Bromomethane	U		14.8	50.0	100	11/05/2023 14:33	WG2164649
n-Butylbenzene	U		15.3	50.0	100	11/05/2023 14:33	WG2164649
sec-Butylbenzene	U		10.1	50.0	100	11/05/2023 14:33	WG2164649
tert-Butylbenzene	U		6.20	20.0	100	11/05/2023 14:33	WG2164649
Carbon tetrachloride	U		4.32	20.0	100	11/05/2023 14:33	WG2164649
Chlorobenzene	U		2.29	10.0	100	11/05/2023 14:33	WG2164649
Chlorodibromomethane	U		1.80	10.0	100	11/05/2023 14:33	WG2164649
Chloroethane	U		4.32	20.0	100	11/05/2023 14:33	WG2164649
Chloroform	U		1.66	10.0	100	11/05/2023 14:33	WG2164649
Chloromethane	U		5.56	50.0	100	11/05/2023 14:33	WG2164649
2-Chlorotoluene	U		3.68	10.0	100	11/05/2023 14:33	WG2164649
4-Chlorotoluene	U		4.52	20.0	100	11/05/2023 14:33	WG2164649
1,2-Dibromo-3-Chloropropane	U		20.4	100	100	11/05/2023 14:33	WG2164649
1,2-Dibromoethane	U		2.10	10.0	100	11/05/2023 14:33	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		4.00	20.0	100	11/05/2023 14:33	WG2164649
1,2-Dichlorobenzene	U		5.80	20.0	100	11/05/2023 14:33	WG2164649
1,3-Dichlorobenzene	U		6.80	20.0	100	11/05/2023 14:33	WG2164649
1,4-Dichlorobenzene	U		7.88	20.0	100	11/05/2023 14:33	WG2164649
Dichlorodifluoromethane	U		3.27	10.0	100	11/05/2023 14:33	WG2164649
1,1-Dichloroethane	U		2.30	10.0	100	11/05/2023 14:33	WG2164649
1,2-Dichloroethane	U		1.90	10.0	100	11/05/2023 14:33	WG2164649
1,1-Dichloroethene	U		2.00	10.0	100	11/05/2023 14:33	WG2164649
cis-1,2-Dichloroethene	193		2.76	10.0	100	11/05/2023 14:33	WG2164649
trans-1,2-Dichloroethene	U		5.72	20.0	100	11/05/2023 14:33	WG2164649
1,2-Dichloropropane	U		5.08	20.0	100	11/05/2023 14:33	WG2164649
1,1-Dichloropropene	U		2.80	10.0	100	11/05/2023 14:33	WG2164649
1,3-Dichloropropane	U		7.00	20.0	100	11/05/2023 14:33	WG2164649
cis-1,3-Dichloropropene	U		2.71	10.0	100	11/05/2023 14:33	WG2164649
trans-1,3-Dichloropropene	U		6.12	20.0	100	11/05/2023 14:33	WG2164649
2,2-Dichloropropane	U		3.17	10.0	100	11/05/2023 14:33	WG2164649
Di-isopropyl ether	U		1.40	4.00	100	11/05/2023 14:33	WG2164649
Ethylbenzene	U		2.12	10.0	100	11/05/2023 14:33	WG2164649
Hexachloro-1,3-butadiene	U		50.8	100	100	11/05/2023 14:33	WG2164649
Isopropylbenzene	U		3.45	10.0	100	11/05/2023 14:33	WG2164649
p-Isopropyltoluene	U		9.32	20.0	100	11/05/2023 14:33	WG2164649
2-Butanone (MEK)	U		50.0	100	100	11/05/2023 14:33	WG2164649
Methylene Chloride	U		26.5	100	100	11/05/2023 14:33	WG2164649
4-Methyl-2-pentanone (MIBK)	U		40.0	100	100	11/05/2023 14:33	WG2164649
Methyl tert-butyl ether	U		1.18	4.00	100	11/05/2023 14:33	WG2164649
Naphthalene	U	UJ C3	12.4	50.0	100	11/05/2023 14:33	WG2164649
n-Propylbenzene	U		4.72	20.0	100	11/05/2023 14:33	WG2164649
Styrene	U		10.9	50.0	100	11/05/2023 14:33	WG2164649
1,1,1,2-Tetrachloroethane	U		2.00	10.0	100	11/05/2023 14:33	WG2164649
1,1,2,2-Tetrachloroethane	U		1.56	10.0	100	11/05/2023 14:33	WG2164649
1,1,2-Trichlorotrifluoroethane	U		2.70	10.0	100	11/05/2023 14:33	WG2164649
Tetrachloroethene	U		2.80	10.0	100	11/05/2023 14:33	WG2164649
Toluene	U		5.00	20.0	100	11/05/2023 14:33	WG2164649
1,2,3-Trichlorobenzene	U		2.50	50.0	100	11/05/2023 14:33	WG2164649
1,2,4-Trichlorobenzene	U		19.3	50.0	100	11/05/2023 14:33	WG2164649
1,1,1-Trichloroethane	U		1.10	10.0	100	11/05/2023 14:33	WG2164649
1,1,2-Trichloroethane	U		3.53	10.0	100	11/05/2023 14:33	WG2164649
Trichloroethene	U		1.60	4.00	100	11/05/2023 14:33	WG2164649
Trichlorofluoromethane	U		2.00	10.0	100	11/05/2023 14:33	WG2164649
1,2,3-Trichloropropane	U		20.4	50.0	100	11/05/2023 14:33	WG2164649
1,2,4-Trimethylbenzene	U		4.64	20.0	100	11/05/2023 14:33	WG2164649
1,2,3-Trimethylbenzene	U		4.60	20.0	100	11/05/2023 14:33	WG2164649
1,3,5-Trimethylbenzene	U		4.32	20.0	100	11/05/2023 14:33	WG2164649
Vinyl chloride	1050		2.73	10.0	100	11/05/2023 14:33	WG2164649
Xylenes, Total	U		19.1	26.0	100	11/05/2023 14:33	WG2164649
Ethyl Ether	U		1.70	10.0	100	11/05/2023 14:33	WG2164649
Tetrahydrofuran	U		9.00	50.0	100	11/05/2023 14:33	WG2164649
Iodomethane	U		24.2	50.0	100	11/05/2023 14:33	WG2164649
Allyl chloride	U		58.0	100	100	11/05/2023 14:33	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ C3	5.60	20.0	100	11/05/2023 14:33	WG2164649
(S) Toluene-d8	*99.1*			*75.0-131*		*11/05/2023 14:33*	WG2164649
(S) 4-Bromofluorobenzene	*87.4*			*67.0-138*		*11/05/2023 14:33*	WG2164649
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/05/2023 14:33*	WG2164649

JC 2/13/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1340000		8450	20000	1	11/07/2023 12:03	WG2165877

Sample Narrative:
L1672953-05 WG2165877: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	167000		379	1000	1	11/03/2023 01:43	WG2163525
Nitrate	65.9	J	48.0	100	1	11/03/2023 01:43	WG2163525
Sulfate	27000		594	5000	1	11/03/2023 01:43	WG2163525

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	29700		102	1000	1	11/16/2023 05:11	WG2171403

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	26500		28.1	100	1	11/09/2023 11:32	WG2165351
Manganese	7810		0.704	5.00	1	11/09/2023 11:32	WG2165351

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	24500		2.87	6.78	10	11/07/2023 14:50	WG2166209
Ethane	159		0.296	1.29	1	11/07/2023 10:24	WG2165206
Ethene	109		0.422	1.27	1	11/07/2023 10:24	WG2165206

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		13.7	25.0	25	11/05/2023 14:52	WG2164649
Acrylonitrile	U		1.90	12.5	25	11/05/2023 14:52	WG2164649
Benzene	U		0.400	1.00	25	11/05/2023 14:52	WG2164649
Bromobenzene	U		1.05	12.5	25	11/05/2023 14:52	WG2164649
Bromodichloromethane	U		0.788	2.50	25	11/05/2023 14:52	WG2164649
Bromoform	U		5.98	25.0	25	11/05/2023 14:52	WG2164649
Bromomethane	U		3.70	12.5	25	11/05/2023 14:52	WG2164649
n-Butylbenzene	U		3.83	12.5	25	11/05/2023 14:52	WG2164649
sec-Butylbenzene	U		2.53	12.5	25	11/05/2023 14:52	WG2164649
tert-Butylbenzene	U		1.55	5.00	25	11/05/2023 14:52	WG2164649
Carbon tetrachloride	U		1.08	5.00	25	11/05/2023 14:52	WG2164649
Chlorobenzene	U		0.573	2.50	25	11/05/2023 14:52	WG2164649
Chlorodibromomethane	U		0.450	2.50	25	11/05/2023 14:52	WG2164649
Chloroethane	U		1.08	5.00	25	11/05/2023 14:52	WG2164649
Chloroform	U		0.415	2.50	25	11/05/2023 14:52	WG2164649
Chloromethane	U		1.39	12.5	25	11/05/2023 14:52	WG2164649
2-Chlorotoluene	U		0.920	2.50	25	11/05/2023 14:52	WG2164649
4-Chlorotoluene	U		1.13	5.00	25	11/05/2023 14:52	WG2164649
1,2-Dibromo-3-Chloropropane	U		5.10	25.0	25	11/05/2023 14:52	WG2164649
1,2-Dibromoethane	U		0.525	2.50	25	11/05/2023 14:52	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		1.00	5.00	25	11/05/2023 14:52	WG2164649
1,2-Dichlorobenzene	U		1.45	5.00	25	11/05/2023 14:52	WG2164649
1,3-Dichlorobenzene	U		1.70	5.00	25	11/05/2023 14:52	WG2164649
1,4-Dichlorobenzene	U		1.97	5.00	25	11/05/2023 14:52	WG2164649
Dichlorodifluoromethane	U		0.818	2.50	25	11/05/2023 14:52	WG2164649
1,1-Dichloroethane	U		0.575	2.50	25	11/05/2023 14:52	WG2164649
1,2-Dichloroethane	U		0.475	2.50	25	11/05/2023 14:52	WG2164649
1,1-Dichloroethene	7.15		0.500	2.50	25	11/05/2023 14:52	WG2164649
cis-1,2-Dichloroethene	4400		6.90	25.0	250	11/10/2023 03:23	WG2168000
trans-1,2-Dichloroethene	12.9		1.43	5.00	25	11/05/2023 14:52	WG2164649
1,2-Dichloropropane	U		1.27	5.00	25	11/05/2023 14:52	WG2164649
1,1-Dichloropropene	U		0.700	2.50	25	11/05/2023 14:52	WG2164649
1,3-Dichloropropane	U		1.75	5.00	25	11/05/2023 14:52	WG2164649
cis-1,3-Dichloropropene	U		0.678	2.50	25	11/05/2023 14:52	WG2164649
trans-1,3-Dichloropropene	U		1.53	5.00	25	11/05/2023 14:52	WG2164649
2,2-Dichloropropane	U		0.793	2.50	25	11/05/2023 14:52	WG2164649
Di-isopropyl ether	U		0.350	1.00	25	11/05/2023 14:52	WG2164649
Ethylbenzene	U		0.530	2.50	25	11/05/2023 14:52	WG2164649
Hexachloro-1,3-butadiene	U		12.7	25.0	25	11/05/2023 14:52	WG2164649
Isopropylbenzene	U		0.863	2.50	25	11/05/2023 14:52	WG2164649
p-Isopropyltoluene	U		2.33	5.00	25	11/05/2023 14:52	WG2164649
2-Butanone (MEK)	U		12.5	25.0	25	11/05/2023 14:52	WG2164649
Methylene Chloride	U		6.63	25.0	25	11/05/2023 14:52	WG2164649
4-Methyl-2-pentanone (MIBK)	U		10.0	25.0	25	11/05/2023 14:52	WG2164649
Methyl tert-butyl ether	U		0.295	1.00	25	11/05/2023 14:52	WG2164649
Naphthalene	U	UJ C3	3.10	12.5	25	11/05/2023 14:52	WG2164649
n-Propylbenzene	U		1.18	5.00	25	11/05/2023 14:52	WG2164649
Styrene	U		2.73	12.5	25	11/05/2023 14:52	WG2164649
1,1,1,2-Tetrachloroethane	U		0.500	2.50	25	11/05/2023 14:52	WG2164649
1,1,2,2-Tetrachloroethane	U		0.390	2.50	25	11/05/2023 14:52	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.675	2.50	25	11/05/2023 14:52	WG2164649
Tetrachloroethene	46.3		0.700	2.50	25	11/05/2023 14:52	WG2164649
Toluene	U		1.25	5.00	25	11/05/2023 14:52	WG2164649
1,2,3-Trichlorobenzene	U		0.625	12.5	25	11/05/2023 14:52	WG2164649
1,2,4-Trichlorobenzene	U		4.83	12.5	25	11/05/2023 14:52	WG2164649
1,1,1-Trichloroethane	U		0.275	2.50	25	11/05/2023 14:52	WG2164649
1,1,2-Trichloroethane	U		0.883	2.50	25	11/05/2023 14:52	WG2164649
Trichloroethene	116		0.400	1.00	25	11/05/2023 14:52	WG2164649
Trichlorofluoromethane	U		0.500	2.50	25	11/05/2023 14:52	WG2164649
1,2,3-Trichloropropane	U		5.10	12.5	25	11/05/2023 14:52	WG2164649
1,2,4-Trimethylbenzene	U		1.16	5.00	25	11/05/2023 14:52	WG2164649
1,2,3-Trimethylbenzene	U		1.15	5.00	25	11/05/2023 14:52	WG2164649
1,3,5-Trimethylbenzene	U		1.08	5.00	25	11/05/2023 14:52	WG2164649
Vinyl chloride	575		0.682	2.50	25	11/05/2023 14:52	WG2164649
Xylenes, Total	U		4.78	6.50	25	11/05/2023 14:52	WG2164649
Ethyl Ether	U		0.425	2.50	25	11/05/2023 14:52	WG2164649
Tetrahydrofuran	U		2.25	12.5	25	11/05/2023 14:52	WG2164649
Iodomethane	U		6.05	12.5	25	11/05/2023 14:52	WG2164649
Allyl chloride	U		14.5	25.0	25	11/05/2023 14:52	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ C3	1.40	5.00	25	11/05/2023 14:52	WG2164649
(S) Toluene-d8	*101*			*75.0-131*		*11/05/2023 14:52*	WG2164649
(S) Toluene-d8	*94.9*			*75.0-131*		*11/10/2023 03:23*	WG2168000
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*11/05/2023 14:52*	WG2164649
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*11/10/2023 03:23*	WG2168000
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/05/2023 14:52*	WG2164649
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/10/2023 03:23*	WG2168000

JC 2/13/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	611000		8450	20000	1	11/08/2023 15:57	WG2166450

Sample Narrative:

L1673440-01 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	175000		379	1000	1	11/03/2023 21:57	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 21:57	WG2164204
Sulfate	4540	J	594	5000	1	11/03/2023 21:57	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15500		102	1000	1	11/21/2023 02:34	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3170		28.1	100	1	11/10/2023 18:48	WG2166496
Manganese	1390		0.704	5.00	1	11/10/2023 18:48	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27500		2.87	6.78	10	11/09/2023 15:21	WG2168088
Ethane	39.0		0.296	1.29	1	11/09/2023 09:34	WG2165856
Ethene	870		0.422	1.27	1	11/09/2023 09:34	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U		0.548	1.00	1	11/09/2023 12:04	WG2167871	
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 12:04	WG2167871	
Benzene	0.186		0.0160	0.0400	1	11/09/2023 12:04	WG2167871	
Bromobenzene	U		0.0420	0.500	1	11/09/2023 12:04	WG2167871	
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 12:04	WG2167871	
Bromoform	U		0.239	1.00	1	11/09/2023 12:04	WG2167871	
Bromomethane	U		0.148	0.500	1	11/09/2023 12:04	WG2167871	
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 12:04	WG2167871	
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 12:04	WG2167871	
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 12:04	WG2167871	
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 12:04	WG2167871	
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 12:04	WG2167871	
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 12:04	WG2167871	
Chloroethane	U		0.0432	0.200	1	11/09/2023 12:04	WG2167871	
Chloroform	U		0.0166	0.100	1	11/09/2023 12:04	WG2167871	
Chloromethane	U		0.0556	0.500	1	11/09/2023 12:04	WG2167871	
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 12:04	WG2167871	
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 12:04	WG2167871	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 12:04	WG2167871	
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 12:04	WG2167871	JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 12:04	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 12:04	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 12:04	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 12:04	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 12:04	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 12:04	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 12:04	WG2167871
1,1-Dichloroethene	22.8		4.00	20.0	200	11/11/2023 06:31	WG2168846
cis-1,2-Dichloroethene	5760		5.52	20.0	200	11/11/2023 06:31	WG2168846
trans-1,2-Dichloroethene	179		11.4	40.0	200	11/11/2023 06:31	WG2168846
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 12:04	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 12:04	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 12:04	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 12:04	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 12:04	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 12:04	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 12:04	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 12:04	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 12:04	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 12:04	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 12:04	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 12:04	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 12:04	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 12:04	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 12:04	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 12:04	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 12:04	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 12:04	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 12:04	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 12:04	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 12:04	WG2167871
Tetrachloroethene	81.8		0.0280	0.100	1	11/09/2023 12:04	WG2167871
Toluene	0.134	J	0.0500	0.200	1	11/09/2023 12:04	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 12:04	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 12:04	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 12:04	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 12:04	WG2167871
Trichloroethene	40.5		0.0160	0.0400	1	11/09/2023 12:04	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 12:04	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 12:04	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 12:04	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 12:04	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 12:04	WG2167871
Vinyl chloride	11700		5.46	20.0	200	11/11/2023 06:31	WG2168846
Xylenes, Total	U		0.191	0.260	1	11/09/2023 12:04	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 12:04	WG2167871
Tetrahydrofuran	0.496	J	0.0900	0.500	1	11/09/2023 12:04	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 12:04	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 12:04	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 12:04	WG2167871
(S) Toluene-d8	*98.8*			*75.0-131*		*11/09/2023 12:04*	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/11/2023 06:31*	WG2168846
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/09/2023 12:04*	WG2167871
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*11/11/2023 06:31*	WG2168846
(S) 1,2-Dichloroethane-d4	*95.8*			*70.0-130*		*11/09/2023 12:04*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/11/2023 06:31*	WG2168846

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	407000		8450	20000	1	11/08/2023 16:01	WG2166450

Sample Narrative:
L1673440-02 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	296 J-	~~T8~~	15.0	50.0	1	11/04/2023 13:31	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26900		379	1000	1	11/03/2023 22:22	WG2164204
Nitrate	59.4 U	~~B J~~	48.0	100	1	11/03/2023 22:22	WG2164204
Sulfate	28200		594	5000	1	11/03/2023 22:22	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12800		102	1000	1	11/21/2023 02:55	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1140		28.1	100	1	11/10/2023 19:01	WG2166496
Manganese	4620		0.704	5.00	1	11/10/2023 19:01	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8800		2.87	6.78	10	11/09/2023 15:27	WG2168088
Ethane	17.9		0.296	1.29	1	11/09/2023 12:24	WG2165856
Ethene	0.860	J	0.422	1.27	1	11/09/2023 12:24	WG2165856

JC 1/12/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	919000		8450	20000	1	11/08/2023 16:22	WG2166450

Sample Narrative:
L1673440-03 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	11400 J-	~~T8~~	300	1000	20	11/04/2023 13:31	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	76600		379	1000	1	11/04/2023 04:07	WG2164210
Nitrate	51.4 U	~~B J P1~~	48.0	100	1	11/04/2023 04:07	WG2164210
Sulfate	657	J	594	5000	1	11/04/2023 04:07	WG2164210

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	17600		102	1000	1	11/21/2023 03:18	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14200		28.1	100	1	11/10/2023 19:05	WG2166496
Manganese	2620		0.704	5.00	1	11/10/2023 19:05	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	32900		2.87	6.78	10	11/09/2023 15:33	WG2168088
Ethane	489		0.296	1.29	1	11/09/2023 09:58	WG2165856
Ethene	6.67		0.422	1.27	1	11/09/2023 09:58	WG2165856

JC 1/12/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	692000		8450	20000	1	11/08/2023 16:26	WG2166450

Sample Narrative:
L1673441-01 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	412000		3790	10000	10	11/03/2023 22:48	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 22:35	WG2164204
Sulfate	1010	J	594	5000	1	11/03/2023 22:35	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	33000		102	1000	1	11/21/2023 03:42	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	22700		28.1	100	1	11/10/2023 19:08	WG2166496
Manganese	3130		0.704	5.00	1	11/10/2023 19:08	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	30900		2.87	6.78	10	11/09/2023 15:41	WG2168088
Ethane	293		0.296	1.29	1	11/09/2023 10:06	WG2165856
Ethene	3530		0.422	1.27	1	11/09/2023 10:06	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ	5.48	10.0	10	11/09/2023 16:23	WG2167871
Acrylonitrile	U		0.760	5.00	10	11/09/2023 16:23	WG2167871
Benzene	U		0.160	0.400	10	11/09/2023 16:23	WG2167871
Bromobenzene	U		0.420	5.00	10	11/09/2023 16:23	WG2167871
Bromodichloromethane	U		0.315	1.00	10	11/09/2023 16:23	WG2167871
Bromoform	U		2.39	10.0	10	11/09/2023 16:23	WG2167871
Bromomethane	U		1.48	5.00	10	11/09/2023 16:23	WG2167871
n-Butylbenzene	U		1.53	5.00	10	11/09/2023 16:23	WG2167871
sec-Butylbenzene	U		1.01	5.00	10	11/09/2023 16:23	WG2167871
tert-Butylbenzene	U		0.620	2.00	10	11/09/2023 16:23	WG2167871
Carbon tetrachloride	U		0.432	2.00	10	11/09/2023 16:23	WG2167871
Chlorobenzene	U		0.229	1.00	10	11/09/2023 16:23	WG2167871
Chlorodibromomethane	U		0.180	1.00	10	11/09/2023 16:23	WG2167871
Chloroethane	U		0.432	2.00	10	11/09/2023 16:23	WG2167871
Chloroform	U		0.166	1.00	10	11/09/2023 16:23	WG2167871
Chloromethane	U		0.556	5.00	10	11/09/2023 16:23	WG2167871
2-Chlorotoluene	U		0.368	1.00	10	11/09/2023 16:23	WG2167871
4-Chlorotoluene	U		0.452	2.00	10	11/09/2023 16:23	WG2167871
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/09/2023 16:23	WG2167871
1,2-Dibromoethane	U	UJ	0.210	1.00	10	11/09/2023 16:23	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	UJ	0.400	2.00	10	11/09/2023 16:23	WG2167871
1,2-Dichlorobenzene	U		0.580	2.00	10	11/09/2023 16:23	WG2167871
1,3-Dichlorobenzene	U		0.680	2.00	10	11/09/2023 16:23	WG2167871
1,4-Dichlorobenzene	U		0.788	2.00	10	11/09/2023 16:23	WG2167871
Dichlorodifluoromethane	U		0.327	1.00	10	11/09/2023 16:23	WG2167871
1,1-Dichloroethane	U	UJ	0.230	1.00	10	11/09/2023 16:23	WG2167871
1,2-Dichloroethane	U	UJ	0.190	1.00	10	11/09/2023 16:23	WG2167871
1,1-Dichloroethene	29.0	J J	20.0	100	1000	11/11/2023 06:51	WG2168846
cis-1,2-Dichloroethene	32100	J	27.6	100	1000	11/11/2023 06:51	WG2168846
trans-1,2-Dichloroethene	48.7	J	0.572	2.00	10	11/09/2023 16:23	WG2167871
1,2-Dichloropropane	U	UJ	0.508	2.00	10	11/09/2023 16:23	WG2167871
1,1-Dichloropropene	U		0.280	1.00	10	11/09/2023 16:23	WG2167871
1,3-Dichloropropane	U		0.700	2.00	10	11/09/2023 16:23	WG2167871
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/09/2023 16:23	WG2167871
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/09/2023 16:23	WG2167871
2,2-Dichloropropane	U		0.317	1.00	10	11/09/2023 16:23	WG2167871
Di-isopropyl ether	U		0.140	0.400	10	11/09/2023 16:23	WG2167871
Ethylbenzene	U		0.212	1.00	10	11/09/2023 16:23	WG2167871
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/09/2023 16:23	WG2167871
Isopropylbenzene	U		0.345	1.00	10	11/09/2023 16:23	WG2167871
p-Isopropyltoluene	U		0.932	2.00	10	11/09/2023 16:23	WG2167871
2-Butanone (MEK)	U		5.00	10.0	10	11/09/2023 16:23	WG2167871
Methylene Chloride	U		2.65	10.0	10	11/09/2023 16:23	WG2167871
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/09/2023 16:23	WG2167871
Methyl tert-butyl ether	U		0.118	0.400	10	11/09/2023 16:23	WG2167871
Naphthalene	U		1.24	5.00	10	11/09/2023 16:23	WG2167871
n-Propylbenzene	U		0.472	2.00	10	11/09/2023 16:23	WG2167871
Styrene	U		1.09	5.00	10	11/09/2023 16:23	WG2167871
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/09/2023 16:23	WG2167871
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/09/2023 16:23	WG2167871
1,1,2-Trichlorotrifluoroethane	U	UJ	0.270	1.00	10	11/09/2023 16:23	WG2167871
Tetrachloroethene	39.4	J	0.280	1.00	10	11/09/2023 16:23	WG2167871
Toluene	0.760	J J	0.500	2.00	10	11/09/2023 16:23	WG2167871
1,2,3-Trichlorobenzene	U	UJ	0.250	5.00	10	11/09/2023 16:23	WG2167871
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/09/2023 16:23	WG2167871
1,1,1-Trichloroethane	U		0.110	1.00	10	11/09/2023 16:23	WG2167871
1,1,2-Trichloroethane	U	UJ	0.353	1.00	10	11/09/2023 16:23	WG2167871
Trichloroethene	69.0	J	0.160	0.400	10	11/09/2023 16:23	WG2167871
Trichlorofluoromethane	U	UJ	0.200	1.00	10	11/09/2023 16:23	WG2167871
1,2,3-Trichloropropane	U		2.04	5.00	10	11/09/2023 16:23	WG2167871
1,2,4-Trimethylbenzene	U	UJ	0.464	2.00	10	11/09/2023 16:23	WG2167871
1,2,3-Trimethylbenzene	1.48	J J	0.460	2.00	10	11/09/2023 16:23	WG2167871
1,3,5-Trimethylbenzene	U	UJ	0.432	2.00	10	11/09/2023 16:23	WG2167871
Vinyl chloride	15700	J	27.3	100	1000	11/11/2023 06:51	WG2168846
Xylenes, Total	U	UJ	1.91	2.60	10	11/09/2023 16:23	WG2167871
Ethyl Ether	U		0.170	1.00	10	11/09/2023 16:23	WG2167871
Tetrahydrofuran	U		0.900	5.00	10	11/09/2023 16:23	WG2167871
Iodomethane	U		2.42	5.00	10	11/09/2023 16:23	WG2167871
Allyl chloride	U		5.80	10.0	10	11/09/2023 16:23	WG2167871
Trans-1,4-Dichloro-2-butene	U	UJ	0.560	2.00	10	11/09/2023 16:23	WG2167871
(S) Toluene-d8	*103*			*75.0-131*		*11/09/2023 16:23*	WG2167871
(S) Toluene-d8	*98.8*			*75.0-131*		*11/11/2023 06:51*	WG2168846
(S) 4-Bromofluorobenzene	*95.6*			*67.0-138*		*11/09/2023 16:23*	WG2167871
(S) 4-Bromofluorobenzene	*96.6*			*67.0-138*		*11/11/2023 06:51*	WG2168846
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/09/2023 16:23*	WG2167871
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/11/2023 06:51*	WG2168846

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	395000		8450	20000	1	11/08/2023 16:30	WG2166450

Sample Narrative:
L1673441-02 WG2166450: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	29600		379	1000	1	11/03/2023 23:01	WG2164204
Nitrate	55.8 U	BJ	48.0	100	1	11/03/2023 23:01	WG2164204
Sulfate	32600		594	5000	1	11/03/2023 23:01	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14600		102	1000	1	11/21/2023 04:04	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2090		28.1	100	1	11/10/2023 19:11	WG2166496
Manganese	4720		0.704	5.00	1	11/10/2023 19:11	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1930		0.287	0.678	1	11/09/2023 10:14	WG2165856
Ethane	12.4		0.296	1.29	1	11/09/2023 10:14	WG2165856
Ethene	15.4		0.422	1.27	1	11/09/2023 10:14	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/05/2023 12:00	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:00	WG2164649
Benzene	U		0.0160	0.0400	1	11/05/2023 12:00	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:00	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:00	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:00	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:00	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:00	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:00	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:00	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:00	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:00	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:00	WG2164649
Chloroethane	4.02		0.0432	0.200	1	11/05/2023 12:00	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:00	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:00	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:00	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:00	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:00	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:00	WG2164649

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			0.0400	0.200	1	11/05/2023 12:00	WG2164649
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/05/2023 12:00	WG2164649
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/05/2023 12:00	WG2164649
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/05/2023 12:00	WG2164649
Dichlorodifluoromethane	U			0.0327	0.100	1	11/05/2023 12:00	WG2164649
1,1-Dichloroethane	U			0.0230	0.100	1	11/05/2023 12:00	WG2164649
1,2-Dichloroethane	U			0.0190	0.100	1	11/05/2023 12:00	WG2164649
1,1-Dichloroethene	12.1			0.0200	0.100	1	11/05/2023 12:00	WG2164649
cis-1,2-Dichloroethene	247			0.552	2.00	20	11/10/2023 03:42	WG2168000
trans-1,2-Dichloroethene	6.31			0.0572	0.200	1	11/05/2023 12:00	WG2164649
1,2-Dichloropropane	U			0.0508	0.200	1	11/05/2023 12:00	WG2164649
1,1-Dichloropropene	U			0.0280	0.100	1	11/05/2023 12:00	WG2164649
1,3-Dichloropropane	U			0.0700	0.200	1	11/05/2023 12:00	WG2164649
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/05/2023 12:00	WG2164649
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/05/2023 12:00	WG2164649
2,2-Dichloropropane	U			0.0317	0.100	1	11/05/2023 12:00	WG2164649
Di-isopropyl ether	U			0.0140	0.0400	1	11/05/2023 12:00	WG2164649
Ethylbenzene	U			0.0212	0.100	1	11/05/2023 12:00	WG2164649
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/05/2023 12:00	WG2164649
Isopropylbenzene	U			0.0345	0.100	1	11/05/2023 12:00	WG2164649
p-Isopropyltoluene	U			0.0932	0.200	1	11/05/2023 12:00	WG2164649
2-Butanone (MEK)	U			0.500	1.00	1	11/05/2023 12:00	WG2164649
Methylene Chloride	U			0.265	1.00	1	11/05/2023 12:00	WG2164649
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/05/2023 12:00	WG2164649
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/05/2023 12:00	WG2164649
Naphthalene	U	UJ	C3	0.124	0.500	1	11/05/2023 12:00	WG2164649
n-Propylbenzene	U			0.0472	0.200	1	11/05/2023 12:00	WG2164649
Styrene	U			0.109	0.500	1	11/05/2023 12:00	WG2164649
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/05/2023 12:00	WG2164649
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/05/2023 12:00	WG2164649
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/05/2023 12:00	WG2164649
Tetrachloroethene	228			0.560	2.00	20	11/10/2023 03:42	WG2168000
Toluene	U			0.0500	0.200	1	11/05/2023 12:00	WG2164649
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/05/2023 12:00	WG2164649
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/05/2023 12:00	WG2164649
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/05/2023 12:00	WG2164649
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/05/2023 12:00	WG2164649
Trichloroethene	224			0.320	0.800	20	11/10/2023 03:42	WG2168000
Trichlorofluoromethane	U			0.0200	0.100	1	11/05/2023 12:00	WG2164649
1,2,3-Trichloropropane	U			0.204	0.500	1	11/05/2023 12:00	WG2164649
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/05/2023 12:00	WG2164649
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/05/2023 12:00	WG2164649
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/05/2023 12:00	WG2164649
Vinyl chloride	39.6			0.0273	0.100	1	11/05/2023 12:00	WG2164649
Xylenes, Total	U			0.191	0.260	1	11/05/2023 12:00	WG2164649
Ethyl Ether	U			0.0170	0.100	1	11/05/2023 12:00	WG2164649
Tetrahydrofuran	0.274		J	0.0900	0.500	1	11/05/2023 12:00	WG2164649
Iodomethane	U			0.242	0.500	1	11/05/2023 12:00	WG2164649
Allyl chloride	U			0.580	1.00	1	11/05/2023 12:00	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/05/2023 12:00	WG2164649
(S) Toluene-d8	*98.7*				*75.0-131*		*11/05/2023 12:00*	WG2164649
(S) Toluene-d8	*95.4*				*75.0-131*		*11/10/2023 03:42*	WG2168000
(S) 4-Bromofluorobenzene	*89.6*				*67.0-138*		*11/05/2023 12:00*	WG2164649
(S) 4-Bromofluorobenzene	*90.4*				*67.0-138*		*11/10/2023 03:42*	WG2168000
(S) 1,2-Dichloroethane-d4	*99.2*				*70.0-130*		*11/05/2023 12:00*	WG2164649
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/10/2023 03:42*	WG2168000

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1250000		8450	20000	1	11/08/2023 14:10	WG2166111

Sample Narrative:

L1673441-03 WG2166111: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	143000		379	1000	1	11/03/2023 23:13	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 23:13	WG2164204
Sulfate	U		594	5000	1	11/03/2023 23:13	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14500		102	1000	1	11/21/2023 05:52	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	26500		28.1	100	1	11/10/2023 19:21	WG2166496
Manganese	2640		0.704	5.00	1	11/10/2023 19:21	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17100		2.87	6.78	10	11/09/2023 15:45	WG2168088
Ethane	58.9		0.296	1.29	1	11/09/2023 10:45	WG2165856
Ethene	6.17		0.422	1.27	1	11/09/2023 10:45	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	2.57	J+ C5	0.548	1.00	1	11/05/2023 12:19	WG2164649	
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:19	WG2164649	
Benzene	0.111		0.0160	0.0400	1	11/05/2023 12:19	WG2164649	
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:19	WG2164649	
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:19	WG2164649	
Bromoform	U		0.239	1.00	1	11/05/2023 12:19	WG2164649	
Bromomethane	U		0.148	0.500	1	11/05/2023 12:19	WG2164649	
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:19	WG2164649	
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:19	WG2164649	
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:19	WG2164649	
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:19	WG2164649	
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:19	WG2164649	
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:19	WG2164649	
Chloroethane	U		0.0432	0.200	1	11/05/2023 12:19	WG2164649	
Chloroform	U		0.0166	0.100	1	11/05/2023 12:19	WG2164649	
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:19	WG2164649	
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:19	WG2164649	
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:19	WG2164649	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:19	WG2164649	
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:19	WG2164649	JC 1/12/24

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			0.0400	0.200	1	11/05/2023 12:19	WG2164649
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/05/2023 12:19	WG2164649
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/05/2023 12:19	WG2164649
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/05/2023 12:19	WG2164649
Dichlorodifluoromethane	U			0.0327	0.100	1	11/05/2023 12:19	WG2164649
1,1-Dichloroethane	U			0.0230	0.100	1	11/05/2023 12:19	WG2164649
1,2-Dichloroethane	U			0.0190	0.100	1	11/05/2023 12:19	WG2164649
1,1-Dichloroethene	U			0.0200	0.100	1	11/05/2023 12:19	WG2164649
cis-1,2-Dichloroethene	1.38			0.0276	0.100	1	11/10/2023 02:06	WG2168000
trans-1,2-Dichloroethene	0.171		J	0.0572	0.200	1	11/05/2023 12:19	WG2164649
1,2-Dichloropropane	U			0.0508	0.200	1	11/05/2023 12:19	WG2164649
1,1-Dichloropropene	U			0.0280	0.100	1	11/05/2023 12:19	WG2164649
1,3-Dichloropropane	U			0.0700	0.200	1	11/05/2023 12:19	WG2164649
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/05/2023 12:19	WG2164649
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/05/2023 12:19	WG2164649
2,2-Dichloropropane	U			0.0317	0.100	1	11/05/2023 12:19	WG2164649
Di-isopropyl ether	U			0.0140	0.0400	1	11/05/2023 12:19	WG2164649
Ethylbenzene	U			0.0212	0.100	1	11/05/2023 12:19	WG2164649
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/05/2023 12:19	WG2164649
Isopropylbenzene	U			0.0345	0.100	1	11/05/2023 12:19	WG2164649
p-Isopropyltoluene	U			0.0932	0.200	1	11/05/2023 12:19	WG2164649
2-Butanone (MEK)	U			0.500	1.00	1	11/05/2023 12:19	WG2164649
Methylene Chloride	U			0.265	1.00	1	11/05/2023 12:19	WG2164649
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/05/2023 12:19	WG2164649
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/05/2023 12:19	WG2164649
Naphthalene	U	UJ	C3	0.124	0.500	1	11/05/2023 12:19	WG2164649
n-Propylbenzene	U			0.0472	0.200	1	11/05/2023 12:19	WG2164649
Styrene	U			0.109	0.500	1	11/05/2023 12:19	WG2164649
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/05/2023 12:19	WG2164649
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/05/2023 12:19	WG2164649
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/05/2023 12:19	WG2164649
Tetrachloroethene	U			0.0280	0.100	1	11/10/2023 02:06	WG2168000
Toluene	0.102		J	0.0500	0.200	1	11/05/2023 12:19	WG2164649
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/05/2023 12:19	WG2164649
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/05/2023 12:19	WG2164649
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/05/2023 12:19	WG2164649
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/05/2023 12:19	WG2164649
Trichloroethene	0.106			0.0160	0.0400	1	11/10/2023 02:06	WG2168000
Trichlorofluoromethane	U			0.0200	0.100	1	11/05/2023 12:19	WG2164649
1,2,3-Trichloropropane	U			0.204	0.500	1	11/05/2023 12:19	WG2164649
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/05/2023 12:19	WG2164649
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/05/2023 12:19	WG2164649
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/05/2023 12:19	WG2164649
Vinyl chloride	1.27			0.0273	0.100	1	11/05/2023 12:19	WG2164649
Xylenes, Total	U			0.191	0.260	1	11/05/2023 12:19	WG2164649
Ethyl Ether	U			0.0170	0.100	1	11/05/2023 12:19	WG2164649
Tetrahydrofuran	1.87			0.0900	0.500	1	11/05/2023 12:19	WG2164649
Iodomethane	U			0.242	0.500	1	11/05/2023 12:19	WG2164649
Allyl chloride	U			0.580	1.00	1	11/05/2023 12:19	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/05/2023 12:19	WG2164649
(S) Toluene-d8	*96.3*				*75.0-131*		*11/05/2023 12:19*	WG2164649
(S) Toluene-d8	*96.7*				*75.0-131*		*11/10/2023 02:06*	WG2168000
(S) 4-Bromofluorobenzene	*87.1*				*67.0-138*		*11/05/2023 12:19*	WG2164649
(S) 4-Bromofluorobenzene	*93.4*				*67.0-138*		*11/10/2023 02:06*	WG2168000
(S) 1,2-Dichloroethane-d4	*101*				*70.0-130*		*11/05/2023 12:19*	WG2164649
(S) 1,2-Dichloroethane-d4	*107*				*70.0-130*		*11/10/2023 02:06*	WG2168000

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	1110000		8450	20000	1	11/09/2023 09:29	WG2166959

Sample Narrative:
L1673441-04 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	113000		379	1000	1	11/03/2023 23:26	WG2164204
Nitrate	U		48.0	100	1	11/03/2023 23:26	WG2164204
Sulfate	U		594	5000	1	11/03/2023 23:26	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10300		102	1000	1	11/21/2023 06:13	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	10000		28.1	100	1	11/10/2023 19:24	WG2166496
Manganese	1890		0.704	5.00	1	11/10/2023 19:24	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	24700		2.87	6.78	10	11/09/2023 15:53	WG2168088
Ethane	256		0.296	1.29	1	11/09/2023 10:53	WG2165856
Ethene	3.98		0.422	1.27	1	11/09/2023 10:53	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.28 J+	C5	0.548	1.00	1	11/05/2023 12:38	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:38	WG2164649
Benzene	0.0440		0.0160	0.0400	1	11/05/2023 12:38	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:38	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:38	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:38	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:38	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:38	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:38	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:38	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:38	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:38	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:38	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 12:38	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:38	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:38	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:38	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:38	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:38	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:38	WG2164649

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/05/2023 12:38	WG2164649
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/05/2023 12:38	WG2164649
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/05/2023 12:38	WG2164649
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/05/2023 12:38	WG2164649
Dichlorodifluoromethane	U		0.0327	0.100	1	11/05/2023 12:38	WG2164649
1,1-Dichloroethane	U		0.0230	0.100	1	11/05/2023 12:38	WG2164649
1,2-Dichloroethane	U		0.0190	0.100	1	11/05/2023 12:38	WG2164649
1,1-Dichloroethene	U		0.0200	0.100	1	11/05/2023 12:38	WG2164649
cis-1,2-Dichloroethene	0.253		0.0276	0.100	1	11/10/2023 02:26	WG2168000
trans-1,2-Dichloroethene	0.708		0.0572	0.200	1	11/05/2023 12:38	WG2164649
1,2-Dichloropropane	U		0.0508	0.200	1	11/05/2023 12:38	WG2164649
1,1-Dichloropropene	U		0.0280	0.100	1	11/05/2023 12:38	WG2164649
1,3-Dichloropropane	U		0.0700	0.200	1	11/05/2023 12:38	WG2164649
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/05/2023 12:38	WG2164649
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/05/2023 12:38	WG2164649
2,2-Dichloropropane	U		0.0317	0.100	1	11/05/2023 12:38	WG2164649
Di-isopropyl ether	U		0.0140	0.0400	1	11/05/2023 12:38	WG2164649
Ethylbenzene	0.0230	J	0.0212	0.100	1	11/05/2023 12:38	WG2164649
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/05/2023 12:38	WG2164649
Isopropylbenzene	U		0.0345	0.100	1	11/05/2023 12:38	WG2164649
p-Isopropyltoluene	U		0.0932	0.200	1	11/05/2023 12:38	WG2164649
2-Butanone (MEK)	U		0.500	1.00	1	11/05/2023 12:38	WG2164649
Methylene Chloride	U		0.265	1.00	1	11/05/2023 12:38	WG2164649
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/05/2023 12:38	WG2164649
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/05/2023 12:38	WG2164649
Naphthalene	U UJ	C3	0.124	0.500	1	11/05/2023 12:38	WG2164649
n-Propylbenzene	U		0.0472	0.200	1	11/05/2023 12:38	WG2164649
Styrene	U		0.109	0.500	1	11/05/2023 12:38	WG2164649
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/05/2023 12:38	WG2164649
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/05/2023 12:38	WG2164649
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/05/2023 12:38	WG2164649
Tetrachloroethene	U		0.0280	0.100	1	11/10/2023 02:26	WG2168000
Toluene	0.165	J	0.0500	0.200	1	11/05/2023 12:38	WG2164649
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/05/2023 12:38	WG2164649
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/05/2023 12:38	WG2164649
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/05/2023 12:38	WG2164649
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/05/2023 12:38	WG2164649
Trichloroethene	0.0820		0.0160	0.0400	1	11/10/2023 02:26	WG2168000
Trichlorofluoromethane	U		0.0200	0.100	1	11/05/2023 12:38	WG2164649
1,2,3-Trichloropropane	U		0.204	0.500	1	11/05/2023 12:38	WG2164649
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/05/2023 12:38	WG2164649
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/05/2023 12:38	WG2164649
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/05/2023 12:38	WG2164649
Vinyl chloride	U		0.0273	0.100	1	11/05/2023 12:38	WG2164649
Xylenes, Total	U		0.191	0.260	1	11/05/2023 12:38	WG2164649
Ethyl Ether	U		0.0170	0.100	1	11/05/2023 12:38	WG2164649
Tetrahydrofuran	0.552		0.0900	0.500	1	11/05/2023 12:38	WG2164649
Iodomethane	U		0.242	0.500	1	11/05/2023 12:38	WG2164649
Allyl chloride	U		0.580	1.00	1	11/05/2023 12:38	WG2164649
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/05/2023 12:38	WG2164649
(S) Toluene-d8	*99.6*			*75.0-131*		*11/05/2023 12:38*	WG2164649
(S) Toluene-d8	*94.1*			*75.0-131*		*11/10/2023 02:26*	WG2168000
(S) 4-Bromofluorobenzene	*87.6*			*67.0-138*		*11/05/2023 12:38*	WG2164649
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/10/2023 02:26*	WG2168000
(S) 1,2-Dichloroethane-d4	*98.1*			*70.0-130*		*11/05/2023 12:38*	WG2164649
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/10/2023 02:26*	WG2168000

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	805000		8450	20000	1	11/09/2023 09:35	WG2166959

Sample Narrative:
L1673441-05 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	87100		379	1000	1	11/04/2023 04:32	WG2164210
Nitrate	49.6	U ~~B J~~	48.0	100	1	11/04/2023 04:32	WG2164210
Sulfate	U		594	5000	1	11/04/2023 04:32	WG2164210

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7100		102	1000	1	11/21/2023 06:33	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3470		28.1	100	1	11/10/2023 19:27	WG2166496
Manganese	1050		0.704	5.00	1	11/10/2023 19:27	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	23300		2.87	6.78	10	11/09/2023 16:01	WG2168088
Ethane	398		0.296	1.29	1	11/09/2023 11:00	WG2165856
Ethene	U		0.422	1.27	1	11/09/2023 11:00	WG2165856

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	11.3	J+ C5	0.548	1.00	1	11/05/2023 12:57	WG2164649
Acrylonitrile	U		0.0760	0.500	1	11/05/2023 12:57	WG2164649
Benzene	0.0180	J	0.0160	0.0400	1	11/05/2023 12:57	WG2164649
Bromobenzene	U		0.0420	0.500	1	11/05/2023 12:57	WG2164649
Bromodichloromethane	U		0.0315	0.100	1	11/05/2023 12:57	WG2164649
Bromoform	U		0.239	1.00	1	11/05/2023 12:57	WG2164649
Bromomethane	U		0.148	0.500	1	11/05/2023 12:57	WG2164649
n-Butylbenzene	U		0.153	0.500	1	11/05/2023 12:57	WG2164649
sec-Butylbenzene	U		0.101	0.500	1	11/05/2023 12:57	WG2164649
tert-Butylbenzene	U		0.0620	0.200	1	11/05/2023 12:57	WG2164649
Carbon tetrachloride	U		0.0432	0.200	1	11/05/2023 12:57	WG2164649
Chlorobenzene	U		0.0229	0.100	1	11/05/2023 12:57	WG2164649
Chlorodibromomethane	U		0.0180	0.100	1	11/05/2023 12:57	WG2164649
Chloroethane	U		0.0432	0.200	1	11/05/2023 12:57	WG2164649
Chloroform	U		0.0166	0.100	1	11/05/2023 12:57	WG2164649
Chloromethane	U		0.0556	0.500	1	11/05/2023 12:57	WG2164649
2-Chlorotoluene	U		0.0368	0.100	1	11/05/2023 12:57	WG2164649
4-Chlorotoluene	U		0.0452	0.200	1	11/05/2023 12:57	WG2164649
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/05/2023 12:57	WG2164649
1,2-Dibromoethane	U		0.0210	0.100	1	11/05/2023 12:57	WG2164649

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Dibromomethane	U			0.0400	0.200	1	11/05/2023 12:57	WG2164649
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/05/2023 12:57	WG2164649
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/05/2023 12:57	WG2164649
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/05/2023 12:57	WG2164649
Dichlorodifluoromethane	U			0.0327	0.100	1	11/05/2023 12:57	WG2164649
1,1-Dichloroethane	U			0.0230	0.100	1	11/05/2023 12:57	WG2164649
1,2-Dichloroethane	U			0.0190	0.100	1	11/05/2023 12:57	WG2164649
1,1-Dichloroethene	U			0.0200	0.100	1	11/05/2023 12:57	WG2164649
cis-1,2-Dichloroethene	0.0800		J	0.0276	0.100	1	11/10/2023 02:44	WG2168000
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/05/2023 12:57	WG2164649
1,2-Dichloropropane	U			0.0508	0.200	1	11/05/2023 12:57	WG2164649
1,1-Dichloropropene	U			0.0280	0.100	1	11/05/2023 12:57	WG2164649
1,3-Dichloropropane	U			0.0700	0.200	1	11/05/2023 12:57	WG2164649
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/05/2023 12:57	WG2164649
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/05/2023 12:57	WG2164649
2,2-Dichloropropane	U			0.0317	0.100	1	11/05/2023 12:57	WG2164649
Di-isopropyl ether	U			0.0140	0.0400	1	11/05/2023 12:57	WG2164649
Ethylbenzene	0.0670		J	0.0212	0.100	1	11/05/2023 12:57	WG2164649
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/05/2023 12:57	WG2164649
Isopropylbenzene	U			0.0345	0.100	1	11/05/2023 12:57	WG2164649
p-Isopropyltoluene	U			0.0932	0.200	1	11/05/2023 12:57	WG2164649
2-Butanone (MEK)	0.583		J	0.500	1.00	1	11/05/2023 12:57	WG2164649
Methylene Chloride	U			0.265	1.00	1	11/05/2023 12:57	WG2164649
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/05/2023 12:57	WG2164649
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/05/2023 12:57	WG2164649
Naphthalene	U	UJ	C3	0.124	0.500	1	11/05/2023 12:57	WG2164649
n-Propylbenzene	U			0.0472	0.200	1	11/05/2023 12:57	WG2164649
Styrene	U			0.109	0.500	1	11/05/2023 12:57	WG2164649
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/05/2023 12:57	WG2164649
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/05/2023 12:57	WG2164649
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/05/2023 12:57	WG2164649
Tetrachloroethene	U			0.0280	0.100	1	11/05/2023 12:57	WG2164649
Toluene	0.308			0.0500	0.200	1	11/05/2023 12:57	WG2164649
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/05/2023 12:57	WG2164649
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/05/2023 12:57	WG2164649
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/05/2023 12:57	WG2164649
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/05/2023 12:57	WG2164649
Trichloroethene	U			0.0160	0.0400	1	11/05/2023 12:57	WG2164649
Trichlorofluoromethane	U			0.0200	0.100	1	11/05/2023 12:57	WG2164649
1,2,3-Trichloropropane	U			0.204	0.500	1	11/05/2023 12:57	WG2164649
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/05/2023 12:57	WG2164649
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/05/2023 12:57	WG2164649
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/05/2023 12:57	WG2164649
Vinyl chloride	U			0.0273	0.100	1	11/05/2023 12:57	WG2164649
Xylenes, Total	0.419			0.191	0.260	1	11/05/2023 12:57	WG2164649
Ethyl Ether	U			0.0170	0.100	1	11/05/2023 12:57	WG2164649
Tetrahydrofuran	1.03			0.0900	0.500	1	11/05/2023 12:57	WG2164649
Iodomethane	U			0.242	0.500	1	11/05/2023 12:57	WG2164649
Allyl chloride	U			0.580	1.00	1	11/05/2023 12:57	WG2164649
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/05/2023 12:57	WG2164649
(S) Toluene-d8	*103*				*75.0-131*		*11/05/2023 12:57*	WG2164649
(S) Toluene-d8	*95.0*				*75.0-131*		*11/10/2023 02:44*	WG2168000
(S) 4-Bromofluorobenzene	*88.6*				*67.0-138*		*11/05/2023 12:57*	WG2164649
(S) 4-Bromofluorobenzene	*91.4*				*67.0-138*		*11/10/2023 02:44*	WG2168000
(S) 1,2-Dichloroethane-d4	*92.7*				*70.0-130*		*11/05/2023 12:57*	WG2164649
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/10/2023 02:44*	WG2168000

JC 1/12/24

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

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	909000		8450	20000	1	11/09/2023 09:42	WG2166959

Sample Narrative:
L1673473-01 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	28700	J- ~~T8~~	375	1250	25	11/04/2023 13:32	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	101000		379	1000	1	11/04/2023 00:55	WG2164204
Nitrate	U		48.0	100	1	11/04/2023 00:55	WG2164204
Sulfate	9480		594	5000	1	11/04/2023 00:55	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	47400		102	1000	1	11/21/2023 07:34	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	40800		28.1	100	1	11/10/2023 19:34	WG2166496
Manganese	1330		0.704	5.00	1	11/10/2023 19:34	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	31000		2.87	6.78	10	11/09/2023 16:08	WG2168088
Ethane	542		0.296	1.29	1	11/09/2023 11:10	WG2165856
Ethene	1260		0.422	1.27	1	11/09/2023 11:10	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 12:23	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 12:23	WG2167871
Benzene	0.117		0.0160	0.0400	1	11/09/2023 12:23	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 12:23	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 12:23	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 12:23	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 12:23	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 12:23	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 12:23	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 12:23	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 12:23	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 12:23	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 12:23	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 12:23	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 12:23	WG2167871

JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 12:23	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 12:23	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 12:23	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 12:23	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 12:23	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 12:23	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 12:23	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 12:23	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 12:23	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 12:23	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 12:23	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 12:23	WG2167871
1,1-Dichloroethene	8.30	J	2.00	10.0	100	11/11/2023 07:10	WG2168846
cis-1,2-Dichloroethene	8910		2.76	10.0	100	11/11/2023 07:10	WG2168846
trans-1,2-Dichloroethene	62.7		0.0572	0.200	1	11/09/2023 12:23	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 12:23	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 12:23	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 12:23	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 12:23	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 12:23	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 12:23	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 12:23	WG2167871
Ethylbenzene	0.0550	J	0.0212	0.100	1	11/09/2023 12:23	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 12:23	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 12:23	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 12:23	WG2167871
2-Butanone (MEK)	0.525	J	0.500	1.00	1	11/09/2023 12:23	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 12:23	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 12:23	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 12:23	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 12:23	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 12:23	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 12:23	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 12:23	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 12:23	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 12:23	WG2167871
Tetrachloroethene	0.289		0.0280	0.100	1	11/09/2023 12:23	WG2167871
Toluene	0.122	J	0.0500	0.200	1	11/09/2023 12:23	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 12:23	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 12:23	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 12:23	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 12:23	WG2167871
Trichloroethene	0.401		0.0160	0.0400	1	11/09/2023 12:23	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 12:23	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 12:23	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 12:23	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 12:23	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 12:23	WG2167871
Vinyl chloride	2770		2.73	10.0	100	11/11/2023 07:10	WG2168846
Xylenes, Total	U		0.191	0.260	1	11/09/2023 12:23	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 12:23	WG2167871
Tetrahydrofuran	1.02		0.0900	0.500	1	11/09/2023 12:23	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 12:23	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 12:23	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 12:23	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 12:23*	WG2167871

JC 1/12/24

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) Toluene-d8	*101*			*75.0-131*		*11/11/2023 07:10*	WG2168846
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/09/2023 12:23*	WG2167871
(S) 4-Bromofluorobenzene	*95.7*			*67.0-138*		*11/11/2023 07:10*	WG2168846
(S) 1,2-Dichloroethane-d4	*99.7*			*70.0-130*		*11/09/2023 12:23*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/11/2023 07:10*	WG2168846

JC 1/12/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	503000		8450	20000	1	11/09/2023 09:48	WG2166959

Sample Narrative:
L1673473-02 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	2630	J- ~~J8~~	15.0	50.0	1	11/04/2023 13:33	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43000		379	1000	1	11/04/2023 01:08	WG2164204
Nitrate	593	J	48.0	100	1	11/04/2023 01:08	WG2164204
Sulfate	1570	J	594	5000	1	11/04/2023 01:08	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	11700		102	1000	1	11/21/2023 07:56	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5780		28.1	100	1	11/10/2023 19:37	WG2166496
Manganese	1120		0.704	5.00	1	11/10/2023 19:37	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16900		2.87	6.78	10	11/09/2023 16:18	WG2168088
Ethane	332		0.296	1.29	1	11/09/2023 11:28	WG2165856
Ethene	17.5		0.422	1.27	1	11/09/2023 11:28	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 12:41	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 12:41	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 12:41	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 12:41	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 12:41	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 12:41	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 12:41	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 12:41	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 12:41	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 12:41	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 12:41	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 12:41	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 12:41	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 12:41	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 12:41	WG2167871

JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 12:41	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 12:41	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 12:41	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 12:41	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 12:41	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 12:41	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 12:41	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 12:41	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 12:41	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 12:41	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 12:41	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 12:41	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 12:41	WG2167871
cis-1,2-Dichloroethene	23.0	J	0.0276	0.100	1	11/09/2023 12:41	WG2167871
trans-1,2-Dichloroethene	0.693	J	0.0572	0.200	1	11/09/2023 12:41	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 12:41	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 12:41	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 12:41	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 12:41	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 12:41	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 12:41	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 12:41	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 12:41	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 12:41	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 12:41	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 12:41	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 12:41	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 12:41	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 12:41	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 12:41	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 12:41	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 12:41	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 12:41	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 12:41	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 12:41	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 12:41	WG2167871
Tetrachloroethene	0.747		0.0280	0.100	1	11/09/2023 12:41	WG2167871
Toluene	0.0890	J	0.0500	0.200	1	11/09/2023 12:41	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 12:41	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 12:41	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 12:41	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 12:41	WG2167871
Trichloroethene	0.0500		0.0160	0.0400	1	11/09/2023 12:41	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 12:41	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 12:41	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 12:41	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 12:41	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 12:41	WG2167871
Vinyl chloride	22.4	J	0.0273	0.100	1	11/09/2023 12:41	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 12:41	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 12:41	WG2167871
Tetrahydrofuran	0.647		0.0900	0.500	1	11/09/2023 12:41	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 12:41	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 12:41	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 12:41	WG2167871
(S) Toluene-d8	*102*			*75.0-131*		*11/09/2023 12:41*	WG2167871

JC 1/12/24

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/09/2023 12:41*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 12:41*	WG2167871

JC 1/12/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	499000		8450	20000	1	11/09/2023 09:55	WG2166959

Sample Narrative:
L1673473-03 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	2830	J- ~~T8~~	15.0	50.0	1	11/04/2023 13:33	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	42100		379	1000	1	11/04/2023 01:21	WG2164204
Nitrate	U	UJ	48.0	100	1	11/04/2023 01:21	WG2164204
Sulfate	1340	J	594	5000	1	11/04/2023 01:21	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	11600		102	1000	1	11/21/2023 09:43	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5590		28.1	100	1	11/10/2023 19:40	WG2166496
Manganese	1150		0.704	5.00	1	11/10/2023 19:40	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	16800		2.87	6.78	10	11/09/2023 16:33	WG2168088
Ethane	332		0.296	1.29	1	11/09/2023 11:57	WG2165856
Ethene	17.3		0.422	1.27	1	11/09/2023 11:57	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 13:00	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 13:00	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 13:00	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 13:00	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 13:00	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 13:00	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 13:00	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 13:00	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 13:00	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 13:00	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 13:00	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 13:00	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 13:00	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 13:00	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 13:00	WG2167871

JC 1/12/24

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloromethane	U		0.0556	0.500	1	11/09/2023 13:00	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 13:00	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 13:00	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 13:00	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 13:00	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 13:00	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 13:00	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 13:00	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 13:00	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 13:00	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 13:00	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 13:00	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 13:00	WG2167871
cis-1,2-Dichloroethene	9.58	J	0.0276	0.100	1	11/09/2023 13:00	WG2167871
trans-1,2-Dichloroethene	U	UJ	0.0572	0.200	1	11/09/2023 13:00	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 13:00	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 13:00	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 13:00	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 13:00	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 13:00	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 13:00	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 13:00	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 13:00	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 13:00	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 13:00	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 13:00	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 13:00	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 13:00	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 13:00	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 13:00	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 13:00	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 13:00	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 13:00	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 13:00	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 13:00	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 13:00	WG2167871
Tetrachloroethene	0.591		0.0280	0.100	1	11/09/2023 13:00	WG2167871
Toluene	0.0870	J	0.0500	0.200	1	11/09/2023 13:00	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 13:00	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 13:00	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 13:00	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 13:00	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 13:00	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 13:00	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 13:00	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 13:00	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 13:00	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 13:00	WG2167871
Vinyl chloride	13.1	J	0.0273	0.100	1	11/09/2023 13:00	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 13:00	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 13:00	WG2167871
Tetrahydrofuran	0.796		0.0900	0.500	1	11/09/2023 13:00	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 13:00	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 13:00	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 13:00	WG2167871
(S) Toluene-d8	*98.0*			*75.0-131*		*11/09/2023 13:00*	WG2167871

JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/09/2023 13:00*	WG2167871
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/09/2023 13:00*	WG2167871

JC 1/12/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	613000		8450	20000	1	11/09/2023 10:13	WG2166959

Sample Narrative:
L1673473-04 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	2750	J- ~~T8~~	15.0	50.0	1	11/04/2023 13:34	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	49700		379	1000	1	11/04/2023 01:34	WG2164204
Nitrate	U		48.0	100	1	11/04/2023 01:34	WG2164204
Sulfate	U		594	5000	1	11/04/2023 01:34	WG2164204

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12300		102	1000	1	11/21/2023 10:05	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4020		28.1	100	1	11/10/2023 19:44	WG2166496
Manganese	2550		0.704	5.00	1	11/10/2023 19:44	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25400		2.87	6.78	10	11/09/2023 16:53	WG2168088
Ethane	619		0.296	1.29	1	11/09/2023 12:07	WG2165856
Ethene	94.9		0.422	1.27	1	11/09/2023 12:07	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 13:18	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 13:18	WG2167871
Benzene	0.187		0.0160	0.0400	1	11/09/2023 13:18	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 13:18	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 13:18	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 13:18	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 13:18	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 13:18	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 13:18	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 13:18	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 13:18	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 13:18	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 13:18	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 13:18	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 13:18	WG2167871

JC 1/12/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.0556	0.500	1	11/09/2023 13:18	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 13:18	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 13:18	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 13:18	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 13:18	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 13:18	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 13:18	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 13:18	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 13:18	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 13:18	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 13:18	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 13:18	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 13:18	WG2167871
cis-1,2-Dichloroethene	4.81		0.0276	0.100	1	11/09/2023 13:18	WG2167871
trans-1,2-Dichloroethene	0.381		0.0572	0.200	1	11/09/2023 13:18	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 13:18	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 13:18	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 13:18	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 13:18	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 13:18	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 13:18	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 13:18	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 13:18	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 13:18	WG2167871
Isopropylbenzene	0.149		0.0345	0.100	1	11/09/2023 13:18	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 13:18	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 13:18	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 13:18	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 13:18	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 13:18	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 13:18	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 13:18	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 13:18	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 13:18	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 13:18	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 13:18	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 13:18	WG2167871
Toluene	0.140	J	0.0500	0.200	1	11/09/2023 13:18	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 13:18	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 13:18	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 13:18	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 13:18	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 13:18	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 13:18	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 13:18	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 13:18	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 13:18	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 13:18	WG2167871
Vinyl chloride	4.70		0.0273	0.100	1	11/09/2023 13:18	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 13:18	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 13:18	WG2167871
Tetrahydrofuran	3.41		0.0900	0.500	1	11/09/2023 13:18	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 13:18	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 13:18	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 13:18	WG2167871
(S) Toluene-d8	*100*			*75.0-131*		*11/09/2023 13:18*	WG2167871

JC 1/12/24

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/09/2023 13:18*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 13:18*	WG2167871

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1100000		8450	20000	1	11/09/2023 10:20	WG2166959

Sample Narrative:
L1673473-05 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	13900 J-	~~T8~~	300	1000	20	11/04/2023 13:34	WG2164515

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	88000		379	1000	1	11/04/2023 04:45	WG2164210
Nitrate	72.8 U	~~B J~~	48.0	100	1	11/04/2023 04:45	WG2164210
Sulfate	U		594	5000	1	11/04/2023 04:45	WG2164210

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	20700		102	1000	1	11/21/2023 10:28	WG2172250

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17600		28.1	100	1	11/10/2023 19:47	WG2166496
Manganese	3040		0.704	5.00	1	11/10/2023 19:47	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	31800		2.87	6.78	10	11/09/2023 17:01	WG2168088
Ethane	528		0.296	1.29	1	11/09/2023 12:17	WG2165856
Ethene	U		0.422	1.27	1	11/09/2023 12:17	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 13:37	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 13:37	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 13:37	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 13:37	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 13:37	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 13:37	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 13:37	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 13:37	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 13:37	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 13:37	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 13:37	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 13:37	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 13:37	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 13:37	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 13:37	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Chloromethane	U		0.0556	0.500	1	11/09/2023 13:37	WG2167871	
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 13:37	WG2167871	
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 13:37	WG2167871	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 13:37	WG2167871	
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 13:37	WG2167871	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 13:37	WG2167871	
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 13:37	WG2167871	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 13:37	WG2167871	
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 13:37	WG2167871	
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 13:37	WG2167871	
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 13:37	WG2167871	
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 13:37	WG2167871	
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 13:37	WG2167871	
cis-1,2-Dichloroethene	2.95		0.0276	0.100	1	11/09/2023 13:37	WG2167871	
trans-1,2-Dichloroethene	0.876		0.0572	0.200	1	11/09/2023 13:37	WG2167871	
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 13:37	WG2167871	
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 13:37	WG2167871	
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 13:37	WG2167871	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 13:37	WG2167871	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 13:37	WG2167871	
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 13:37	WG2167871	
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 13:37	WG2167871	
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 13:37	WG2167871	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 13:37	WG2167871	
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 13:37	WG2167871	
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 13:37	WG2167871	
2-Butanone (MEK)	0.553	J	0.500	1.00	1	11/09/2023 13:37	WG2167871	
Methylene Chloride	U		0.265	1.00	1	11/09/2023 13:37	WG2167871	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 13:37	WG2167871	
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 13:37	WG2167871	
Naphthalene	U		0.124	0.500	1	11/09/2023 13:37	WG2167871	
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 13:37	WG2167871	
Styrene	U		0.109	0.500	1	11/09/2023 13:37	WG2167871	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 13:37	WG2167871	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 13:37	WG2167871	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 13:37	WG2167871	
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 13:37	WG2167871	
Toluene	0.0560	J	0.0500	0.200	1	11/09/2023 13:37	WG2167871	
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 13:37	WG2167871	
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 13:37	WG2167871	
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 13:37	WG2167871	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 13:37	WG2167871	
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 13:37	WG2167871	
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 13:37	WG2167871	
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 13:37	WG2167871	
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 13:37	WG2167871	
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 13:37	WG2167871	
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 13:37	WG2167871	
Vinyl chloride	2.58		0.0273	0.100	1	11/09/2023 13:37	WG2167871	
Xylenes, Total	U		0.191	0.260	1	11/09/2023 13:37	WG2167871	
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 13:37	WG2167871	
Tetrahydrofuran	0.423	J	0.0900	0.500	1	11/09/2023 13:37	WG2167871	
Iodomethane	U		0.242	0.500	1	11/09/2023 13:37	WG2167871	
Allyl chloride	U		0.580	1.00	1	11/09/2023 13:37	WG2167871	
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 13:37	WG2167871	JC 1/12/24
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 13:37*	WG2167871	

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/09/2023 13:37*	WG2167871
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/09/2023 13:37*	WG2167871

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MEMORANDUM

TO: Project File **DATE:** February 13, 2024

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 443022-1413001.10.701.04

TASK: EIM Data Validation Level EPA2A for Group 2 – 4th Quarter November - December 2023

LAB: Pace Sample Delivery Group (SDGs): L1673835, L1673863, L1673871, L1674499, and L1674504

Twenty-six groundwater samples (including three field duplicates) and two trip blanks were collected November 1, 3, and 6, 2023, from monitoring wells associated with the fourth quarter sampling event at American Linen in Seattle, WA. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Standard Method (SM) 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Fourth quarter analytical results are reported in eighteen SDGs and are validated in four groups. Group 2 consists of five SDGs (L1673835, L1673863, L1673871, L1674499, and L1674504). The quality assurance review of the laboratory data associated with Group 2 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (USEPA, 2020) and USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested with the following issues:

- SDG L1673863: Review of the chain of custody indicates that samples MW-188-110323, MW-189-110323, and MW-169-110323 were not analyzed for ferrous iron as requested on the chain of custody. Ferrous iron was analyzed in the field with a Hach Test Kit and the COC request for ferrous iron was cancelled by NV5.

- SDG L1673863: Review of chain of custody shows sample MW107-110323 (SDG L1673863-03) however the sample is identified in the deliverables (laboratory report and electronic data deliverables) as MNW107-110323. NV5 confirmed that the that the chain of custody identification was correct. Per NV5 request, Pace revised the sample identification and reissued the associated deliverables on February 9, 2024.

- SDG L1673871: Pace received a cooler without a chain of custody for samples MW-171-110123, MW-165-110123, and MW-181-110123. The chain of custody was submitted in a separate cooler along with client samples. No action is taken other than to note this.

- SDG L1674499: Review of chain of custody shows sample MW120-110623 (SDG L1674499-03) however the sample is identified in the deliverables as MW-120-110623. NV5 confirmed that the that the chain of custody identification was correct. Per NV5 request, Pace revised the sample identification and reissued the associated deliverables on February 9, 2024.

- SDG L1674499: Review of chain of custody shows sample MW-127-110623 (SDG L1674499-01). Per NV5's November 7, 2023, email request Pace revised the sample identification to read MW127-110623.

- SDG L1674504: Review of chain of custody shows samples W-MW-01-110623, MW102-110623, MW104-110623, (SDG L1674504-06, -08, and -09) however the samples are identified in the deliverables as MW-01-110623, MW-102-110623, and MW-104-110623. NV5 confirmed that the that the chain of custody identifications were correct. Per NV5 request, Pace revised the sample identifications and reissued the associated deliverables on February 9, 2024.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. The samples were received in good condition. No data are qualified based upon the sample collection and preservation information with the following exceptions:

- SDG L1673835: Review of case narrative notes indicates that sample R-MW6-110323 pH exceeded preservation criteria for TOC by EPA Method 9060A. **The TOC result for sample R-MW6-110323 is estimated and qualified (J) because preservation criteria was not met.**

- SDG L1673871: Review of case narrative notes indicates that sample MW-165-110123 pH exceeded criteria for VOCs by EPA Method 8260D. **VOC results for sample MW-165-110123 are estimated and qualified (UJ/J) due to a one day holding time exceedance.**

Holding Times

USEPA Method 8260D:
The samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters (7 days for unpreserved waters) from the date of collection. All holding time criteria with the following exception:

- SDG L1673871: Review of case narrative indicates that sample MW-165-110123 pH exceeded criteria for VOCs by EPA Method 8260D. **VOC results for sample MW-165-110123 are estimated and qualified (UJ/J) due to a one day holding time exceedance for unpreserved sample.**

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The samples were analyzed within the USEPA recommended holding time for alkalinity (14 days) chloride (28 days), sulfate (28 days), nitrate (48 hours), and TOC (28 days) for the preserved water sample from the date of sample collection. All holding time criteria are met with the following exceptions:

- SDG L1673835: Review of case narrative notes indicates that sample R-MW6-110323 pH exceeded preservation criteria for TOC by EPA Method 9060A. **TOC result for sample R-MW6-110323 is estimated and qualified (J) because preservation criteria were not met.**

- SDG L1673863: Sample (MW-174-110323, MW107-110323, MW-188-110323, MW-189-110323 and MW-169-110323) results for chloride, sulfate, and dissolved gas were laboratory qualified (T8) to indicate that hold times were exceeded. The report was revised (February 9, 2024) with T8 qualifiers removed from dissolved gases but not chloride and sulfate. All chloride and sulfate analyses were performed within hold times. The laboratory assigned qualifier (T8) was crossed out by the data validator.

- SDG L1673863: Nitrate analysis was performed five days past recommended hold time and associated nitrate results for five samples (MW-174-110323, MW107-110323, MW-188-110323, MW-189-110323 and MW-169-110323) are laboratory qualified (T8). **All**

sample (MW-174-110323, MW107-110323, MW-188-110323, MW-189-110323 and MW-169-110323) nitrate detections are qualified as estimated (J). Refer to the section on Method Blank Results for additional information.

- SDG L1673871: Nitrate analysis was performed five days past recommended hold time and associated nitrate results for five samples (MW-171-110123, MW-165-110123, and MW-181-110123) are laboratory qualified (Q). **All sample MW-171-110123, MW-165-110123, and MW-181-110123 nitrate detections are qualified as estimated (J).** Refer to the section on Method Blank Results for additional information.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCVs are below laboratory acceptance criteria and may be showing potential low bias. **Associated sample results with laboratory qualified (C3) results are estimated with potential low bias and qualified (J-/UJ). Results reported below the RDL are estimated (J) and directional bias are not assigned.**

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for several compounds. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCVs are above laboratory acceptance criteria and may be showing potential high bias. **Associated sample results (detects) with laboratory qualified (C5) results are estimated with potential high bias and qualified (J+).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1673863 – Analytical batch WG2169072: Low levels of methylene chloride and ethyl ether were detected in the VOC method blank. No action is needed as these compounds are not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron and Manganese):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. Method blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1673835	WG2172259	9060A	TOC	286	J	1000	µg/L	NO
L1673835	WG2168330	9056A	Nitrate	72	J	100	µg/L	**YES**
L1673871	WG2166836	9056A	Nitrate	78.1	J	100	µg/L	**YES**
L1673871	WG2166836	9056A	Nitrate	73.8	J	100	µg/L	**YES**
L1673871	WG2171405	9060A	TOC	141	J	1000	µg/L	NO
L1674499	WG2175127	9060A	TOC	167	J	1000	µg/L	NO
L1674504	WG2175127	9060A	TOC	167	J	1000	µg/L	NO

The target analytes were detected in the method blanks at low levels and below the RDLs. No action is taken for TOC on this basis since associated sample results are greater than the RDLs. Low levels of nitrate were detected in method blanks below the RDL however due to holding time exceedance the associated results are evaluated as follows:

- SDG L1673863: Nitrate analysis was performed five days past recommended hold time and nitrate results for five samples (MW-174-110323, MW107-110323, MW-188-110323, MW-189-110323 and MW-169-110323) are laboratory qualified (T8). S**ample MW-174-110323, MW107-110323, MW-188-110323, MW-189-110323 and MW-169-110323 nitrate detections are qualified as estimated (J) due to a significant holding time exceedance.** The associated method blank is contaminated however no action was taken solely on this basis due to the holding time exceedance. Due to deficiencies (holding time exceedance and blank contamination) directional bias is undetermined.

- SDG L1673871: Nitrate analysis was performed five days past recommended hold time and associated nitrate results for five samples (MW-171-110123, MW-165-110123, and MW-181-110123) are laboratory qualified (Q). **Sample MW-171-110123, MW-165-110123, and MW-181-110123 nitrate detections are qualified as estimated (J) due to a significant holding time exceedance.** The associated method blanks are contaminated however no action is taken solely on this basis due to the holding time exceedance. Due to deficiencies (holding time and blank contamination) directional bias is undetermined.

Trip Blank Results

USEPA Method 8260D:

Two trip blanks (TB-110123 (SDG L1673871) and TB-110623 (SDG L1674504)) were collected and submitted for VOC analysis. The target analytes are not detected in the trip blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1674504: Acetone was detected at 3.65 µg/L and above the RDL 1.00 µg/L. Acetone was detected below the established action level (2 x 3.65) in samples MW-158A-110623, MW-161-110623, MW-01-110623, and MW-997-110623. **Acetone detections in samples MW-158A-110623, MW-161-110623, MW-01-110623, and MW-997-110623 are qualified as not detected (U) due to trip blank contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Field, rinsate, and/or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pairs are as follows:

- SDG L1673863: Sample MW-301-110323 and MW-993-110323
- SDG L1674504: Sample MW-161-110623 and MW-998-110623
- SDG L1674504: Sample MW-142-110623 and MW-997-110623

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (or ± 1x RDL for groundwater results <5X the RDL) for the field duplicate pair with the following exceptions:

- SDG L1673863: VOC target compound (cis-1,2-dichloroethene and vinyl chloride) RPDs exceed criteria (30%) for the field duplicate pair. VOC target compounds (**cis-1,2-dichloroethene and vinyl chloride) results for samples MW-301-110323 and MW-993-110323 are estimated and qualified (J/UJ).**

- SDG L1674504: VOC target compounds (1,1-dichloroethene), and nitrate RPDs exceed criteria (30%) for the field duplicate pair. **VOC target compound (1,1-dichloroethene) and nitrate results for samples MW-142-110623 and MW-997-110623 are estimated and qualified (J/UJ).** No action was taken for acetone detection in field duplicate sample MW-997-110623 because acetone is qualified as not detected (U) due to trip blank contamination. Acetone was not detected in sample MW-142-110623.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:

Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or $\pm$ 1x RDL for groundwater results <5X the RDL.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1673863 – Analytical batch WG2169072: LCS/LCSD or LCSD % R results for acetone results for 2-butanone (MEK) exceed acceptance criteria and associated results are laboratory qualified (J4). LCS/LCSD RPD result for MEK exceeds criteria and associated results are laboratory qualified (J3). No action is needed since acetone and MEK are not detected in the associated samples.

- SDG L1673863 – Analytical batch WG2169072: LCS/LCSD RPD results for tert-butylbenzene and iodomethane exceed criteria and associated results are laboratory qualified (J3). No action is taken since LCS/LCSD % Rs are within criteria.

- SDG L1673863 – Analytical batch WG2169072: LCS/LCSD % R results for trans-1,4-dichloro-2-butene are below acceptance criteria and associated results are laboratory qualified (J4). All associated trans-1,4-dichloro-2-butene results are non-detected and are already qualified as estimated (UJ) due to low calibration.

- SDG L1674499 - Analytical batch WG2169075: LCS/LCSD % R results for acetone exceed acceptance criteria and associated results are laboratory qualified (J4). Associated detected results are already qualified (J+) due to a calibration percent difference (% D) exceeding calibration acceptance criteria. No action is needed for non-detected acetone results.

- SDG L1674499 - Analytical batch WG2169075: LCSD % R results exceed acceptance criteria for chloroform and dibromomethane and associated results are laboratory qualified (J4). No action is taken since LCS % Rs and RPDs are within criteria.

- SDG L1674499 - Analytical batch WG2169075: LCS/LCSD RPD criteria are exceeded for 1,1,2-trichlorotrifluoroethane and trans-1,4-dichloro-2-butene. The associated results are laboratory qualified (J3). No action is taken since LCS/LCSD % Rs are within criteria.

- SDG L1674504- Analytical batch WG2169075: LCS/LCSD % R results for acetone exceed acceptance criteria and associated results are laboratory qualified (J4). Using qualifier hierarchy (blank contamination supersedes estimated concentration) acetone detections in samples MW-158A-110623, MW-161-110623, W- MW-01-110623, and MW-997-110623 are already qualified as not detected (U) due to trip blank contamination. The acetone result in sample MW104-110623 exceeds the established action level for trip blank contamination and is already qualified (J+) due to a calibration exceeding acceptance criteria (C5). Refer to the section on Initial and Continuing Calibration.

- SDG L1674504- Analytical batch WG2169075: LCSD % R results exceed acceptance criteria for chloroform and dibromomethane and associated results are laboratory qualified (J4). No action is needed since LCS % Rs and RPDs are within criteria.

- SDG L1674504- Analytical batch WG2169075: LCS/LCSD RPD criteria are exceeded for 1,1,2-trichlorotrifluoroethane and trans-1,4-dichloro-2-butene and associated laboratory results are qualified (J3). No action is needed since LCS/LCSD % Rs are within criteria.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron and Manganese):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to laboratory control sample results for precision and accuracy results.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to laboratory control sample and laboratory duplicate results for precision and accuracy results.

General Chemistry (Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron and Manganese): MS or MS/MSD analyses were performed on client and/or on non-client samples within the analytical batches. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for the SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy but the associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses are reported based on laboratory RDLs for all compounds. RDLs for all targets or selected compounds are elevated in several samples due to method-required dilutions.

Per NV5's request the associated EDDs show result reporting limits (also known as reported detection limit (RDL) or practical quantitation limit (PQL)) and result detection limits (also referred to as method detection limit (MDL)) instead of defaulting to the RDL when reporting the MDL

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020); and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	840000		8450	20000	1	11/09/2023 13:31	WG2167358

Sample Narrative:

L1673835-01 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	10100		379	1000	1	11/04/2023 18:41	WG2164521
Nitrate	U		48.0	100	1	11/04/2023 18:41	WG2164521
Sulfate	22900		594	5000	1	11/04/2023 18:41	WG2164521

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5770	J	102	1000	1	11/19/2023 01:16	WG2172259

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	15700		28.1	100	1	11/10/2023 19:57	WG2166496
Manganese	4710		0.704	5.00	1	11/10/2023 19:57	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	14400		2.87	6.78	10	11/09/2023 17:32	WG2168088
Ethane	17.7		0.296	1.29	1	11/09/2023 13:04	WG2165856
Ethene	U		0.422	1.27	1	11/09/2023 13:04	WG2165856

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 14:14	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 14:14	WG2167871
Benzene	0.0840		0.0160	0.0400	1	11/09/2023 14:14	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 14:14	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 14:14	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 14:14	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 14:14	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 14:14	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 14:14	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 14:14	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 14:14	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 14:14	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 14:14	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 14:14	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 14:14	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 14:14	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 14:14	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 14:14	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 14:14	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 14:14	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 14:14	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 14:14	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 14:14	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 14:14	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 14:14	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 14:14	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 14:14	WG2167871
1,1-Dichloroethene	0.0550	J	0.0200	0.100	1	11/09/2023 14:14	WG2167871
cis-1,2-Dichloroethene	4.66		0.0276	0.100	1	11/09/2023 14:14	WG2167871
trans-1,2-Dichloroethene	0.180	J	0.0572	0.200	1	11/09/2023 14:14	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 14:14	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 14:14	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 14:14	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 14:14	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 14:14	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 14:14	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 14:14	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 14:14	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 14:14	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 14:14	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 14:14	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 14:14	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 14:14	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 14:14	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 14:14	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 14:14	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 14:14	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 14:14	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 14:14	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 14:14	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 14:14	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 14:14	WG2167871
Toluene	0.0610	J	0.0500	0.200	1	11/09/2023 14:14	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 14:14	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 14:14	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 14:14	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 14:14	WG2167871
Trichloroethene	0.100		0.0160	0.0400	1	11/09/2023 14:14	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 14:14	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 14:14	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 14:14	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 14:14	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 14:14	WG2167871
Vinyl chloride	1.81		0.0273	0.100	1	11/09/2023 14:14	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 14:14	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 14:14	WG2167871
Tetrahydrofuran	1.29		0.0900	0.500	1	11/09/2023 14:14	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 14:14	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 14:14	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 14:14	WG2167871
(S) Toluene-d8	*96.5*			*75.0-131*		*11/09/2023 14:14*	WG2167871
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/09/2023 14:14*	WG2167871
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/09/2023 14:14*	WG2167871

JC 2/13/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 05:52	WG2168846
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 14:51	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 14:51	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 14:51	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 14:51	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 14:51	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 14:51	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 14:51	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 14:51	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 14:51	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 14:51	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 14:51	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 14:51	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 14:51	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 14:51	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 14:51	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 14:51	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 14:51	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 14:51	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 14:51	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 14:51	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 14:51	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 14:51	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 14:51	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 14:51	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 14:51	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 14:51	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 14:51	WG2167871
cis-1,2-Dichloroethene	1.82		0.0276	0.100	1	11/09/2023 14:51	WG2167871
trans-1,2-Dichloroethene	0.0640	J	0.0572	0.200	1	11/09/2023 14:51	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 14:51	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 14:51	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 14:51	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 14:51	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 14:51	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 14:51	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 14:51	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 14:51	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 14:51	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 14:51	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 14:51	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 14:51	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 14:51	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 14:51	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 14:51	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 14:51	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 14:51	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 14:51	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 14:51	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 14:51	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 14:51	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 14:51	WG2167871
Toluene	U		0.0500	0.200	1	11/09/2023 14:51	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 14:51	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 14:51	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 14:51	WG2167871

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 14:51	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 14:51	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 14:51	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 14:51	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 14:51	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 14:51	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 14:51	WG2167871
Vinyl chloride	2.03		0.0273	0.100	1	11/09/2023 14:51	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 14:51	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 14:51	WG2167871
Tetrahydrofuran	U		0.0900	0.500	1	11/09/2023 14:51	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 14:51	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 14:51	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 14:51	WG2167871
(S) Toluene-d8	*100*			*75.0-131*		*11/09/2023 14:51*	WG2167871
(S) Toluene-d8	*99.8*			*75.0-131*		*11/11/2023 05:52*	WG2168846
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/09/2023 14:51*	WG2167871
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*11/11/2023 05:52*	WG2168846
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/09/2023 14:51*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/11/2023 05:52*	WG2168846

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1150000		8450	20000	1	11/09/2023 14:40	WG2167358

Sample Narrative:

L1673863-02 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	98200	~~T8~~	379	1000	1	11/10/2023 09:37	WG2168330
Nitrate	91.0 J	B J T8	48.0	100	1	11/10/2023 09:37	WG2168330
Sulfate	2720	J ~~T8~~	594	5000	1	11/10/2023 09:37	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	30900		102	1000	1	11/20/2023 12:37	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	16400		28.1	100	1	11/10/2023 20:00	WG2166496
Manganese	4090		0.704	5.00	1	11/10/2023 20:00	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	29100	~~T8~~	2.87	6.78	10	11/06/2023 19:05	WG2165659
Ethane	180	~~T8~~	0.296	1.29	1	11/06/2023 17:20	WG2164806
Ethene	58.6	~~T8~~	0.422	1.27	1	11/06/2023 17:20	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		2.74	5.00	5	11/09/2023 16:42	WG2167871
Acrylonitrile	U		0.380	2.50	5	11/09/2023 16:42	WG2167871
Benzene	U		0.0800	0.200	5	11/09/2023 16:42	WG2167871
Bromobenzene	U		0.210	2.50	5	11/09/2023 16:42	WG2167871
Bromodichloromethane	U		0.158	0.500	5	11/09/2023 16:42	WG2167871
Bromoform	U		1.20	5.00	5	11/09/2023 16:42	WG2167871
Bromomethane	U		0.740	2.50	5	11/09/2023 16:42	WG2167871
n-Butylbenzene	U		0.765	2.50	5	11/09/2023 16:42	WG2167871
sec-Butylbenzene	U		0.505	2.50	5	11/09/2023 16:42	WG2167871
tert-Butylbenzene	U		0.310	1.00	5	11/09/2023 16:42	WG2167871
Carbon tetrachloride	U		0.216	1.00	5	11/09/2023 16:42	WG2167871
Chlorobenzene	U		0.115	0.500	5	11/09/2023 16:42	WG2167871
Chlorodibromomethane	U		0.0900	0.500	5	11/09/2023 16:42	WG2167871
Chloroethane	U		0.216	1.00	5	11/09/2023 16:42	WG2167871
Chloroform	U		0.0830	0.500	5	11/09/2023 16:42	WG2167871
Chloromethane	U		0.278	2.50	5	11/09/2023 16:42	WG2167871
2-Chlorotoluene	U		0.184	0.500	5	11/09/2023 16:42	WG2167871
4-Chlorotoluene	U		0.226	1.00	5	11/09/2023 16:42	WG2167871
1,2-Dibromo-3-Chloropropane	U		1.02	5.00	5	11/09/2023 16:42	WG2167871
1,2-Dibromoethane	U		0.105	0.500	5	11/09/2023 16:42	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.200	1.00	5	11/09/2023 16:42	WG2167871
1,2-Dichlorobenzene	U		0.290	1.00	5	11/09/2023 16:42	WG2167871
1,3-Dichlorobenzene	U		0.340	1.00	5	11/09/2023 16:42	WG2167871
1,4-Dichlorobenzene	U		0.394	1.00	5	11/09/2023 16:42	WG2167871
Dichlorodifluoromethane	U		0.164	0.500	5	11/09/2023 16:42	WG2167871
1,1-Dichloroethane	U		0.115	0.500	5	11/09/2023 16:42	WG2167871
1,2-Dichloroethane	U		0.0950	0.500	5	11/09/2023 16:42	WG2167871
1,1-Dichloroethene	U		0.100	0.500	5	11/09/2023 16:42	WG2167871
cis-1,2-Dichloroethene	86.6		0.138	0.500	5	11/09/2023 16:42	WG2167871
trans-1,2-Dichloroethene	2.93		0.286	1.00	5	11/09/2023 16:42	WG2167871
1,2-Dichloropropane	U		0.254	1.00	5	11/09/2023 16:42	WG2167871
1,1-Dichloropropene	U		0.140	0.500	5	11/09/2023 16:42	WG2167871
1,3-Dichloropropane	U		0.350	1.00	5	11/09/2023 16:42	WG2167871
cis-1,3-Dichloropropene	U		0.136	0.500	5	11/09/2023 16:42	WG2167871
trans-1,3-Dichloropropene	U		0.306	1.00	5	11/09/2023 16:42	WG2167871
2,2-Dichloropropane	U		0.159	0.500	5	11/09/2023 16:42	WG2167871
Di-isopropyl ether	U		0.0700	0.200	5	11/09/2023 16:42	WG2167871
Ethylbenzene	U		0.106	0.500	5	11/09/2023 16:42	WG2167871
Hexachloro-1,3-butadiene	U		2.54	5.00	5	11/09/2023 16:42	WG2167871
Isopropylbenzene	U		0.173	0.500	5	11/09/2023 16:42	WG2167871
p-Isopropyltoluene	U		0.466	1.00	5	11/09/2023 16:42	WG2167871
2-Butanone (MEK)	U		2.50	5.00	5	11/09/2023 16:42	WG2167871
Methylene Chloride	U		1.33	5.00	5	11/09/2023 16:42	WG2167871
4-Methyl-2-pentanone (MIBK)	U		2.00	5.00	5	11/09/2023 16:42	WG2167871
Methyl tert-butyl ether	U		0.0590	0.200	5	11/09/2023 16:42	WG2167871
Naphthalene	U		0.620	2.50	5	11/09/2023 16:42	WG2167871
n-Propylbenzene	U		0.236	1.00	5	11/09/2023 16:42	WG2167871
Styrene	U		0.545	2.50	5	11/09/2023 16:42	WG2167871
1,1,1,2-Tetrachloroethane	U		0.100	0.500	5	11/09/2023 16:42	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0780	0.500	5	11/09/2023 16:42	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.135	0.500	5	11/09/2023 16:42	WG2167871
Tetrachloroethene	U		0.140	0.500	5	11/09/2023 16:42	WG2167871
Toluene	U		0.250	1.00	5	11/09/2023 16:42	WG2167871
1,2,3-Trichlorobenzene	U		0.125	2.50	5	11/09/2023 16:42	WG2167871
1,2,4-Trichlorobenzene	U		0.965	2.50	5	11/09/2023 16:42	WG2167871
1,1,1-Trichloroethane	U		0.0550	0.500	5	11/09/2023 16:42	WG2167871
1,1,2-Trichloroethane	U		0.177	0.500	5	11/09/2023 16:42	WG2167871
Trichloroethene	U		0.0800	0.200	5	11/09/2023 16:42	WG2167871
Trichlorofluoromethane	U		0.100	0.500	5	11/09/2023 16:42	WG2167871
1,2,3-Trichloropropane	U		1.02	2.50	5	11/09/2023 16:42	WG2167871
1,2,4-Trimethylbenzene	U		0.232	1.00	5	11/09/2023 16:42	WG2167871
1,2,3-Trimethylbenzene	U		0.230	1.00	5	11/09/2023 16:42	WG2167871
1,3,5-Trimethylbenzene	U		0.216	1.00	5	11/09/2023 16:42	WG2167871
Vinyl chloride	228		0.137	0.500	5	11/09/2023 16:42	WG2167871
Xylenes, Total	U		0.955	1.30	5	11/09/2023 16:42	WG2167871
Ethyl Ether	U		0.0850	0.500	5	11/09/2023 16:42	WG2167871
Tetrahydrofuran	U		0.450	2.50	5	11/09/2023 16:42	WG2167871
Iodomethane	U		1.21	2.50	5	11/09/2023 16:42	WG2167871
Allyl chloride	U		2.90	5.00	5	11/09/2023 16:42	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.280	1.00	5	11/09/2023 16:42	WG2167871
(S) Toluene-d8	*99.3*			*75.0-131*		*11/09/2023 16:42*	WG2167871
(S) 4-Bromofluorobenzene	*92.4*			*67.0-138*		*11/09/2023 16:42*	WG2167871
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/09/2023 16:42*	WG2167871

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	656000	T8	8450	20000	1	11/08/2023 18:45	WG2166962

Sample Narrative:
L1673863-03 WG2166962: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	43800	T8	379	1000	1	11/10/2023 09:49	WG2168330
Nitrate	94.0 J	B J T8	48.0	100	1	11/10/2023 09:49	WG2168330
Sulfate	911	J T8	594	5000	1	11/10/2023 09:49	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9170		102	1000	1	11/20/2023 12:59	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10900		28.1	100	1	11/10/2023 20:03	WG2166496
Manganese	1510		0.704	5.00	1	11/10/2023 20:03	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	23300		2.87	6.78	10	11/06/2023 19:12	WG2165659
Ethane	311		0.296	1.29	1	11/06/2023 17:26	WG2164806
Ethene	15.9		0.422	1.27	1	11/06/2023 17:26	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/09/2023 15:10	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 15:10	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 15:10	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 15:10	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 15:10	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 15:10	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 15:10	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 15:10	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 15:10	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 15:10	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 15:10	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 15:10	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 15:10	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 15:10	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 15:10	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 15:10	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 15:10	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 15:10	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 15:10	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 15:10	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/09/2023 15:10	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 15:10	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 15:10	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 15:10	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 15:10	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 15:10	WG2167871
1,2-Dichloroethane	0.140		0.0190	0.100	1	11/09/2023 15:10	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 15:10	WG2167871
cis-1,2-Dichloroethene	13.0		0.0276	0.100	1	11/09/2023 15:10	WG2167871
trans-1,2-Dichloroethene	3.47		0.0572	0.200	1	11/09/2023 15:10	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 15:10	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 15:10	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 15:10	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 15:10	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 15:10	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 15:10	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 15:10	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 15:10	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 15:10	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 15:10	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 15:10	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 15:10	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 15:10	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 15:10	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 15:10	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 15:10	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 15:10	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 15:10	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 15:10	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 15:10	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 15:10	WG2167871
Tetrachloroethene	0.125		0.0280	0.100	1	11/09/2023 15:10	WG2167871
Toluene	0.255		0.0500	0.200	1	11/09/2023 15:10	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 15:10	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 15:10	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 15:10	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 15:10	WG2167871
Trichloroethene	0.606		0.0160	0.0400	1	11/09/2023 15:10	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 15:10	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 15:10	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 15:10	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 15:10	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 15:10	WG2167871
Vinyl chloride	14.7		0.0273	0.100	1	11/09/2023 15:10	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 15:10	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 15:10	WG2167871
Tetrahydrofuran	3.45		0.0900	0.500	1	11/09/2023 15:10	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 15:10	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 15:10	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 15:10	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 15:10*	WG2167871
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/09/2023 15:10*	WG2167871
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/09/2023 15:10*	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/09/2023 15:28	WG2167871
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 15:28	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 15:28	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 15:28	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 15:28	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 15:28	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 15:28	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 15:28	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 15:28	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 15:28	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 15:28	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 15:28	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 15:28	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 15:28	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 15:28	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 15:28	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 15:28	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 15:28	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 15:28	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 15:28	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 15:28	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 15:28	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 15:28	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 15:28	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 15:28	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 15:28	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 15:28	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 15:28	WG2167871
cis-1,2-Dichloroethene	0.818		0.0276	0.100	1	11/09/2023 15:28	WG2167871
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/09/2023 15:28	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 15:28	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 15:28	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 15:28	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 15:28	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 15:28	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 15:28	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 15:28	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 15:28	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 15:28	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 15:28	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 15:28	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 15:28	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 15:28	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 15:28	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 15:28	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 15:28	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 15:28	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 15:28	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 15:28	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 15:28	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 15:28	WG2167871
Tetrachloroethene	U		0.0280	0.100	1	11/09/2023 15:28	WG2167871
Toluene	U		0.0500	0.200	1	11/09/2023 15:28	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 15:28	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 15:28	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 15:28	WG2167871

JC 2/13/24

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 15:28	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 15:28	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 15:28	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 15:28	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 15:28	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 15:28	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 15:28	WG2167871
Vinyl chloride	0.685		0.0273	0.100	1	11/09/2023 15:28	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 15:28	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 15:28	WG2167871
Tetrahydrofuran	U		0.0900	0.500	1	11/09/2023 15:28	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 15:28	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 15:28	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 15:28	WG2167871
(S) Toluene-d8	*98.9*			*75.0-131*		*11/09/2023 15:28*	WG2167871
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/09/2023 15:28*	WG2167871
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/09/2023 15:28*	WG2167871

JC 2/13/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 06:11	WG2168846
Acrylonitrile	U		0.0760	0.500	1	11/09/2023 15:47	WG2167871
Benzene	U		0.0160	0.0400	1	11/09/2023 15:47	WG2167871
Bromobenzene	U		0.0420	0.500	1	11/09/2023 15:47	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 15:47	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 15:47	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 15:47	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 15:47	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 15:47	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 15:47	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 15:47	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 15:47	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 15:47	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 15:47	WG2167871
Chloroform	U		0.0166	0.100	1	11/09/2023 15:47	WG2167871
Chloromethane	U		0.0556	0.500	1	11/09/2023 15:47	WG2167871
2-Chlorotoluene	U		0.0368	0.100	1	11/09/2023 15:47	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 15:47	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 15:47	WG2167871
1,2-Dibromoethane	U		0.0210	0.100	1	11/09/2023 15:47	WG2167871
Dibromomethane	U		0.0400	0.200	1	11/09/2023 15:47	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 15:47	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 15:47	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 15:47	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 15:47	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 15:47	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 15:47	WG2167871
1,1-Dichloroethene	U		0.0200	0.100	1	11/09/2023 15:47	WG2167871
cis-1,2-Dichloroethene	1.04	J	0.0276	0.100	1	11/09/2023 15:47	WG2167871
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/09/2023 15:47	WG2167871
1,2-Dichloropropane	U		0.0508	0.200	1	11/09/2023 15:47	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 15:47	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 15:47	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 15:47	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 15:47	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 15:47	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 15:47	WG2167871
Ethylbenzene	U		0.0212	0.100	1	11/09/2023 15:47	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 15:47	WG2167871
Isopropylbenzene	U		0.0345	0.100	1	11/09/2023 15:47	WG2167871
p-Isopropyltoluene	U		0.0932	0.200	1	11/09/2023 15:47	WG2167871
2-Butanone (MEK)	U		0.500	1.00	1	11/09/2023 15:47	WG2167871
Methylene Chloride	U		0.265	1.00	1	11/09/2023 15:47	WG2167871
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/09/2023 15:47	WG2167871
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/09/2023 15:47	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 15:47	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 15:47	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 15:47	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 15:47	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 15:47	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 15:47	WG2167871
Tetrachloroethene	2.56		0.0280	0.100	1	11/09/2023 15:47	WG2167871
Toluene	0.0560	J	0.0500	0.200	1	11/09/2023 15:47	WG2167871
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/09/2023 15:47	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 15:47	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 15:47	WG2167871

JC 2/13/24

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 15:47	WG2167871
Trichloroethene	0.211		0.0160	0.0400	1	11/09/2023 15:47	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 15:47	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 15:47	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 15:47	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 15:47	WG2167871
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/09/2023 15:47	WG2167871
Vinyl chloride	0.721	J	0.0273	0.100	1	11/09/2023 15:47	WG2167871
Xylenes, Total	U		0.191	0.260	1	11/09/2023 15:47	WG2167871
Ethyl Ether	U		0.0170	0.100	1	11/09/2023 15:47	WG2167871
Tetrahydrofuran	0.721		0.0900	0.500	1	11/09/2023 15:47	WG2167871
Iodomethane	U		0.242	0.500	1	11/09/2023 15:47	WG2167871
Allyl chloride	U		0.580	1.00	1	11/09/2023 15:47	WG2167871
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/09/2023 15:47	WG2167871
(S) Toluene-d8	*101*			*75.0-131*		*11/09/2023 15:47*	WG2167871
(S) Toluene-d8	*100*			*75.0-131*		*11/11/2023 06:11*	WG2168846
(S) 4-Bromofluorobenzene	*99.5*			*67.0-138*		*11/09/2023 15:47*	WG2167871
(S) 4-Bromofluorobenzene	*98.1*			*67.0-138*		*11/11/2023 06:11*	WG2168846
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/09/2023 15:47*	WG2167871
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/11/2023 06:11*	WG2168846

JC 2/13/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/13/2023 20:54	WG2170135
Acrylonitrile	U		0.0760	0.500	1	11/10/2023 23:31	WG2169072
Benzene	U		0.0160	0.0400	1	11/10/2023 23:31	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/10/2023 23:31	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/10/2023 23:31	WG2169072
Bromoform	U		0.239	1.00	1	11/10/2023 23:31	WG2169072
Bromomethane	U		0.148	0.500	1	11/10/2023 23:31	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/10/2023 23:31	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/10/2023 23:31	WG2169072
tert-Butylbenzene	U	~~J3~~	0.0620	0.200	1	11/10/2023 23:31	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2023 23:31	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/10/2023 23:31	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2023 23:31	WG2169072
Chloroethane	U		0.0432	0.200	1	11/10/2023 23:31	WG2169072
Chloroform	U		0.0166	0.100	1	11/10/2023 23:31	WG2169072
Chloromethane	U		0.0556	0.500	1	11/10/2023 23:31	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2023 23:31	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2023 23:31	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2023 23:31	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2023 23:31	WG2169072
Dibromomethane	U		0.0400	0.200	1	11/10/2023 23:31	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2023 23:31	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2023 23:31	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2023 23:31	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2023 23:31	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2023 23:31	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2023 23:31	WG2169072
1,1-Dichloroethene	U		0.0200	0.100	1	11/10/2023 23:31	WG2169072
cis-1,2-Dichloroethene	0.255	J	0.0276	0.100	1	11/10/2023 23:31	WG2169072
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/10/2023 23:31	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2023 23:31	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2023 23:31	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2023 23:31	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2023 23:31	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2023 23:31	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2023 23:31	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2023 23:31	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/10/2023 23:31	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2023 23:31	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/10/2023 23:31	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2023 23:31	WG2169072
2-Butanone (MEK)	U	~~J3 J4~~	0.500	1.00	1	11/10/2023 23:31	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/10/2023 23:31	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/10/2023 23:31	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2023 23:31	WG2169072
Naphthalene	U		0.124	0.500	1	11/10/2023 23:31	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/10/2023 23:31	WG2169072
Styrene	U		0.109	0.500	1	11/10/2023 23:31	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2023 23:31	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2023 23:31	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2023 23:31	WG2169072
Tetrachloroethene	2.26		0.0280	0.100	1	11/10/2023 23:31	WG2169072
Toluene	U		0.0500	0.200	1	11/10/2023 23:31	WG2169072
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/10/2023 23:31	WG2169072
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/10/2023 23:31	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2023 23:31	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2023 23:31	WG2169072
Trichloroethene	0.185		0.0160	0.0400	1	11/10/2023 23:31	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2023 23:31	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2023 23:31	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2023 23:31	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2023 23:31	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2023 23:31	WG2169072
Vinyl chloride	U	UJ	0.0273	0.100	1	11/10/2023 23:31	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/10/2023 23:31	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/10/2023 23:31	WG2169072
Tetrahydrofuran	1.02		0.0900	0.500	1	11/10/2023 23:31	WG2169072
Iodomethane	U	J3	0.242	0.500	1	11/10/2023 23:31	WG2169072
Allyl chloride	U		0.580	1.00	1	11/10/2023 23:31	WG2169072
Trans-1,4-Dichloro-2-butene	U	UJ C3 J4	0.0560	0.200	1	11/10/2023 23:31	WG2169072
(S) Toluene-d8	*95.0*			*75.0-131*		*11/10/2023 23:31*	WG2169072
(S) Toluene-d8	*101*			*75.0-131*		*11/13/2023 20:54*	WG2170135
(S) 4-Bromofluorobenzene	*92.3*			*67.0-138*		*11/10/2023 23:31*	WG2169072
(S) 4-Bromofluorobenzene	*109*			*67.0-138*		*11/13/2023 20:54*	WG2170135
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/10/2023 23:31*	WG2169072
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/13/2023 20:54*	WG2170135

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	298000		8450	20000	1	11/09/2023 14:34	WG2167358

Sample Narrative:
L1673863-07 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	42500	~~T8~~	379	1000	1	11/10/2023 10:02	WG2168330
Nitrate	78.0 J	B J T8	48.0	100	1	11/10/2023 10:02	WG2168330
Sulfate	20400	~~T8~~	594	5000	1	11/10/2023 10:02	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2050		102	1000	1	11/20/2023 13:18	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2030		28.1	100	1	11/10/2023 20:06	WG2166496
Manganese	667		0.704	5.00	1	11/10/2023 20:06	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	883	~~T8~~	0.287	0.678	1	11/06/2023 17:34	WG2164806
Ethane	23.3	~~T8~~	0.296	1.29	1	11/06/2023 17:34	WG2164806
Ethene	U	~~T8~~	0.422	1.27	1	11/06/2023 17:34	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/10/2023 23:50	WG2169072
Acrylonitrile	U		0.0760	0.500	1	11/10/2023 23:50	WG2169072
Benzene	U		0.0160	0.0400	1	11/10/2023 23:50	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/10/2023 23:50	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/10/2023 23:50	WG2169072
Bromoform	U		0.239	1.00	1	11/10/2023 23:50	WG2169072
Bromomethane	U		0.148	0.500	1	11/10/2023 23:50	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/10/2023 23:50	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/10/2023 23:50	WG2169072
tert-Butylbenzene	U	~~J3~~	0.0620	0.200	1	11/10/2023 23:50	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/10/2023 23:50	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/10/2023 23:50	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/10/2023 23:50	WG2169072
Chloroethane	U		0.0432	0.200	1	11/10/2023 23:50	WG2169072
Chloroform	U		0.0166	0.100	1	11/10/2023 23:50	WG2169072
Chloromethane	U		0.0556	0.500	1	11/10/2023 23:50	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/10/2023 23:50	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/10/2023 23:50	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/10/2023 23:50	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/10/2023 23:50	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/10/2023 23:50	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/10/2023 23:50	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/10/2023 23:50	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/10/2023 23:50	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/10/2023 23:50	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/10/2023 23:50	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/10/2023 23:50	WG2169072
1,1-Dichloroethene	U		0.0200	0.100	1	11/10/2023 23:50	WG2169072
cis-1,2-Dichloroethene	0.103		0.0276	0.100	1	11/10/2023 23:50	WG2169072
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/10/2023 23:50	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/10/2023 23:50	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/10/2023 23:50	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/10/2023 23:50	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/10/2023 23:50	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/10/2023 23:50	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/10/2023 23:50	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/10/2023 23:50	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/10/2023 23:50	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/10/2023 23:50	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/10/2023 23:50	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/10/2023 23:50	WG2169072
2-Butanone (MEK)	U	~~J3 J4~~	0.500	1.00	1	11/10/2023 23:50	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/10/2023 23:50	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/10/2023 23:50	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/10/2023 23:50	WG2169072
Naphthalene	U		0.124	0.500	1	11/10/2023 23:50	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/10/2023 23:50	WG2169072
Styrene	U		0.109	0.500	1	11/10/2023 23:50	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/10/2023 23:50	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/10/2023 23:50	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/10/2023 23:50	WG2169072
Tetrachloroethene	U		0.0280	0.100	1	11/10/2023 23:50	WG2169072
Toluene	U		0.0500	0.200	1	11/10/2023 23:50	WG2169072
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/10/2023 23:50	WG2169072
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/10/2023 23:50	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/10/2023 23:50	WG2169072
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/10/2023 23:50	WG2169072
Trichloroethene	U		0.0160	0.0400	1	11/10/2023 23:50	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/10/2023 23:50	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/10/2023 23:50	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/10/2023 23:50	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/10/2023 23:50	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/10/2023 23:50	WG2169072
Vinyl chloride	0.135		0.0273	0.100	1	11/10/2023 23:50	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/10/2023 23:50	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/10/2023 23:50	WG2169072
Tetrahydrofuran	0.214	J	0.0900	0.500	1	11/10/2023 23:50	WG2169072
Iodomethane	U	~~J3~~	0.242	0.500	1	11/10/2023 23:50	WG2169072
Allyl chloride	U		0.580	1.00	1	11/10/2023 23:50	WG2169072
Trans-1,4-Dichloro-2-butene	U	UJ C3 J4	0.0560	0.200	1	11/10/2023 23:50	WG2169072
(S) Toluene-d8	*95.3*			*75.0-131*		*11/10/2023 23:50*	WG2169072
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*11/10/2023 23:50*	WG2169072
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/10/2023 23:50*	WG2169072

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	271000		8450	20000	1	11/09/2023 14:47	WG2167358

Sample Narrative:
L1673863-08 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	19700	~~T8~~	379	1000	1	11/10/2023 10:40	WG2168330
Nitrate	108 J	B T8	48.0	100	1	11/10/2023 10:40	WG2168330
Sulfate	45400	~~T8~~	594	5000	1	11/10/2023 10:40	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6280		102	1000	1	11/20/2023 13:55	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4270		28.1	100	1	11/10/2023 20:10	WG2166496
Manganese	1340		0.704	5.00	1	11/10/2023 20:10	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4310	~~T8~~	0.287	0.678	1	11/06/2023 17:45	WG2164806
Ethane	7.79	T8	0.296	1.29	1	11/06/2023 17:45	WG2164806
Ethene	32.5	~~T8~~	0.422	1.27	1	11/06/2023 17:45	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/13/2023 21:13	WG2170135
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 00:09	WG2169072
Benzene	U		0.0160	0.0400	1	11/11/2023 00:09	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/11/2023 00:09	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 00:09	WG2169072
Bromoform	U		0.239	1.00	1	11/11/2023 00:09	WG2169072
Bromomethane	U		0.148	0.500	1	11/11/2023 00:09	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 00:09	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 00:09	WG2169072
tert-Butylbenzene	U	~~J3~~	0.0620	0.200	1	11/11/2023 00:09	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 00:09	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 00:09	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 00:09	WG2169072
Chloroethane	0.990		0.0432	0.200	1	11/11/2023 00:09	WG2169072
Chloroform	U		0.0166	0.100	1	11/11/2023 00:09	WG2169072
Chloromethane	U		0.0556	0.500	1	11/11/2023 00:09	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 00:09	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 00:09	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 00:09	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 00:09	WG2169072

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/11/2023 00:09	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 00:09	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 00:09	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 00:09	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 00:09	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 00:09	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 00:09	WG2169072
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 00:09	WG2169072
cis-1,2-Dichloroethene	2.43		0.0276	0.100	1	11/11/2023 00:09	WG2169072
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 00:09	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 00:09	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 00:09	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 00:09	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 00:09	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 00:09	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 00:09	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 00:09	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 00:09	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 00:09	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 00:09	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 00:09	WG2169072
2-Butanone (MEK)	U	~~J3 J4~~	0.500	1.00	1	11/11/2023 00:09	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/11/2023 00:09	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 00:09	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 00:09	WG2169072
Naphthalene	U		0.124	0.500	1	11/11/2023 00:09	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 00:09	WG2169072
Styrene	U		0.109	0.500	1	11/11/2023 00:09	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 00:09	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 00:09	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 00:09	WG2169072
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 00:09	WG2169072
Toluene	0.144	J	0.0500	0.200	1	11/11/2023 00:09	WG2169072
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 00:09	WG2169072
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 00:09	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 00:09	WG2169072
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 00:09	WG2169072
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 00:09	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 00:09	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 00:09	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 00:09	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 00:09	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 00:09	WG2169072
Vinyl chloride	30.4		0.0273	0.100	1	11/11/2023 00:09	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/11/2023 00:09	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 00:09	WG2169072
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 00:09	WG2169072
Iodomethane	U	~~J3~~	0.242	0.500	1	11/11/2023 00:09	WG2169072
Allyl chloride	U		0.580	1.00	1	11/11/2023 00:09	WG2169072
Trans-1,4-Dichloro-2-butene	U	UJ C3 J4	0.0560	0.200	1	11/11/2023 00:09	WG2169072
(S) Toluene-d8	*94.8*			*75.0-131*		*11/11/2023 00:09*	WG2169072
(S) Toluene-d8	*103*			*75.0-131*		*11/13/2023 21:13*	WG2170135
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/11/2023 00:09*	WG2169072
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/13/2023 21:13*	WG2170135
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/11/2023 00:09*	WG2169072
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/13/2023 21:13*	WG2170135

JC 2/13/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	486000		8450	20000	1	11/09/2023 14:54	WG2167358

Sample Narrative:
L1673863-09 WG2167358: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	86400	~~T8~~	379	1000	1	11/10/2023 10:53	WG2168330
Nitrate	75.6 J	B J T8	48.0	100	1	11/10/2023 10:53	WG2168330
Sulfate	824	J ~~T8~~	594	5000	1	11/10/2023 10:53	WG2168330

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13300		102	1000	1	11/20/2023 14:18	WG2172266

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	7410		28.1	100	1	11/10/2023 20:13	WG2166496
Manganese	889		0.704	5.00	1	11/10/2023 20:13	WG2166496

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	33100	~~T8~~	2.87	6.78	10	11/06/2023 19:18	WG2165659
Ethane	171	~~T8~~	0.296	1.29	1	11/06/2023 17:52	WG2164806
Ethene	5.19	~~T8~~	0.422	1.27	1	11/06/2023 17:52	WG2164806

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/13/2023 21:32	WG2170135
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 00:28	WG2169072
Benzene	0.119		0.0160	0.0400	1	11/11/2023 00:28	WG2169072
Bromobenzene	U		0.0420	0.500	1	11/11/2023 00:28	WG2169072
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 00:28	WG2169072
Bromoform	U		0.239	1.00	1	11/11/2023 00:28	WG2169072
Bromomethane	U		0.148	0.500	1	11/11/2023 00:28	WG2169072
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 00:28	WG2169072
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 00:28	WG2169072
tert-Butylbenzene	U	~~J3~~	0.0620	0.200	1	11/11/2023 00:28	WG2169072
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 00:28	WG2169072
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 00:28	WG2169072
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 00:28	WG2169072
Chloroethane	U		0.0432	0.200	1	11/11/2023 00:28	WG2169072
Chloroform	U		0.0166	0.100	1	11/11/2023 00:28	WG2169072
Chloromethane	U		0.0556	0.500	1	11/11/2023 00:28	WG2169072
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 00:28	WG2169072
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 00:28	WG2169072
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 00:28	WG2169072
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 00:28	WG2169072

JC 2/13/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/11/2023 00:28	WG2169072
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 00:28	WG2169072
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 00:28	WG2169072
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 00:28	WG2169072
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 00:28	WG2169072
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 00:28	WG2169072
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 00:28	WG2169072
1,1-Dichloroethene	0.0580	J	0.0200	0.100	1	11/11/2023 00:28	WG2169072
cis-1,2-Dichloroethene	0.156		0.0276	0.100	1	11/11/2023 00:28	WG2169072
trans-1,2-Dichloroethene	0.244		0.0572	0.200	1	11/11/2023 00:28	WG2169072
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 00:28	WG2169072
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 00:28	WG2169072
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 00:28	WG2169072
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 00:28	WG2169072
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 00:28	WG2169072
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 00:28	WG2169072
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 00:28	WG2169072
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 00:28	WG2169072
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 00:28	WG2169072
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 00:28	WG2169072
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 00:28	WG2169072
2-Butanone (MEK)	U	~~J3~~ J4	0.500	1.00	1	11/11/2023 00:28	WG2169072
Methylene Chloride	U		0.265	1.00	1	11/11/2023 00:28	WG2169072
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 00:28	WG2169072
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 00:28	WG2169072
Naphthalene	U		0.124	0.500	1	11/11/2023 00:28	WG2169072
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 00:28	WG2169072
Styrene	U		0.109	0.500	1	11/11/2023 00:28	WG2169072
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 00:28	WG2169072
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 00:28	WG2169072
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 00:28	WG2169072
Tetrachloroethene	0.0380	J	0.0280	0.100	1	11/11/2023 00:28	WG2169072
Toluene	0.0640	J	0.0500	0.200	1	11/11/2023 00:28	WG2169072
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 00:28	WG2169072
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 00:28	WG2169072
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 00:28	WG2169072
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 00:28	WG2169072
Trichloroethene	0.0550		0.0160	0.0400	1	11/11/2023 00:28	WG2169072
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 00:28	WG2169072
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 00:28	WG2169072
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 00:28	WG2169072
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 00:28	WG2169072
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 00:28	WG2169072
Vinyl chloride	4.10		0.0273	0.100	1	11/11/2023 00:28	WG2169072
Xylenes, Total	U		0.191	0.260	1	11/11/2023 00:28	WG2169072
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 00:28	WG2169072
Tetrahydrofuran	4.60		0.0900	0.500	1	11/11/2023 00:28	WG2169072
Iodomethane	U	~~J3~~	0.242	0.500	1	11/11/2023 00:28	WG2169072
Allyl chloride	U		0.580	1.00	1	11/11/2023 00:28	WG2169072
Trans-1,4-Dichloro-2-butene	U	UJ C3 J4	0.0560	0.200	1	11/11/2023 00:28	WG2169072
(S) Toluene-d8	*95.1*			*75.0-131*		*11/11/2023 00:28*	WG2169072
(S) Toluene-d8	*102*			*75.0-131*		*11/13/2023 21:32*	WG2170135
(S) 4-Bromofluorobenzene	*90.6*			*67.0-138*		*11/11/2023 00:28*	WG2169072
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/13/2023 21:32*	WG2170135
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/11/2023 00:28*	WG2169072
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/13/2023 21:32*	WG2170135

JC 1/18/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	350000		8450	20000	1	11/08/2023 14:06	WG2166111

Sample Narrative:
L1673871-01 WG2166111: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	110000		379	1000	1	11/08/2023 21:43	WG2166836
Nitrate	76.7 J	B J Q	48.0	100	1	11/08/2023 21:43	WG2166836
Sulfate	11600		594	5000	1	11/08/2023 21:43	WG2166836

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6970		102	1000	1	11/16/2023 06:19	WG2171405

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3680		140	500	5	11/09/2023 17:04	WG2167812
Manganese	682		3.52	25.0	5	11/09/2023 17:04	WG2167812

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6720		0.287	0.678	1	11/07/2023 11:36	WG2165206
Ethane	20.8		0.296	1.29	1	11/07/2023 11:36	WG2165206
Ethene	551		0.422	1.27	1	11/07/2023 11:36	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		137	250	250	11/09/2023 17:01	WG2167871
Acrylonitrile	U		19.0	125	250	11/09/2023 17:01	WG2167871
Benzene	U		4.00	10.0	250	11/09/2023 17:01	WG2167871
Bromobenzene	U		10.5	125	250	11/09/2023 17:01	WG2167871
Bromodichloromethane	U		7.88	25.0	250	11/09/2023 17:01	WG2167871
Bromoform	U		59.8	250	250	11/09/2023 17:01	WG2167871
Bromomethane	U		37.0	125	250	11/09/2023 17:01	WG2167871
n-Butylbenzene	U		38.3	125	250	11/09/2023 17:01	WG2167871
sec-Butylbenzene	U		25.3	125	250	11/09/2023 17:01	WG2167871
tert-Butylbenzene	U		15.5	50.0	250	11/09/2023 17:01	WG2167871
Carbon tetrachloride	U		10.8	50.0	250	11/09/2023 17:01	WG2167871
Chlorobenzene	U		5.73	25.0	250	11/09/2023 17:01	WG2167871
Chlorodibromomethane	U		4.50	25.0	250	11/09/2023 17:01	WG2167871
Chloroethane	U		10.8	50.0	250	11/09/2023 17:01	WG2167871
Chloroform	U		4.15	25.0	250	11/09/2023 17:01	WG2167871
Chloromethane	U		13.9	125	250	11/09/2023 17:01	WG2167871
2-Chlorotoluene	U		9.20	25.0	250	11/09/2023 17:01	WG2167871
4-Chlorotoluene	U		11.3	50.0	250	11/09/2023 17:01	WG2167871
1,2-Dibromo-3-Chloropropane	U		51.0	250	250	11/09/2023 17:01	WG2167871
1,2-Dibromoethane	U		5.25	25.0	250	11/09/2023 17:01	WG2167871

JC 2/2/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		10.0	50.0	250	11/09/2023 17:01	WG2167871
1,2-Dichlorobenzene	U		14.5	50.0	250	11/09/2023 17:01	WG2167871
1,3-Dichlorobenzene	U		17.0	50.0	250	11/09/2023 17:01	WG2167871
1,4-Dichlorobenzene	U		19.7	50.0	250	11/09/2023 17:01	WG2167871
Dichlorodifluoromethane	U		8.18	25.0	250	11/09/2023 17:01	WG2167871
1,1-Dichloroethane	U		5.75	25.0	250	11/09/2023 17:01	WG2167871
1,2-Dichloroethane	U		4.75	25.0	250	11/09/2023 17:01	WG2167871
1,1-Dichloroethene	U		5.00	25.0	250	11/09/2023 17:01	WG2167871
cis-1,2-Dichloroethene	4140		6.90	25.0	250	11/09/2023 17:01	WG2167871
trans-1,2-Dichloroethene	14.5	J	14.3	50.0	250	11/09/2023 17:01	WG2167871
1,2-Dichloropropane	U		12.7	50.0	250	11/09/2023 17:01	WG2167871
1,1-Dichloropropene	U		7.00	25.0	250	11/09/2023 17:01	WG2167871
1,3-Dichloropropane	U		17.5	50.0	250	11/09/2023 17:01	WG2167871
cis-1,3-Dichloropropene	U		6.78	25.0	250	11/09/2023 17:01	WG2167871
trans-1,3-Dichloropropene	U		15.3	50.0	250	11/09/2023 17:01	WG2167871
2,2-Dichloropropane	U		7.93	25.0	250	11/09/2023 17:01	WG2167871
Di-isopropyl ether	U		3.50	10.0	250	11/09/2023 17:01	WG2167871
Ethylbenzene	U		5.30	25.0	250	11/09/2023 17:01	WG2167871
Hexachloro-1,3-butadiene	U		127	250	250	11/09/2023 17:01	WG2167871
Isopropylbenzene	U		8.63	25.0	250	11/09/2023 17:01	WG2167871
p-Isopropyltoluene	U		23.3	50.0	250	11/09/2023 17:01	WG2167871
2-Butanone (MEK)	U		125	250	250	11/09/2023 17:01	WG2167871
Methylene Chloride	72.3	J	66.3	250	250	11/09/2023 17:01	WG2167871
4-Methyl-2-pentanone (MIBK)	U		100	250	250	11/09/2023 17:01	WG2167871
Methyl tert-butyl ether	U		2.95	10.0	250	11/09/2023 17:01	WG2167871
Naphthalene	U		31.0	125	250	11/09/2023 17:01	WG2167871
n-Propylbenzene	U		11.8	50.0	250	11/09/2023 17:01	WG2167871
Styrene	U		27.3	125	250	11/09/2023 17:01	WG2167871
1,1,1,2-Tetrachloroethane	U		5.00	25.0	250	11/09/2023 17:01	WG2167871
1,1,2,2-Tetrachloroethane	U		3.90	25.0	250	11/09/2023 17:01	WG2167871
1,1,2-Trichlorotrifluoroethane	U		6.75	25.0	250	11/09/2023 17:01	WG2167871
Tetrachloroethene	U		7.00	25.0	250	11/09/2023 17:01	WG2167871
Toluene	U		12.5	50.0	250	11/09/2023 17:01	WG2167871
1,2,3-Trichlorobenzene	U		6.25	125	250	11/09/2023 17:01	WG2167871
1,2,4-Trichlorobenzene	U		48.3	125	250	11/09/2023 17:01	WG2167871
1,1,1-Trichloroethane	U		2.75	25.0	250	11/09/2023 17:01	WG2167871
1,1,2-Trichloroethane	U		8.83	25.0	250	11/09/2023 17:01	WG2167871
Trichloroethene	94.8		4.00	10.0	250	11/09/2023 17:01	WG2167871
Trichlorofluoromethane	U		5.00	25.0	250	11/09/2023 17:01	WG2167871
1,2,3-Trichloropropane	U		51.0	125	250	11/09/2023 17:01	WG2167871
1,2,4-Trimethylbenzene	U		11.6	50.0	250	11/09/2023 17:01	WG2167871
1,2,3-Trimethylbenzene	U		11.5	50.0	250	11/09/2023 17:01	WG2167871
1,3,5-Trimethylbenzene	U		10.8	50.0	250	11/09/2023 17:01	WG2167871
Vinyl chloride	1410		6.82	25.0	250	11/09/2023 17:01	WG2167871
Xylenes, Total	U		47.8	65.0	250	11/09/2023 17:01	WG2167871
Ethyl Ether	U		4.25	25.0	250	11/09/2023 17:01	WG2167871
Tetrahydrofuran	U		22.5	125	250	11/09/2023 17:01	WG2167871
Iodomethane	U		60.5	125	250	11/09/2023 17:01	WG2167871
Allyl chloride	U		145	250	250	11/09/2023 17:01	WG2167871
Trans-1,4-Dichloro-2-butene	U		14.0	50.0	250	11/09/2023 17:01	WG2167871
(S) Toluene-d8	*99.4*			*75.0-131*		*11/09/2023 17:01*	WG2167871
(S) 4-Bromofluorobenzene	*93.3*			*67.0-138*		*11/09/2023 17:01*	WG2167871
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/09/2023 17:01*	WG2167871

JC 2/2/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1010000		8450	20000	1	11/08/2023 12:07	WG2165406

Sample Narrative:
L1673871-02 WG2165406: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	89400		379	1000	1	11/08/2023 21:56	WG2166836
Nitrate	71.4 J	B J Q	48.0	100	1	11/08/2023 21:56	WG2166836
Sulfate	U		594	5000	1	11/08/2023 21:56	WG2166836

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	26200		102	1000	1	11/16/2023 06:39	WG2171405

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	25700		1400	5000	50	11/09/2023 17:07	WG2167812
Manganese	5930		35.2	250	50	11/09/2023 17:07	WG2167812

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25700		2.87	6.78	10	11/07/2023 14:58	WG2166209
Ethane	378		0.296	1.29	1	11/07/2023 11:52	WG2165206
Ethene	6.89		0.422	1.27	1	11/07/2023 11:52	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ	0.548	1.00	1	11/09/2023 16:05	WG2167871
Acrylonitrile	U	UJ	0.0760	0.500	1	11/09/2023 16:05	WG2167871
Benzene	0.105	J	0.0160	0.0400	1	11/09/2023 16:05	WG2167871
Bromobenzene	U	UJ	0.0420	0.500	1	11/09/2023 16:05	WG2167871
Bromodichloromethane	U		0.0315	0.100	1	11/09/2023 16:05	WG2167871
Bromoform	U		0.239	1.00	1	11/09/2023 16:05	WG2167871
Bromomethane	U		0.148	0.500	1	11/09/2023 16:05	WG2167871
n-Butylbenzene	U		0.153	0.500	1	11/09/2023 16:05	WG2167871
sec-Butylbenzene	U		0.101	0.500	1	11/09/2023 16:05	WG2167871
tert-Butylbenzene	U		0.0620	0.200	1	11/09/2023 16:05	WG2167871
Carbon tetrachloride	U		0.0432	0.200	1	11/09/2023 16:05	WG2167871
Chlorobenzene	U		0.0229	0.100	1	11/09/2023 16:05	WG2167871
Chlorodibromomethane	U		0.0180	0.100	1	11/09/2023 16:05	WG2167871
Chloroethane	U		0.0432	0.200	1	11/09/2023 16:05	WG2167871
Chloroform	U	UJ	0.0166	0.100	1	11/09/2023 16:05	WG2167871
Chloromethane	0.0570	J J	0.0556	0.500	1	11/09/2023 16:05	WG2167871
2-Chlorotoluene	U	UJ	0.0368	0.100	1	11/09/2023 16:05	WG2167871
4-Chlorotoluene	U		0.0452	0.200	1	11/09/2023 16:05	WG2167871
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/09/2023 16:05	WG2167871
1,2-Dibromoethane	U	UJ	0.0210	0.100	1	11/09/2023 16:05	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	UJ	0.0400	0.200	1	11/09/2023 16:05	WG2167871
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/09/2023 16:05	WG2167871
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/09/2023 16:05	WG2167871
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/09/2023 16:05	WG2167871
Dichlorodifluoromethane	U		0.0327	0.100	1	11/09/2023 16:05	WG2167871
1,1-Dichloroethane	U		0.0230	0.100	1	11/09/2023 16:05	WG2167871
1,2-Dichloroethane	U		0.0190	0.100	1	11/09/2023 16:05	WG2167871
1,1-Dichloroethene	U	UJ	0.0200	0.100	1	11/09/2023 16:05	WG2167871
cis-1,2-Dichloroethene	7.03	J	0.0276	0.100	1	11/09/2023 16:05	WG2167871
trans-1,2-Dichloroethene	1.21	J	0.0572	0.200	1	11/09/2023 16:05	WG2167871
1,2-Dichloropropane	U	UJ	0.0508	0.200	1	11/09/2023 16:05	WG2167871
1,1-Dichloropropene	U		0.0280	0.100	1	11/09/2023 16:05	WG2167871
1,3-Dichloropropane	U		0.0700	0.200	1	11/09/2023 16:05	WG2167871
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/09/2023 16:05	WG2167871
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/09/2023 16:05	WG2167871
2,2-Dichloropropane	U		0.0317	0.100	1	11/09/2023 16:05	WG2167871
Di-isopropyl ether	U		0.0140	0.0400	1	11/09/2023 16:05	WG2167871
Ethylbenzene	U	UJ	0.0212	0.100	1	11/09/2023 16:05	WG2167871
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/09/2023 16:05	WG2167871
Isopropylbenzene	0.0800	J J	0.0345	0.100	1	11/09/2023 16:05	WG2167871
p-Isopropyltoluene	U	UJ	0.0932	0.200	1	11/09/2023 16:05	WG2167871
2-Butanone (MEK)	0.907	J J	0.500	1.00	1	11/09/2023 16:05	WG2167871
Methylene Chloride	U	UJ	0.265	1.00	1	11/09/2023 16:05	WG2167871
4-Methyl-2-pentanone (MIBK)	0.434	J J	0.400	1.00	1	11/09/2023 16:05	WG2167871
Methyl tert-butyl ether	U	UJ	0.0118	0.0400	1	11/09/2023 16:05	WG2167871
Naphthalene	U		0.124	0.500	1	11/09/2023 16:05	WG2167871
n-Propylbenzene	U		0.0472	0.200	1	11/09/2023 16:05	WG2167871
Styrene	U		0.109	0.500	1	11/09/2023 16:05	WG2167871
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/09/2023 16:05	WG2167871
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/09/2023 16:05	WG2167871
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/09/2023 16:05	WG2167871
Tetrachloroethene	U	UJ	0.0280	0.100	1	11/09/2023 16:05	WG2167871
Toluene	0.311	J	0.0500	0.200	1	11/09/2023 16:05	WG2167871
1,2,3-Trichlorobenzene	U	UJ	0.0250	0.500	1	11/09/2023 16:05	WG2167871
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/09/2023 16:05	WG2167871
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/09/2023 16:05	WG2167871
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/09/2023 16:05	WG2167871
Trichloroethene	U		0.0160	0.0400	1	11/09/2023 16:05	WG2167871
Trichlorofluoromethane	U		0.0200	0.100	1	11/09/2023 16:05	WG2167871
1,2,3-Trichloropropane	U		0.204	0.500	1	11/09/2023 16:05	WG2167871
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/09/2023 16:05	WG2167871
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/09/2023 16:05	WG2167871
1,3,5-Trimethylbenzene	U	UJ	0.0432	0.200	1	11/09/2023 16:05	WG2167871
Vinyl chloride	10.3	J	0.0273	0.100	1	11/09/2023 16:05	WG2167871
Xylenes, Total	U	UJ	0.191	0.260	1	11/09/2023 16:05	WG2167871
Ethyl Ether	U	UJ	0.0170	0.100	1	11/09/2023 16:05	WG2167871
Tetrahydrofuran	2.42	J	0.0900	0.500	1	11/09/2023 16:05	WG2167871
Iodomethane	U	UJ	0.242	0.500	1	11/09/2023 16:05	WG2167871
Allyl chloride	U	UJ	0.580	1.00	1	11/09/2023 16:05	WG2167871
Trans-1,4-Dichloro-2-butene	U	UJ	0.0560	0.200	1	11/09/2023 16:05	WG2167871
(S) Toluene-d8	*99.4*			*75.0-131*		*11/09/2023 16:05*	WG2167871
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/09/2023 16:05*	WG2167871
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/09/2023 16:05*	WG2167871

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	640000		8450	20000	1	11/08/2023 15:05	WG2166444

Sample Narrative:

L1673871-03 WG2166444: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	95100		379	1000	1	11/08/2023 22:09	WG2166836
Nitrate	120 J	B Q	48.0	100	1	11/08/2023 22:09	WG2166836
Sulfate	U		594	5000	1	11/08/2023 22:09	WG2166836

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	32700		102	1000	1	11/16/2023 06:58	WG2171405

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	15800		281	1000	10	11/09/2023 17:10	WG2167812
Manganese	1860		7.04	50.0	10	11/09/2023 17:10	WG2167812

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	19600		2.87	6.78	10	11/07/2023 15:03	WG2166209
Ethane	230		0.296	1.29	1	11/07/2023 12:05	WG2165206
Ethene	1230		0.422	1.27	1	11/07/2023 12:05	WG2165206

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		110	200	200	11/09/2023 17:19	WG2167871
Acrylonitrile	U		15.2	100	200	11/09/2023 17:19	WG2167871
Benzene	U		3.20	8.00	200	11/09/2023 17:19	WG2167871
Bromobenzene	U		8.40	100	200	11/09/2023 17:19	WG2167871
Bromodichloromethane	U		6.30	20.0	200	11/09/2023 17:19	WG2167871
Bromoform	U		47.8	200	200	11/09/2023 17:19	WG2167871
Bromomethane	U		29.6	100	200	11/09/2023 17:19	WG2167871
n-Butylbenzene	U		30.6	100	200	11/09/2023 17:19	WG2167871
sec-Butylbenzene	U		20.2	100	200	11/09/2023 17:19	WG2167871
tert-Butylbenzene	U		12.4	40.0	200	11/09/2023 17:19	WG2167871
Carbon tetrachloride	U		8.64	40.0	200	11/09/2023 17:19	WG2167871
Chlorobenzene	U		4.58	20.0	200	11/09/2023 17:19	WG2167871
Chlorodibromomethane	U		3.60	20.0	200	11/09/2023 17:19	WG2167871
Chloroethane	U		8.64	40.0	200	11/09/2023 17:19	WG2167871
Chloroform	U		3.32	20.0	200	11/09/2023 17:19	WG2167871
Chloromethane	U		11.1	100	200	11/09/2023 17:19	WG2167871
2-Chlorotoluene	U		7.36	20.0	200	11/09/2023 17:19	WG2167871
4-Chlorotoluene	U		9.04	40.0	200	11/09/2023 17:19	WG2167871
1,2-Dibromo-3-Chloropropane	U		40.8	200	200	11/09/2023 17:19	WG2167871
1,2-Dibromoethane	U		4.20	20.0	200	11/09/2023 17:19	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		8.00	40.0	200	11/09/2023 17:19	WG2167871
1,2-Dichlorobenzene	U		11.6	40.0	200	11/09/2023 17:19	WG2167871
1,3-Dichlorobenzene	U		13.6	40.0	200	11/09/2023 17:19	WG2167871
1,4-Dichlorobenzene	U		15.8	40.0	200	11/09/2023 17:19	WG2167871
Dichlorodifluoromethane	U		6.54	20.0	200	11/09/2023 17:19	WG2167871
1,1-Dichloroethane	U		4.60	20.0	200	11/09/2023 17:19	WG2167871
1,2-Dichloroethane	U		3.80	20.0	200	11/09/2023 17:19	WG2167871
1,1-Dichloroethene	U		4.00	20.0	200	11/09/2023 17:19	WG2167871
cis-1,2-Dichloroethene	7530		5.52	20.0	200	11/09/2023 17:19	WG2167871
trans-1,2-Dichloroethene	28.4	J	11.4	40.0	200	11/09/2023 17:19	WG2167871
1,2-Dichloropropane	U		10.2	40.0	200	11/09/2023 17:19	WG2167871
1,1-Dichloropropene	U		5.60	20.0	200	11/09/2023 17:19	WG2167871
1,3-Dichloropropane	U		14.0	40.0	200	11/09/2023 17:19	WG2167871
cis-1,3-Dichloropropene	U		5.42	20.0	200	11/09/2023 17:19	WG2167871
trans-1,3-Dichloropropene	U		12.2	40.0	200	11/09/2023 17:19	WG2167871
2,2-Dichloropropane	U		6.34	20.0	200	11/09/2023 17:19	WG2167871
Di-isopropyl ether	U		2.80	8.00	200	11/09/2023 17:19	WG2167871
Ethylbenzene	U		4.24	20.0	200	11/09/2023 17:19	WG2167871
Hexachloro-1,3-butadiene	U		102	200	200	11/09/2023 17:19	WG2167871
Isopropylbenzene	U		6.90	20.0	200	11/09/2023 17:19	WG2167871
p-Isopropyltoluene	U		18.6	40.0	200	11/09/2023 17:19	WG2167871
2-Butanone (MEK)	U		100	200	200	11/09/2023 17:19	WG2167871
Methylene Chloride	U		53.0	200	200	11/09/2023 17:19	WG2167871
4-Methyl-2-pentanone (MIBK)	U		80.0	200	200	11/09/2023 17:19	WG2167871
Methyl tert-butyl ether	U		2.36	8.00	200	11/09/2023 17:19	WG2167871
Naphthalene	U		24.8	100	200	11/09/2023 17:19	WG2167871
n-Propylbenzene	U		9.44	40.0	200	11/09/2023 17:19	WG2167871
Styrene	U		21.8	100	200	11/09/2023 17:19	WG2167871
1,1,1,2-Tetrachloroethane	U		4.00	20.0	200	11/09/2023 17:19	WG2167871
1,1,2,2-Tetrachloroethane	U		3.12	20.0	200	11/09/2023 17:19	WG2167871
1,1,2-Trichlorotrifluoroethane	U		5.40	20.0	200	11/09/2023 17:19	WG2167871
Tetrachloroethene	U		5.60	20.0	200	11/09/2023 17:19	WG2167871
Toluene	U		10.0	40.0	200	11/09/2023 17:19	WG2167871
1,2,3-Trichlorobenzene	U		5.00	100	200	11/09/2023 17:19	WG2167871
1,2,4-Trichlorobenzene	U		38.6	100	200	11/09/2023 17:19	WG2167871
1,1,1-Trichloroethane	U		2.20	20.0	200	11/09/2023 17:19	WG2167871
1,1,2-Trichloroethane	U		7.06	20.0	200	11/09/2023 17:19	WG2167871
Trichloroethene	U		3.20	8.00	200	11/09/2023 17:19	WG2167871
Trichlorofluoromethane	U		4.00	20.0	200	11/09/2023 17:19	WG2167871
1,2,3-Trichloropropane	U		40.8	100	200	11/09/2023 17:19	WG2167871
1,2,4-Trimethylbenzene	U		9.28	40.0	200	11/09/2023 17:19	WG2167871
1,2,3-Trimethylbenzene	U		9.20	40.0	200	11/09/2023 17:19	WG2167871
1,3,5-Trimethylbenzene	U		8.64	40.0	200	11/09/2023 17:19	WG2167871
Vinyl chloride	6830		5.46	20.0	200	11/09/2023 17:19	WG2167871
Xylenes, Total	U		38.2	52.0	200	11/09/2023 17:19	WG2167871
Ethyl Ether	U		3.40	20.0	200	11/09/2023 17:19	WG2167871
Tetrahydrofuran	U		18.0	100	200	11/09/2023 17:19	WG2167871
Iodomethane	U		48.4	100	200	11/09/2023 17:19	WG2167871
Allyl chloride	U		116	200	200	11/09/2023 17:19	WG2167871
Trans-1,4-Dichloro-2-butene	U		11.2	40.0	200	11/09/2023 17:19	WG2167871
(S) Toluene-d8	*105*			*75.0-131*		*11/09/2023 17:19*	WG2167871
(S) 4-Bromofluorobenzene	*89.7*			*67.0-138*		*11/09/2023 17:19*	WG2167871
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/09/2023 17:19*	WG2167871

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	11/11/2023 06:31	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 06:31	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 06:31	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 06:31	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 06:31	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 06:31	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 06:31	WG2169075
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 06:31	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 06:31	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 06:31	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 06:31	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 06:31	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 06:31	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 06:31	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 06:31	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 06:31	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 06:31	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 06:31	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 06:31	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 06:31	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 06:31	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 06:31	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 06:31	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 06:31	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 06:31	WG2169075
1,1-Dichloroethane	0.478		0.0230	0.100	1	11/11/2023 06:31	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 06:31	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 06:31	WG2169075
cis-1,2-Dichloroethene	0.724		0.0276	0.100	1	11/11/2023 06:31	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 06:31	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 06:31	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 06:31	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 06:31	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 06:31	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 06:31	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 06:31	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 06:31	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 06:31	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 06:31	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 06:31	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 06:31	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 06:31	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 06:31	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 06:31	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 06:31	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 06:31	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 06:31	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 06:31	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 06:31	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 06:31	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 06:31	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 06:31	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 06:31	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 06:31	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 06:31	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 06:31	WG2169075

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/11/2023 06:31	WG2169075
Trichloroethene	U			0.0160	0.0400	1	11/11/2023 06:31	WG2169075
Trichlorofluoromethane	U			0.0200	0.100	1	11/11/2023 06:31	WG2169075
1,2,3-Trichloropropane	U			0.204	0.500	1	11/11/2023 06:31	WG2169075
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/11/2023 06:31	WG2169075
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/11/2023 06:31	WG2169075
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/11/2023 06:31	WG2169075
Vinyl chloride	U			0.0273	0.100	1	11/11/2023 06:31	WG2169075
Xylenes, Total	U			0.191	0.260	1	11/11/2023 06:31	WG2169075
Ethyl Ether	U			0.0170	0.100	1	11/11/2023 06:31	WG2169075
Tetrahydrofuran	0.385		J	0.0900	0.500	1	11/11/2023 06:31	WG2169075
Iodomethane	U			0.242	0.500	1	11/11/2023 06:31	WG2169075
Allyl chloride	U			0.580	1.00	1	11/11/2023 06:31	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ	C3 ~~J3~~	0.0560	0.200	1	11/11/2023 06:31	WG2169075
(S) Toluene-d8	*92.6*				*75.0-131*		*11/11/2023 06:31*	WG2169075
(S) 4-Bromofluorobenzene	*89.4*				*67.0-138*		*11/11/2023 06:31*	WG2169075
(S) 1,2-Dichloroethane-d4	*112*				*70.0-130*		*11/11/2023 06:31*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	227000		8450	20000	1	11/12/2023 10:22	WG2167858

Sample Narrative:
L1674499-02 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15900		379	1000	1	11/07/2023 13:40	WG2166050
Nitrate	88.7	J	48.0	100	1	11/07/2023 13:40	WG2166050
Sulfate	36400		594	5000	1	11/07/2023 13:40	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6440		102	1000	1	11/22/2023 01:30	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2340		28.1	100	1	11/14/2023 16:45	WG2166505
Manganese	872		0.704	5.00	1	11/14/2023 16:45	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	4110		0.287	0.678	1	11/14/2023 10:39	WG2168264
Ethane	28.4		0.296	1.29	1	11/14/2023 10:39	WG2168264
Ethene	30.4		0.422	1.27	1	11/14/2023 10:39	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	14.5 J+	C5 J4	0.548	1.00	1	11/11/2023 06:50	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 06:50	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 06:50	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 06:50	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 06:50	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 06:50	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 06:50	WG2169075
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/11/2023 06:50	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 06:50	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 06:50	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 06:50	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 06:50	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 06:50	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 06:50	WG2169075
Chloroform	U	J4	0.0166	0.100	1	11/11/2023 06:50	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 06:50	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 06:50	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 06:50	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 06:50	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 06:50	WG2169075

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 06:50	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 06:50	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 06:50	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 06:50	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 06:50	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 06:50	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 06:50	WG2169075
1,1-Dichloroethene	0.134		0.0200	0.100	1	11/11/2023 06:50	WG2169075
cis-1,2-Dichloroethene	78.8		0.0276	0.100	1	11/11/2023 06:50	WG2169075
trans-1,2-Dichloroethene	0.0960	J	0.0572	0.200	1	11/11/2023 06:50	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 06:50	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 06:50	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 06:50	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 06:50	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 06:50	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 06:50	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 06:50	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 06:50	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 06:50	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 06:50	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 06:50	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 06:50	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 06:50	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 06:50	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 06:50	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 06:50	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 06:50	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 06:50	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 06:50	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 06:50	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 06:50	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 06:50	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 06:50	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 06:50	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 06:50	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 06:50	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 06:50	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 06:50	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 06:50	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 06:50	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 06:50	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 06:50	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 06:50	WG2169075
Vinyl chloride	64.8		0.0273	0.100	1	11/11/2023 06:50	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 06:50	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 06:50	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 06:50	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 06:50	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 06:50	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 06:50	WG2169075
(S) Toluene-d8	*94.8*			*75.0-131*		*11/11/2023 06:50*	WG2169075
(S) 4-Bromofluorobenzene	*89.4*			*67.0-138*		*11/11/2023 06:50*	WG2169075
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/11/2023 06:50*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	182000		8450	20000	1	11/12/2023 10:26	WG2167858

Sample Narrative:
L1674499-03 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22200		379	1000	1	11/07/2023 13:55	WG2166050
Nitrate	1660		48.0	100	1	11/07/2023 13:55	WG2166050
Sulfate	53800		594	5000	1	11/07/2023 13:55	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1350	~~B~~	102	1000	1	11/22/2023 01:48	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	952		28.1	100	1	11/14/2023 16:48	WG2166505
Manganese	344		0.704	5.00	1	11/14/2023 16:48	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17.4		0.287	0.678	1	11/14/2023 10:45	WG2168264
Ethane	0.758	J	0.296	1.29	1	11/14/2023 10:45	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 10:45	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.45	J+ C5 J4	0.548	1.00	1	11/11/2023 07:09	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 07:09	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 07:09	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 07:09	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 07:09	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 07:09	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 07:09	WG2169075
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 07:09	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 07:09	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 07:09	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 07:09	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 07:09	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 07:09	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 07:09	WG2169075
Chloroform	0.144	~~J4~~	0.0166	0.100	1	11/11/2023 07:09	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 07:09	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 07:09	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 07:09	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 07:09	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 07:09	WG2169075

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 07:09	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 07:09	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 07:09	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 07:09	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 07:09	WG2169075
1,1-Dichloroethane	1.42		0.0230	0.100	1	11/11/2023 07:09	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 07:09	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 07:09	WG2169075
cis-1,2-Dichloroethene	21.2		0.0276	0.100	1	11/11/2023 07:09	WG2169075
trans-1,2-Dichloroethene	0.161	J	0.0572	0.200	1	11/11/2023 07:09	WG2169075
1,2-Dichloropropane	0.570		0.0508	0.200	1	11/11/2023 07:09	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 07:09	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 07:09	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 07:09	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 07:09	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 07:09	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 07:09	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 07:09	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 07:09	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 07:09	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 07:09	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 07:09	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 07:09	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 07:09	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 07:09	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 07:09	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 07:09	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 07:09	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 07:09	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 07:09	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 07:09	WG2169075
Tetrachloroethene	58.3		0.0280	0.100	1	11/11/2023 07:09	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 07:09	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 07:09	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 07:09	WG2169075
1,1,1-Trichloroethane	0.215		0.0110	0.100	1	11/11/2023 07:09	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 07:09	WG2169075
Trichloroethene	17.5		0.0160	0.0400	1	11/11/2023 07:09	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 07:09	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 07:09	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 07:09	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 07:09	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 07:09	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 07:09	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 07:09	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 07:09	WG2169075
Tetrahydrofuran	0.480	J	0.0900	0.500	1	11/11/2023 07:09	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 07:09	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 07:09	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 J3	0.0560	0.200	1	11/11/2023 07:09	WG2169075
(S) Toluene-d8	*96.0*			*75.0-131*		*11/11/2023 07:09*	WG2169075
(S) 4-Bromofluorobenzene	*90.4*			*67.0-138*		*11/11/2023 07:09*	WG2169075
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/11/2023 07:09*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	587000		8450	20000	1	11/09/2023 11:01	WG2166959

Sample Narrative:
L1674499-04 WG2166959: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	63800		379	1000	1	11/07/2023 14:10	WG2166050
Nitrate	1040		48.0	100	1	11/07/2023 14:10	WG2166050
Sulfate	56000		594	5000	1	11/07/2023 14:10	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4500		102	1000	1	11/22/2023 02:03	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	17600		28.1	100	1	11/14/2023 16:52	WG2166505
Manganese	3740		0.704	5.00	1	11/14/2023 16:52	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	128		0.287	0.678	1	11/14/2023 10:52	WG2168264
Ethane	1.53		0.296	1.29	1	11/14/2023 10:52	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 10:52	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/11/2023 07:28	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 07:28	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 07:28	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 07:28	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 07:28	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 07:28	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 07:28	WG2169075
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 07:28	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 07:28	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 07:28	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 07:28	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 07:28	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 07:28	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 07:28	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 07:28	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 07:28	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 07:28	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 07:28	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 07:28	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 07:28	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	J4	0.0400	0.200	1	11/11/2023 07:28	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 07:28	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 07:28	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 07:28	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 07:28	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 07:28	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 07:28	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 07:28	WG2169075
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 07:28	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 07:28	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 07:28	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 07:28	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 07:28	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 07:28	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 07:28	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 07:28	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 07:28	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 07:28	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 07:28	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 07:28	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 07:28	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 07:28	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 07:28	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 07:28	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 07:28	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 07:28	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 07:28	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 07:28	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 07:28	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 07:28	WG2169075
1,1,2-Trichlorotrifluoroethane	U	J3	0.0270	0.100	1	11/11/2023 07:28	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 07:28	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 07:28	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 07:28	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 07:28	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 07:28	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 07:28	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 07:28	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 07:28	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 07:28	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 07:28	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 07:28	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 07:28	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 07:28	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 07:28	WG2169075
Ethyl Ether	0.191		0.0170	0.100	1	11/11/2023 07:28	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 07:28	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 07:28	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 07:28	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 J3	0.0560	0.200	1	11/11/2023 07:28	WG2169075
(S) Toluene-d8	*93.9*			*75.0-131*		*11/11/2023 07:28*	WG2169075
(S) 4-Bromofluorobenzene	*89.3*			*67.0-138*		*11/11/2023 07:28*	WG2169075
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/11/2023 07:28*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	329000		8450	20000	1	11/12/2023 10:30	WG2167858

Sample Narrative:
L1674504-01 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	59200		379	1000	1	11/07/2023 14:25	WG2166050
Nitrate	U		48.0	100	1	11/07/2023 14:25	WG2166050
Sulfate	29700		594	5000	1	11/07/2023 14:25	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6620		102	1000	1	11/22/2023 02:23	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	3170		28.1	100	1	11/14/2023 16:55	WG2166505
Manganese	3680		0.704	5.00	1	11/14/2023 16:55	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1730		0.287	0.678	1	11/14/2023 11:05	WG2168264
Ethane	26.0		0.296	1.29	1	11/14/2023 11:05	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 11:05	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	11.0	20.0	20	11/11/2023 11:37	WG2169075
Acrylonitrile	U		1.52	10.0	20	11/11/2023 11:37	WG2169075
Benzene	U		0.320	0.800	20	11/11/2023 11:37	WG2169075
Bromobenzene	U		0.840	10.0	20	11/11/2023 11:37	WG2169075
Bromodichloromethane	U		0.630	2.00	20	11/11/2023 11:37	WG2169075
Bromoform	U		4.78	20.0	20	11/11/2023 11:37	WG2169075
Bromomethane	U		2.96	10.0	20	11/11/2023 11:37	WG2169075
n-Butylbenzene	U	UJ C3	3.06	10.0	20	11/11/2023 11:37	WG2169075
sec-Butylbenzene	U		2.02	10.0	20	11/11/2023 11:37	WG2169075
tert-Butylbenzene	U		1.24	4.00	20	11/11/2023 11:37	WG2169075
Carbon tetrachloride	U		0.864	4.00	20	11/11/2023 11:37	WG2169075
Chlorobenzene	U		0.458	2.00	20	11/11/2023 11:37	WG2169075
Chlorodibromomethane	U		0.360	2.00	20	11/11/2023 11:37	WG2169075
Chloroethane	U		0.864	4.00	20	11/11/2023 11:37	WG2169075
Chloroform	U	~~J4~~	0.332	2.00	20	11/11/2023 11:37	WG2169075
Chloromethane	U		1.11	10.0	20	11/11/2023 11:37	WG2169075
2-Chlorotoluene	U		0.736	2.00	20	11/11/2023 11:37	WG2169075
4-Chlorotoluene	U		0.904	4.00	20	11/11/2023 11:37	WG2169075
1,2-Dibromo-3-Chloropropane	U		4.08	20.0	20	11/11/2023 11:37	WG2169075
1,2-Dibromoethane	U		0.420	2.00	20	11/11/2023 11:37	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	~~J4~~	0.800	4.00	20	11/11/2023 11:37	WG2169075
1,2-Dichlorobenzene	U		1.16	4.00	20	11/11/2023 11:37	WG2169075
1,3-Dichlorobenzene	U		1.36	4.00	20	11/11/2023 11:37	WG2169075
1,4-Dichlorobenzene	U		1.58	4.00	20	11/11/2023 11:37	WG2169075
Dichlorodifluoromethane	U		0.654	2.00	20	11/11/2023 11:37	WG2169075
1,1-Dichloroethane	U		0.460	2.00	20	11/11/2023 11:37	WG2169075
1,2-Dichloroethane	U		0.380	2.00	20	11/11/2023 11:37	WG2169075
1,1-Dichloroethene	U		0.400	2.00	20	11/11/2023 11:37	WG2169075
cis-1,2-Dichloroethene	304		0.552	2.00	20	11/11/2023 11:37	WG2169075
trans-1,2-Dichloroethene	1.60	J	1.14	4.00	20	11/11/2023 11:37	WG2169075
1,2-Dichloropropane	U		1.02	4.00	20	11/11/2023 11:37	WG2169075
1,1-Dichloropropene	U		0.560	2.00	20	11/11/2023 11:37	WG2169075
1,3-Dichloropropane	U		1.40	4.00	20	11/11/2023 11:37	WG2169075
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/11/2023 11:37	WG2169075
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/11/2023 11:37	WG2169075
2,2-Dichloropropane	U		0.634	2.00	20	11/11/2023 11:37	WG2169075
Di-isopropyl ether	U		0.280	0.800	20	11/11/2023 11:37	WG2169075
Ethylbenzene	U		0.424	2.00	20	11/11/2023 11:37	WG2169075
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/11/2023 11:37	WG2169075
Isopropylbenzene	U		0.690	2.00	20	11/11/2023 11:37	WG2169075
p-Isopropyltoluene	U		1.86	4.00	20	11/11/2023 11:37	WG2169075
2-Butanone (MEK)	U		10.0	20.0	20	11/11/2023 11:37	WG2169075
Methylene Chloride	U		5.30	20.0	20	11/11/2023 11:37	WG2169075
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/11/2023 11:37	WG2169075
Methyl tert-butyl ether	U		0.236	0.800	20	11/11/2023 11:37	WG2169075
Naphthalene	U	UJ C3	2.48	10.0	20	11/11/2023 11:37	WG2169075
n-Propylbenzene	U		0.944	4.00	20	11/11/2023 11:37	WG2169075
Styrene	U		2.18	10.0	20	11/11/2023 11:37	WG2169075
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/11/2023 11:37	WG2169075
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/11/2023 11:37	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.540	2.00	20	11/11/2023 11:37	WG2169075
Tetrachloroethene	303		0.560	2.00	20	11/11/2023 11:37	WG2169075
Toluene	U		1.00	4.00	20	11/11/2023 11:37	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.500	10.0	20	11/11/2023 11:37	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	3.86	10.0	20	11/11/2023 11:37	WG2169075
1,1,1-Trichloroethane	U		0.220	2.00	20	11/11/2023 11:37	WG2169075
1,1,2-Trichloroethane	U		0.706	2.00	20	11/11/2023 11:37	WG2169075
Trichloroethene	147		0.320	0.800	20	11/11/2023 11:37	WG2169075
Trichlorofluoromethane	U		0.400	2.00	20	11/11/2023 11:37	WG2169075
1,2,3-Trichloropropane	U		4.08	10.0	20	11/11/2023 11:37	WG2169075
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/11/2023 11:37	WG2169075
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/11/2023 11:37	WG2169075
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/11/2023 11:37	WG2169075
Vinyl chloride	U		0.546	2.00	20	11/11/2023 11:37	WG2169075
Xylenes, Total	U		3.82	5.20	20	11/11/2023 11:37	WG2169075
Ethyl Ether	U		0.340	2.00	20	11/11/2023 11:37	WG2169075
Tetrahydrofuran	U		1.80	10.0	20	11/11/2023 11:37	WG2169075
Iodomethane	U		4.84	10.0	20	11/11/2023 11:37	WG2169075
Allyl chloride	U		11.6	20.0	20	11/11/2023 11:37	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	1.12	4.00	20	11/11/2023 11:37	WG2169075
(S) Toluene-d8	*97.2*			*75.0-131*		*11/11/2023 11:37*	WG2169075
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*11/11/2023 11:37*	WG2169075
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/11/2023 11:37*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.41 U	~~C5 J4~~	0.548	1.00	1	11/11/2023 07:47	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 07:47	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 07:47	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 07:47	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 07:47	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 07:47	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 07:47	WG2169075
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 07:47	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 07:47	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 07:47	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 07:47	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 07:47	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 07:47	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 07:47	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 07:47	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 07:47	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 07:47	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 07:47	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 07:47	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 07:47	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 07:47	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 07:47	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 07:47	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 07:47	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 07:47	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 07:47	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 07:47	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 07:47	WG2169075
cis-1,2-Dichloroethene	0.384		0.0276	0.100	1	11/11/2023 07:47	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 07:47	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 07:47	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 07:47	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 07:47	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 07:47	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 07:47	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 07:47	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 07:47	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 07:47	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 07:47	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 07:47	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 07:47	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 07:47	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 07:47	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 07:47	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 07:47	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 07:47	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 07:47	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 07:47	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 07:47	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 07:47	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 07:47	WG2169075
Tetrachloroethene	0.403		0.0280	0.100	1	11/11/2023 07:47	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 07:47	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 07:47	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 07:47	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 07:47	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 07:47	WG2169075
Trichloroethene	0.268		0.0160	0.0400	1	11/11/2023 07:47	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 07:47	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 07:47	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 07:47	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 07:47	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 07:47	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 07:47	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 07:47	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 07:47	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 07:47	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 07:47	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 07:47	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 07:47	WG2169075
(S) Toluene-d8	*93.9*			*75.0-131*		*11/11/2023 07:47*	WG2169075
(S) 4-Bromofluorobenzene	*93.1*			*67.0-138*		*11/11/2023 07:47*	WG2169075
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/11/2023 07:47*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.03 U	~~C5 J4~~	0.548	1.00	1	11/11/2023 08:06	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 08:06	WG2169075
Benzene	U		0.0160	0.0400	1	11/11/2023 08:06	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 08:06	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 08:06	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 08:06	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 08:06	WG2169075
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/11/2023 08:06	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 08:06	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 08:06	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 08:06	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 08:06	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 08:06	WG2169075
Chloroethane	0.356		0.0432	0.200	1	11/11/2023 08:06	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 08:06	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 08:06	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 08:06	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 08:06	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 08:06	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 08:06	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 08:06	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 08:06	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 08:06	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 08:06	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 08:06	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 08:06	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 08:06	WG2169075
1,1-Dichloroethene	1.22		0.0200	0.100	1	11/11/2023 08:06	WG2169075
cis-1,2-Dichloroethene	32.5		0.0276	0.100	1	11/11/2023 08:06	WG2169075
trans-1,2-Dichloroethene	0.465		0.0572	0.200	1	11/11/2023 08:06	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 08:06	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 08:06	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 08:06	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 08:06	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 08:06	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 08:06	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 08:06	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 08:06	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 08:06	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 08:06	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 08:06	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 08:06	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 08:06	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 08:06	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 08:06	WG2169075
Naphthalene	U UJ	C3	0.124	0.500	1	11/11/2023 08:06	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 08:06	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 08:06	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 08:06	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 08:06	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 08:06	WG2169075
Tetrachloroethene	0.227		0.0280	0.100	1	11/11/2023 08:06	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 08:06	WG2169075
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/11/2023 08:06	WG2169075
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/11/2023 08:06	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 08:06	WG2169075

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/11/2023 08:06	WG2169075
Trichloroethene	2.11			0.0160	0.0400	1	11/11/2023 08:06	WG2169075
Trichlorofluoromethane	U			0.0200	0.100	1	11/11/2023 08:06	WG2169075
1,2,3-Trichloropropane	U			0.204	0.500	1	11/11/2023 08:06	WG2169075
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/11/2023 08:06	WG2169075
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/11/2023 08:06	WG2169075
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/11/2023 08:06	WG2169075
Vinyl chloride	2.73			0.0273	0.100	1	11/11/2023 08:06	WG2169075
Xylenes, Total	U			0.191	0.260	1	11/11/2023 08:06	WG2169075
Ethyl Ether	U			0.0170	0.100	1	11/11/2023 08:06	WG2169075
Tetrahydrofuran	U			0.0900	0.500	1	11/11/2023 08:06	WG2169075
Iodomethane	U			0.242	0.500	1	11/11/2023 08:06	WG2169075
Allyl chloride	U			0.580	1.00	1	11/11/2023 08:06	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ	C3 ~~J3~~	0.0560	0.200	1	11/11/2023 08:06	WG2169075
(S) Toluene-d8	*95.4*				*75.0-131*		*11/11/2023 08:06*	WG2169075
(S) 4-Bromofluorobenzene	*91.8*				*67.0-138*		*11/11/2023 08:06*	WG2169075
(S) 1,2-Dichloroethane-d4	*111*				*70.0-130*		*11/11/2023 08:06*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	U	~~J4~~	0.548	1.00	1	11/11/2023 08:25	WG2169075	
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 08:25	WG2169075	
Benzene	U		0.0160	0.0400	1	11/11/2023 08:25	WG2169075	
Bromobenzene	U		0.0420	0.500	1	11/11/2023 08:25	WG2169075	
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 08:25	WG2169075	
Bromoform	U		0.239	1.00	1	11/11/2023 08:25	WG2169075	
Bromomethane	U		0.148	0.500	1	11/11/2023 08:25	WG2169075	
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 08:25	WG2169075	
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 08:25	WG2169075	
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 08:25	WG2169075	
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 08:25	WG2169075	
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 08:25	WG2169075	
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 08:25	WG2169075	
Chloroethane	U		0.0432	0.200	1	11/11/2023 08:25	WG2169075	
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 08:25	WG2169075	
Chloromethane	U		0.0556	0.500	1	11/11/2023 08:25	WG2169075	
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 08:25	WG2169075	
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 08:25	WG2169075	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 08:25	WG2169075	
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 08:25	WG2169075	
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 08:25	WG2169075	
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 08:25	WG2169075	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 08:25	WG2169075	
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 08:25	WG2169075	
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 08:25	WG2169075	
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 08:25	WG2169075	
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 08:25	WG2169075	
1,1-Dichloroethene	1.30		0.0200	0.100	1	11/11/2023 08:25	WG2169075	
cis-1,2-Dichloroethene	32.1		0.0276	0.100	1	11/11/2023 08:25	WG2169075	
trans-1,2-Dichloroethene	0.469		0.0572	0.200	1	11/11/2023 08:25	WG2169075	
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 08:25	WG2169075	
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 08:25	WG2169075	
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 08:25	WG2169075	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 08:25	WG2169075	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 08:25	WG2169075	
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 08:25	WG2169075	
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 08:25	WG2169075	
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 08:25	WG2169075	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 08:25	WG2169075	
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 08:25	WG2169075	
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 08:25	WG2169075	
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 08:25	WG2169075	
Methylene Chloride	U		0.265	1.00	1	11/11/2023 08:25	WG2169075	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 08:25	WG2169075	
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 08:25	WG2169075	
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 08:25	WG2169075	
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 08:25	WG2169075	
Styrene	U		0.109	0.500	1	11/11/2023 08:25	WG2169075	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 08:25	WG2169075	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 08:25	WG2169075	
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 08:25	WG2169075	
Tetrachloroethene	0.202		0.0280	0.100	1	11/11/2023 08:25	WG2169075	
Toluene	U		0.0500	0.200	1	11/11/2023 08:25	WG2169075	
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 08:25	WG2169075	JC 2/14/24
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 08:25	WG2169075	
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 08:25	WG2169075	

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 08:25	WG2169075
Trichloroethene	2.17		0.0160	0.0400	1	11/11/2023 08:25	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 08:25	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 08:25	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 08:25	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 08:25	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 08:25	WG2169075
Vinyl chloride	2.75		0.0273	0.100	1	11/11/2023 08:25	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 08:25	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 08:25	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 08:25	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 08:25	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 08:25	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 08:25	WG2169075
(S) Toluene-d8	*93.6*			*75.0-131*		*11/11/2023 08:25*	WG2169075
(S) 4-Bromofluorobenzene	*91.1*			*67.0-138*		*11/11/2023 08:25*	WG2169075
(S) 1,2-Dichloroethane-d4	*118*			*70.0-130*		*11/11/2023 08:25*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1030000		8450	20000	1	11/12/2023 10:33	WG2167858

Sample Narrative:
L1674504-05 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	41000		379	1000	1	11/07/2023 14:40	WG2166050
Nitrate	U	UJ	48.0	100	1	11/07/2023 14:40	WG2166050
Sulfate	14400		594	5000	1	11/07/2023 14:40	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	16700		102	1000	1	11/22/2023 02:46	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10700		28.1	100	1	11/14/2023 17:06	WG2166505
Manganese	5640		0.704	5.00	1	11/14/2023 17:06	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	7970		2.87	6.78	10	11/14/2023 16:09	WG2171051
Ethane	24.4		0.296	1.29	1	11/14/2023 11:12	WG2168264
Ethene	4.38		0.422	1.27	1	11/14/2023 11:12	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/11/2023 08:44	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 08:44	WG2169075
Benzene	0.281		0.0160	0.0400	1	11/11/2023 08:44	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 08:44	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 08:44	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 08:44	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 08:44	WG2169075
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 08:44	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 08:44	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 08:44	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 08:44	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 08:44	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 08:44	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 08:44	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 08:44	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 08:44	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 08:44	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 08:44	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 08:44	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 08:44	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 08:44	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 08:44	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 08:44	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 08:44	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 08:44	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 08:44	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 08:44	WG2169075
1,1-Dichloroethene	U UJ		0.0200	0.100	1	11/11/2023 08:44	WG2169075
cis-1,2-Dichloroethene	88.4		0.0276	0.100	1	11/11/2023 08:44	WG2169075
trans-1,2-Dichloroethene	0.680		0.0572	0.200	1	11/11/2023 08:44	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 08:44	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 08:44	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 08:44	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 08:44	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 08:44	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 08:44	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 08:44	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 08:44	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 08:44	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 08:44	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 08:44	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 08:44	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 08:44	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 08:44	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 08:44	WG2169075
Naphthalene	U UJ	C3	0.124	0.500	1	11/11/2023 08:44	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 08:44	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 08:44	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 08:44	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 08:44	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 08:44	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 08:44	WG2169075
Toluene	0.0890	J	0.0500	0.200	1	11/11/2023 08:44	WG2169075
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/11/2023 08:44	WG2169075
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/11/2023 08:44	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 08:44	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 08:44	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 08:44	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 08:44	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 08:44	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 08:44	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 08:44	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 08:44	WG2169075
Vinyl chloride	53.8		0.0273	0.100	1	11/11/2023 08:44	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 08:44	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 08:44	WG2169075
Tetrahydrofuran	1.09 J+	C5	0.0900	0.500	1	11/11/2023 08:44	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 08:44	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 08:44	WG2169075
Trans-1,4-Dichloro-2-butene	U UJ	C3 ~~J3~~	0.0560	0.200	1	11/11/2023 08:44	WG2169075
(S) Toluene-d8	*94.8*			*75.0-131*		*11/11/2023 08:44*	WG2169075
(S) 4-Bromofluorobenzene	*89.9*			*67.0-138*		*11/11/2023 08:44*	WG2169075
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/11/2023 08:44*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1280000		8450	20000	1	11/12/2023 10:37	WG2167858

Sample Narrative:
L1674504-06 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	27500		379	1000	1	11/07/2023 15:25	WG2166050
Nitrate	U		48.0	100	1	11/07/2023 15:25	WG2166050
Sulfate	3330	J	594	5000	1	11/07/2023 15:25	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12200		102	1000	1	11/22/2023 03:05	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	14000		28.1	100	1	11/14/2023 17:37	WG2166505
Manganese	3560		0.704	5.00	1	11/14/2023 17:37	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	27100		2.87	6.78	10	11/14/2023 16:16	WG2171051
Ethane	4.46		0.296	1.29	1	11/14/2023 11:19	WG2168264
Ethene	2.75		0.422	1.27	1	11/14/2023 11:19	WG2168264

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	6.16	U	~~C5 J4~~	0.548	1.00	1	11/11/2023 09:04	WG2169075
Acrylonitrile	U			0.0760	0.500	1	11/11/2023 09:04	WG2169075
Benzene	U			0.0160	0.0400	1	11/11/2023 09:04	WG2169075
Bromobenzene	U			0.0420	0.500	1	11/11/2023 09:04	WG2169075
Bromodichloromethane	U			0.0315	0.100	1	11/11/2023 09:04	WG2169075
Bromoform	U			0.239	1.00	1	11/11/2023 09:04	WG2169075
Bromomethane	U			0.148	0.500	1	11/11/2023 09:04	WG2169075
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/11/2023 09:04	WG2169075
sec-Butylbenzene	U			0.101	0.500	1	11/11/2023 09:04	WG2169075
tert-Butylbenzene	U			0.0620	0.200	1	11/11/2023 09:04	WG2169075
Carbon tetrachloride	U			0.0432	0.200	1	11/11/2023 09:04	WG2169075
Chlorobenzene	U			0.0229	0.100	1	11/11/2023 09:04	WG2169075
Chlorodibromomethane	U			0.0180	0.100	1	11/11/2023 09:04	WG2169075
Chloroethane	U			0.0432	0.200	1	11/11/2023 09:04	WG2169075
Chloroform	U		~~J4~~	0.0166	0.100	1	11/11/2023 09:04	WG2169075
Chloromethane	U			0.0556	0.500	1	11/11/2023 09:04	WG2169075
2-Chlorotoluene	U			0.0368	0.100	1	11/11/2023 09:04	WG2169075
4-Chlorotoluene	U			0.0452	0.200	1	11/11/2023 09:04	WG2169075
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/11/2023 09:04	WG2169075
1,2-Dibromoethane	U			0.0210	0.100	1	11/11/2023 09:04	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 09:04	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 09:04	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 09:04	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 09:04	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 09:04	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 09:04	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 09:04	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 09:04	WG2169075
cis-1,2-Dichloroethene	0.264		0.0276	0.100	1	11/11/2023 09:04	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 09:04	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 09:04	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 09:04	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 09:04	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 09:04	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 09:04	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 09:04	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 09:04	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 09:04	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 09:04	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 09:04	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 09:04	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 09:04	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 09:04	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 09:04	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 09:04	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 09:04	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 09:04	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 09:04	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 09:04	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 09:04	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 09:04	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 09:04	WG2169075
Toluene	0.181	J	0.0500	0.200	1	11/11/2023 09:04	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 09:04	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 09:04	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 09:04	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 09:04	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 09:04	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 09:04	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 09:04	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 09:04	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 09:04	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 09:04	WG2169075
Vinyl chloride	1.51		0.0273	0.100	1	11/11/2023 09:04	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 09:04	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 09:04	WG2169075
Tetrahydrofuran	4.91	J+ C5	0.0900	0.500	1	11/11/2023 09:04	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 09:04	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 09:04	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 09:04	WG2169075
(S) Toluene-d8	*93.4*			*75.0-131*		*11/11/2023 09:04*	WG2169075
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*11/11/2023 09:04*	WG2169075
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2023 09:04*	WG2169075

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	1020000		8450	20000	1	11/12/2023 10:41	WG2167858

Sample Narrative:
L1674504-07 WG2167858: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	39400		379	1000	1	11/07/2023 15:40	WG2166050
Nitrate	159	J	48.0	100	1	11/07/2023 15:40	WG2166050
Sulfate	13500		594	5000	1	11/07/2023 15:40	WG2166050

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	15500		102	1000	1	11/22/2023 03:27	WG2175127

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10400		28.1	100	1	11/14/2023 17:40	WG2166505
Manganese	5630		0.704	5.00	1	11/14/2023 17:40	WG2166505

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	8150		2.87	6.78	10	11/14/2023 16:26	WG2171051
Ethane	24.5		0.296	1.29	1	11/14/2023 11:26	WG2168264
Ethene	4.53		0.422	1.27	1	11/14/2023 11:26	WG2168264

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.53	U ~~C5 J4~~	0.548	1.00	1	11/11/2023 09:23	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 09:23	WG2169075
Benzene	0.261		0.0160	0.0400	1	11/11/2023 09:23	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 09:23	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 09:23	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 09:23	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 09:23	WG2169075
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/11/2023 09:23	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 09:23	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 09:23	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 09:23	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 09:23	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 09:23	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 09:23	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 09:23	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 09:23	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 09:23	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 09:23	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 09:23	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 09:23	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 09:23	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 09:23	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 09:23	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 09:23	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 09:23	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 09:23	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 09:23	WG2169075
1,1-Dichloroethene	0.233	J	0.0200	0.100	1	11/11/2023 09:23	WG2169075
cis-1,2-Dichloroethene	92.4		0.0276	0.100	1	11/11/2023 09:23	WG2169075
trans-1,2-Dichloroethene	0.646		0.0572	0.200	1	11/11/2023 09:23	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 09:23	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 09:23	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 09:23	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 09:23	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 09:23	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 09:23	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 09:23	WG2169075
Ethylbenzene	0.0300	J	0.0212	0.100	1	11/11/2023 09:23	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 09:23	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 09:23	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 09:23	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 09:23	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 09:23	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 09:23	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 09:23	WG2169075
Naphthalene	U	UJ C3	0.124	0.500	1	11/11/2023 09:23	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 09:23	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 09:23	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 09:23	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 09:23	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 09:23	WG2169075
Tetrachloroethene	0.0810	J	0.0280	0.100	1	11/11/2023 09:23	WG2169075
Toluene	0.107	J	0.0500	0.200	1	11/11/2023 09:23	WG2169075
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/11/2023 09:23	WG2169075
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/11/2023 09:23	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 09:23	WG2169075
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 09:23	WG2169075
Trichloroethene	0.0670		0.0160	0.0400	1	11/11/2023 09:23	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 09:23	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 09:23	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 09:23	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 09:23	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 09:23	WG2169075
Vinyl chloride	53.1		0.0273	0.100	1	11/11/2023 09:23	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 09:23	WG2169075
Ethyl Ether	0.0880	J	0.0170	0.100	1	11/11/2023 09:23	WG2169075
Tetrahydrofuran	1.03	J+ C5	0.0900	0.500	1	11/11/2023 09:23	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 09:23	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 09:23	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 09:23	WG2169075
(S) Toluene-d8	*92.1*			*75.0-131*		*11/11/2023 09:23*	WG2169075
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*11/11/2023 09:23*	WG2169075
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/11/2023 09:23*	WG2169075

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U		~~J4~~	0.548	1.00	1	11/11/2023 09:42	WG2169075
Acrylonitrile	U			0.0760	0.500	1	11/11/2023 09:42	WG2169075
Benzene	U			0.0160	0.0400	1	11/11/2023 09:42	WG2169075
Bromobenzene	U			0.0420	0.500	1	11/11/2023 09:42	WG2169075
Bromodichloromethane	U			0.0315	0.100	1	11/11/2023 09:42	WG2169075
Bromoform	U			0.239	1.00	1	11/11/2023 09:42	WG2169075
Bromomethane	U			0.148	0.500	1	11/11/2023 09:42	WG2169075
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/11/2023 09:42	WG2169075
sec-Butylbenzene	U			0.101	0.500	1	11/11/2023 09:42	WG2169075
tert-Butylbenzene	U			0.0620	0.200	1	11/11/2023 09:42	WG2169075
Carbon tetrachloride	U			0.0432	0.200	1	11/11/2023 09:42	WG2169075
Chlorobenzene	U			0.0229	0.100	1	11/11/2023 09:42	WG2169075
Chlorodibromomethane	U			0.0180	0.100	1	11/11/2023 09:42	WG2169075
Chloroethane	U			0.0432	0.200	1	11/11/2023 09:42	WG2169075
Chloroform	U		~~J4~~	0.0166	0.100	1	11/11/2023 09:42	WG2169075
Chloromethane	U			0.0556	0.500	1	11/11/2023 09:42	WG2169075
2-Chlorotoluene	U			0.0368	0.100	1	11/11/2023 09:42	WG2169075
4-Chlorotoluene	U			0.0452	0.200	1	11/11/2023 09:42	WG2169075
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/11/2023 09:42	WG2169075
1,2-Dibromoethane	U			0.0210	0.100	1	11/11/2023 09:42	WG2169075
Dibromomethane	U		~~J4~~	0.0400	0.200	1	11/11/2023 09:42	WG2169075
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/11/2023 09:42	WG2169075
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/11/2023 09:42	WG2169075
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/11/2023 09:42	WG2169075
Dichlorodifluoromethane	U			0.0327	0.100	1	11/11/2023 09:42	WG2169075
1,1-Dichloroethane	U			0.0230	0.100	1	11/11/2023 09:42	WG2169075
1,2-Dichloroethane	U			0.0190	0.100	1	11/11/2023 09:42	WG2169075
1,1-Dichloroethene	U			0.0200	0.100	1	11/11/2023 09:42	WG2169075
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/11/2023 09:42	WG2169075
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/11/2023 09:42	WG2169075
1,2-Dichloropropane	U			0.0508	0.200	1	11/11/2023 09:42	WG2169075
1,1-Dichloropropene	U			0.0280	0.100	1	11/11/2023 09:42	WG2169075
1,3-Dichloropropane	U			0.0700	0.200	1	11/11/2023 09:42	WG2169075
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/11/2023 09:42	WG2169075
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/11/2023 09:42	WG2169075
2,2-Dichloropropane	U			0.0317	0.100	1	11/11/2023 09:42	WG2169075
Di-isopropyl ether	U			0.0140	0.0400	1	11/11/2023 09:42	WG2169075
Ethylbenzene	U			0.0212	0.100	1	11/11/2023 09:42	WG2169075
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/11/2023 09:42	WG2169075
Isopropylbenzene	U			0.0345	0.100	1	11/11/2023 09:42	WG2169075
p-Isopropyltoluene	U			0.0932	0.200	1	11/11/2023 09:42	WG2169075
2-Butanone (MEK)	U			0.500	1.00	1	11/11/2023 09:42	WG2169075
Methylene Chloride	U			0.265	1.00	1	11/11/2023 09:42	WG2169075
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/11/2023 09:42	WG2169075
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/11/2023 09:42	WG2169075
Naphthalene	U	UJ	C3	0.124	0.500	1	11/11/2023 09:42	WG2169075
n-Propylbenzene	U			0.0472	0.200	1	11/11/2023 09:42	WG2169075
Styrene	U			0.109	0.500	1	11/11/2023 09:42	WG2169075
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/11/2023 09:42	WG2169075
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/11/2023 09:42	WG2169075
1,1,2-Trichlorotrifluoroethane	U		J3	0.0270	0.100	1	11/11/2023 09:42	WG2169075
Tetrachloroethene	0.0690		J	0.0280	0.100	1	11/11/2023 09:42	WG2169075
Toluene	0.377			0.0500	0.200	1	11/11/2023 09:42	WG2169075
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/11/2023 09:42	WG2169075
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/11/2023 09:42	WG2169075
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/11/2023 09:42	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 09:42	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 09:42	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 09:42	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 09:42	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 09:42	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 09:42	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 09:42	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 09:42	WG2169075
Xylenes, Total	0.647		0.191	0.260	1	11/11/2023 09:42	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 09:42	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 09:42	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 09:42	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 09:42	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 09:42	WG2169075
(S) Toluene-d8	*92.9*			*75.0-131*		*11/11/2023 09:42*	WG2169075
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/11/2023 09:42*	WG2169075
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2023 09:42*	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	19.6 J+	C5 J4	0.548	1.00	1	11/11/2023 10:01	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 10:01	WG2169075
Benzene	0.0450		0.0160	0.0400	1	11/11/2023 10:01	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 10:01	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 10:01	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 10:01	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 10:01	WG2169075
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/11/2023 10:01	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 10:01	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 10:01	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 10:01	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 10:01	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 10:01	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 10:01	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 10:01	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 10:01	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 10:01	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 10:01	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 10:01	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 10:01	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 10:01	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 10:01	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 10:01	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 10:01	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 10:01	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 10:01	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 10:01	WG2169075
1,1-Dichloroethene	0.277		0.0200	0.100	1	11/11/2023 10:01	WG2169075
cis-1,2-Dichloroethene	16.9		0.0276	0.100	1	11/11/2023 10:01	WG2169075
trans-1,2-Dichloroethene	0.548		0.0572	0.200	1	11/11/2023 10:01	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 10:01	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 10:01	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 10:01	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 10:01	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 10:01	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 10:01	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 10:01	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 10:01	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 10:01	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 10:01	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 10:01	WG2169075
2-Butanone (MEK)	2.38		0.500	1.00	1	11/11/2023 10:01	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 10:01	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 10:01	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 10:01	WG2169075
Naphthalene	U UJ	C3	0.124	0.500	1	11/11/2023 10:01	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 10:01	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 10:01	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 10:01	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 10:01	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 10:01	WG2169075
Tetrachloroethene	0.0330	J	0.0280	0.100	1	11/11/2023 10:01	WG2169075
Toluene	0.174	J	0.0500	0.200	1	11/11/2023 10:01	WG2169075
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/11/2023 10:01	WG2169075 JC 2/14/24
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/11/2023 10:01	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 10:01	WG2169075

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 10:01	WG2169075
Trichloroethene	0.526		0.0160	0.0400	1	11/11/2023 10:01	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 10:01	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 10:01	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 10:01	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 10:01	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 10:01	WG2169075
Vinyl chloride	20.4		0.0273	0.100	1	11/11/2023 10:01	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 10:01	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 10:01	WG2169075
Tetrahydrofuran	16.1 J+	C5	0.0900	0.500	1	11/11/2023 10:01	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 10:01	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 10:01	WG2169075
Trans-1,4-Dichloro-2-butene	U	C3 ~~J3~~	0.0560	0.200	1	11/11/2023 10:01	WG2169075
(S) Toluene-d8	*93.8*			*75.0-131*		*11/11/2023 10:01*	WG2169075
(S) 4-Bromofluorobenzene	*91.6*			*67.0-138*		*11/11/2023 10:01*	WG2169075
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/11/2023 10:01*	WG2169075

JC 2/14/24

MEMORANDUM

TO: Project File **DATE:** February 14, 2024

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 443022-1413001.10.701.04

TASK: EIM Data Validation Level EPA2A for Group 3 – 4th Quarter November-December 2023

LAB: Pace Sample Delivery Group (SDGs): L1675140, L1675231, L1675715, L1675773, and L1676327

Fifty-nine groundwater samples (including three field duplicates) and two trip blanks were collected November 7-9, 2023, from monitoring wells associated with fourth quarter monitoring at American Linen in Seattle, WA. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Selected samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Standard Method (SM) 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A;
- Ferrous Iron by SM 3500-Fe B-2011; and
- Metals (iron and manganese) by USEPA Method 6020B.

Fourth quarter analytical results are reported in eighteen SDGs and were validated in four groups. Group 3 consists of five SDGs (L1675140, L1675231, L1675715 (except sample MW-346-110823), L1675773, and L1676327). Refer to the data validation review on the SDOT Mercer Parcels at American Linen for sample MW-346-110823. The quality assurance review of the laboratory data associated with Group 3 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020) and USEPA National Functional Guidelines for Inorganic Superfund

Methods Data Review (USEPA, 2020). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested with the following issues:

- SDG L1675140: Review of chain of custody shows sample FMW-141-110723 was analyzed for VOCs however multiple analyses (dissolved gases, alkalinity, anions, metals, and TOC) were requested and not analyzed. NV5 contacted Pace to indicate that multiple parameters were inadvertently requested and only one parameter (VOCs) was required on sample FMW-141-110723 (November 8, 2023).

- SDG L1675231: Review of chain of custody shows identifications for samples MW109-110723, MW108-110723 and MW121-110723 (SDG L1675231-06, -07, and -10) however these samples are identified in the laboratory report as MW-109-110723, MW-108-110723 and MW-121-110723. NV5 confirmed that the that the chain of custody identifications were correct. Per NV5 request, Pace revised the sample identifications and reissued the associated deliverables on February 9, 2024.

- SDG L1675773: Review of chain of custody shows identifications for samples MW113-110823, MW116-110823, MW119-110823, and MW115-110823 (SDG L1675773-03, -04, -13, and -15) however these samples are identified in the laboratory report as MW-113-110823, MW-116-110823, MW-119-110823, and MW-115-110823. NV5 confirmed that the that the chain of custody identifications were correct. Per NV5 request, Pace revised the sample identifications and reissued the associated deliverables on February 9, 2024.

- SDG L1676327: Review of chain of custody shows identifications for samples MW123-110923, and MW128-110923 (SDG L1676327-02, and -18) however these samples are identified in the laboratory report as MW-123-110923, and MW-128-110923. NV5 confirmed that the that the chain of custody identifications were correct. Per NV5 request, Pace revised the sample identifications and reissued the associated deliverables on February 9, 2024.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. The samples were received in good condition. No data are qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
The samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters (7 days for unpreserved waters) from the date of collection. All holding time criteria.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met with the following exception:

- SDG L1675773: Sample MW-144R-110823 was analyzed for methane eight days past the 14-day recommended hold time and laboratory qualified (T8). **Sample MW-144R-110823 methane result is qualified as estimated with low bias (J-) due to a hold time exceedance.**

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The samples were analyzed within the USEPA recommended holding time for alkalinity (14 days) chloride (28 days), sulfate (28 days), nitrate (48 hours), and TOC (28 days) for the preserved water sample from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B and Ferrous Iron:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

All samples were analyzed for ferrous iron within 24 hours with the following exceptions:

- SDG L1675140: Samples MW110-110723 and MW-314-110723 were analyzed for ferrous iron approximately 13 and 15 hours past the 24-hour recommended hold time and laboratory qualified (T8). **Samples MW110-110723 and MW-314-110723 ferrous iron results are qualified as estimated with low bias (J-) due to a hold time exceedance.**

- SDG L1675715: Sample MW-145R-110823 was analyzed for ferrous iron approximately 8 hours past the 24-hour recommended hold time and laboratory qualified (T8). **Sample MW-145R-110823 ferrous iron result is qualified as estimated with low bias (J-) due to a hold time exceedance.**

- SDG L1675773: Samples MW-322-110823 and MW-144R-110823 were analyzed for ferrous iron approximately 9 and 13 hours past the 24-hour recommended hold time and laboratory qualified (T8). **Samples MW-322-110823 and MW-144R-110823 ferrous iron results are qualified as estimated with low bias (J-) due to a hold time exceedance.**

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCVs are below laboratory acceptance criteria and showing potential low bias. **Associated sample results with laboratory qualified (C3) results are estimated with potential low bias and qualified (J-/UJ). Results reported below the RDL are estimated (J) and directional bias are not assigned.**

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for several compounds. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCVs are above laboratory acceptance criteria and showing potential high bias. **Associated sample results (detects) with laboratory qualified (C5) results are estimated with potential high bias and qualified (J+).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs).

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per NFG, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. General chemistry and metal blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1675140	WG2167255	9056A	Chloride	516	J	1000	µg/L	NO
L1675140	WG2175135	9060A	TOC	130	J	1000	µg/L	NO
L1675231	WG2167331	9056A	Nitrate	85	J	100	µg/L	**YES**

L1675231	WG2175201	9060A	TOC	126	J	1000	µg/L	NO
L1675715	WG2176775	9060A	TOC	166	J	1000	µg/L	NO
L1675773	WG2168476	6020B	Iron	52.3	J	100	µg/L	NO
L1675773	WG2168476	6020B	Manganese	3.45	J	5.00	µg/L	NO
L1676327	WG2178410	9060A	TOC	162	J	1000	µg/L	NO
L1676327	WG2169907	6020B	Iron	69.2	J	100	µg/L	NO
L1676327	WG2169907	6020B	Manganese	1.87	J	5.00	µg/L	NO

The target analytes were detected in the method blanks at low levels and below the RDLs. No action is taken for TOC, chloride, iron, or manganese on this basis since associated sample results are greater than the RDLs. A low level of nitrate was detected one method blank below the RDL and the associated results are evaluated as follows:

- SDG L1675231: Nitrate results for samples MW109-110723 and MW-143-110723 are detected below the RDL and laboratory qualified (B) due to method blank contamination. The EDD did not assign the laboratory qualifier (B) to these samples but the EDD comment fields indicate that the associated blanks are contaminated. **Per NFG, sample MW109-110723** and **MW-143-110723 nitrate results are qualified as not detected (U) due to method blank contamination.**

Trip Blank Results

USEPA Method 8260D:
Two trip blanks (TB-110723 (SDG L1675231) and TB-110923 (SDG L1676327)) were collected and submitted for VOC analysis. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1675231: Acetone, a common laboratory contaminant, was detected in trip blank (TB-110723) at 2.77 µg/L and above the RDL 1.00 µg/L. Toluene was detected in the trip blank at 0.0570 µg/L and below the RDL at 0.200 µg/L.
    - Acetone (a common laboratory contaminant) was detected below the established action level of 5.54 µg/L (2 x 2.77 µg/L) in samples MW-159-110723, MW-310-110723, and MW-143-110723. **Acetone detections in samples MW-159-110723, MW-310-110723, and MW-143-110723 are qualified as not detected (U) due to trip blank contamination.**
    - Toluene was detected below the RDL in samples MW109-110723 and MW121-110723. **Toluene detections in samples MW109-110723 and MW121-110723 are qualified as not detected (U) due to trip blank contamination.**
- SDG L1676327: Acetone was detected in trip blank TB-110923 at 2.77 ug/L and above the RDL 1.00 ug/L. Acetone was detected below the established action level (2 x 2.77) in samples MW-148-110923, MW123-110923, MW-325-110923, MW-351-110923, MW-340-110923, MW-327-110923, and MW-334-110923. **Acetone detections in samples MW-148-110923, MW-123-110923, MW-325-110923, MW-351-110923, MW-340-110923, MW-327-110923, and MW-334-110923 are qualified as not detected (U) due to trip blank contamination.**

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
Field, rinsate, and/or equipment blanks were not collected.

Field Duplicate Analyses

Field duplicate pairs were submitted and analyzed. Field duplicate sample pairs are as follows:

- SDG L1675773: Samples MW-319-110823 and MW-994-110823
- SDG L1675773: Samples MW119-110823 and MW-996-110823
- SDG L1676327: Samples MW-326R-110923 and MW-995-110923

Target analyte results are comparable and within a relative percent difference (RPD) of 30% (or ± 1x RDL for groundwater results <5X the RDL) for the field duplicate pairs.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

Ferrous Iron:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1675140 - Analytical batch WG2169075: LCS/LCSD % R results for acetone exceed acceptance criteria and associated results are laboratory qualified (J4). Associated detected results are already qualified (J+) due to a calibration percent difference (% D) exceeding calibration acceptance criteria. No action is needed for non-detected acetone results.

- SDG L1675140 - Analytical batch WG2169075: LCSD % R results exceed acceptance criteria for two target analytes (chloroform and dibromomethane) and associated results are laboratory qualified (J4). No action is needed since LCS % Rs and RPDs are within criteria.

- SDG L1675140 - Analytical batch WG2169075: LCS/LCSD RPD criteria are exceeded for two target analytes (1,1,2-trichlorotrifluoroethane and trans-1,4-dichloro-2-butene) and associated results are laboratory qualified (J3). No action is needed since LCS/LCSD % Rs are within criteria.

- SDGs L1675140 and L1675231 - Analytical batch WG2171873: LCS/LCSD RPD criteria are exceeded for 2,2-dichloropropane and the associated result is laboratory qualified (J3). No action is needed since LCS/LCSD % Rs are within criteria.

- SDG L1676327 - Analytical batch WG2169514: LCS/LCSD % R results for acetone exceed acceptance criteria and associated results are laboratory qualified (J4). Associated detected results are already qualified (J+) due to a calibration percent difference (% D) exceeding calibration acceptance criteria. No action is needed for non-detected acetone results.

- SDG L1676327 - Analytical batch WG2169514: LCS/LCSD % R results for acetone exceed acceptance criteria and associated results are laboratory qualified (J4). Associated detected results are qualified (J+) due to a calibration percent difference (% D) exceeding calibration acceptance criteria. No action is needed for non-detected acetone results.

- SDG L1676327 - Analytical batch WG2169514: LCS/LCSD RPD criteria are exceeded for 2-butanone (MEK) and the associated results are laboratory qualified (J3). No action is needed since LCS/LCSD % Rs are within criteria.

- SDG L1676327 - Analytical batch WG2169514: LCS/LCSD % R results for naphthalene are below acceptance criteria and associated results are laboratory qualified (J4). Associated results are all non-detect for naphthalene and qualified (UJ) due to a

calibration percent difference (% D) below calibration acceptance criteria. No further action is needed.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC), and Metals (Iron and Manganese, and Ferrous Iron):
The LCS % Rs or LCS/LCSD %Rs and RPDs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on a non-client sample. Refer to laboratory control sample results for precision and accuracy results.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were performed on non-client samples. Refer to laboratory control sample and laboratory duplicate results for precision and accuracy results.

General Chemistry (Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
MS or MS/MSD analyses were performed on client and/or on non-client samples within the analytical batches. The MS % Rs or MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples with the following exception and discussions:

- SDG L1675231: Matrix spike analysis as performed on sample MW121-110723. Sulfate MS % R is below laboratory acceptance criteria. **Per NFG, the sulfate result for sample MW121-110723 is qualified as estimated with low bias (J-).**

- SDG L1675231: Matrix spike analysis was performed on sample MW109-110723. Manganese MSD % R exceeds criteria. Per NFG, no action is taken since the sample amount is greater than four times the spike amount.

- SDG L1676327: Matrix spike analysis was performed on sample MW-335-110923. Manganese MSD % R exceeds criteria. Per NFG, no action is taken since the sample amount is greater than four times the spike amount.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for this SDG was provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy but the associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

- The associated EDDs identify ferrous iron as iron under the EDD field designated Result Parameter Name. Ferrous iron (iron by phenanthroline) is analyzed by Standard Methods 3500-Fe B (listed as SM3500FeB in the EDD) under the EDD field designated Result Method.

Compound Identification and Quantitation Limits

Results of the analyses are reported based on laboratory RDLs for all compounds. RDLs for all targets or selected compounds are elevated in several samples due to method-required dilutions. Pace included sample narratives for the following samples:

- SDG L1675140: Select VOC target compounds in samples MW110-110723 and MW-314-110723 are elevated and the samples were run at a dilution (respectively, 10X and 20X).

- SDG L1675231: Select VOC target compounds in samples MW103-110723 and MW108-110723 are elevated and the samples were analyzed at a dilution (20X).

- SDG L1675773: Select VOC target compounds in sample MW113-110823 are elevated and the sample was analyzed at a dilution (5X).

Per NV5's request the associated EDDs show result reporting limits (also known as reported detection limit (RDL) or practical quantitation limit (PQL)) and result detection limits (also referred to as method detection limit (MDL)) instead of defaulting to the RDL when reporting the MDL.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020); and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/11/2023 10:39	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 10:39	WG2169075
Benzene	4.61		0.0160	0.0400	1	11/14/2023 22:50	WG2170865
Bromobenzene	U		0.0420	0.500	1	11/11/2023 10:39	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 10:39	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 10:39	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 10:39	WG2169075
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/11/2023 10:39	WG2169075
sec-Butylbenzene	8.64		0.101	0.500	1	11/11/2023 10:39	WG2169075
tert-Butylbenzene	0.229		0.0620	0.200	1	11/11/2023 10:39	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 10:39	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 10:39	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 10:39	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 10:39	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 10:39	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 10:39	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 10:39	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 10:39	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 10:39	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 10:39	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 10:39	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 10:39	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 10:39	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 10:39	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 10:39	WG2169075
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 10:39	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 10:39	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 10:39	WG2169075
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 10:39	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 10:39	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 10:39	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 10:39	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 10:39	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 10:39	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 10:39	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 10:39	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 10:39	WG2169075
Ethylbenzene	0.340		0.0212	0.100	1	11/14/2023 22:50	WG2170865
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 10:39	WG2169075
Isopropylbenzene	9.99		0.0345	0.100	1	11/11/2023 10:39	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 10:39	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 10:39	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 10:39	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 10:39	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 10:39	WG2169075
Naphthalene	7.46 J-	C3	0.124	0.500	1	11/11/2023 10:39	WG2169075
n-Propylbenzene	26.0		0.0472	0.200	1	11/11/2023 10:39	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 10:39	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 10:39	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 10:39	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 10:39	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 10:39	WG2169075
Toluene	0.220		0.0500	0.200	1	11/11/2023 10:39	WG2169075
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/11/2023 10:39	WG2169075
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/11/2023 10:39	WG2169075 JC 2/1/24
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 10:39	WG2169075

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	0.207		0.0353	0.100	1	11/11/2023 10:39	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 10:39	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 10:39	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 10:39	WG2169075
1,2,4-Trimethylbenzene	0.303		0.0464	0.200	1	11/11/2023 10:39	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 10:39	WG2169075
1,3,5-Trimethylbenzene	0.324		0.0432	0.200	1	11/11/2023 10:39	WG2169075
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 10:39	WG2169075
Xylenes, Total	0.936		0.191	0.260	1	11/14/2023 22:50	WG2170865
Ethyl Ether	0.0350	J	0.0170	0.100	1	11/11/2023 10:39	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 10:39	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 10:39	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 10:39	WG2169075
Trans-1,4-Dichloro-2-butene	U UJ	C3 ~~J3~~	0.0560	0.200	1	11/11/2023 10:39	WG2169075
(S) Toluene-d8	*94.3*			*75.0-131*		*11/11/2023 10:39*	WG2169075
(S) Toluene-d8	*90.2*			*75.0-131*		*11/14/2023 22:50*	WG2170865
(S) 4-Bromofluorobenzene	*96.3*			*67.0-138*		*11/11/2023 10:39*	WG2169075
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/14/2023 22:50*	WG2170865
(S) 1,2-Dichloroethane-d4	*105*			*70.0-130*		*11/11/2023 10:39*	WG2169075
(S) 1,2-Dichloroethane-d4	*94.4*			*70.0-130*		*11/14/2023 22:50*	WG2170865

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	0.957 J	J ~~J4~~	0.548	1.00	1	11/11/2023 10:58	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 10:58	WG2169075
Benzene	0.274		0.0160	0.0400	1	11/14/2023 23:10	WG2170865
Bromobenzene	U		0.0420	0.500	1	11/11/2023 10:58	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 10:58	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 10:58	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 10:58	WG2169075
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/11/2023 10:58	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 10:58	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 10:58	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 10:58	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 10:58	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 10:58	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 10:58	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 10:58	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 10:58	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 10:58	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 10:58	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 10:58	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 10:58	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 10:58	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 10:58	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 10:58	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 10:58	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 10:58	WG2169075
1,1-Dichloroethane	0.0430	J	0.0230	0.100	1	11/11/2023 10:58	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 10:58	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 10:58	WG2169075
cis-1,2-Dichloroethene	0.261		0.0276	0.100	1	11/11/2023 10:58	WG2169075
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 10:58	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 10:58	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 10:58	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 10:58	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 10:58	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 10:58	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 10:58	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 10:58	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/14/2023 23:10	WG2170865
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 10:58	WG2169075
Isopropylbenzene	0.100	J	0.0345	0.100	1	11/11/2023 10:58	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 10:58	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 10:58	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 10:58	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 10:58	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 10:58	WG2169075
Naphthalene	0.668 J-	C3	0.124	0.500	1	11/11/2023 10:58	WG2169075
n-Propylbenzene	0.0950	J	0.0472	0.200	1	11/11/2023 10:58	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 10:58	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 10:58	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 10:58	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 10:58	WG2169075
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 10:58	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 10:58	WG2169075
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/11/2023 10:58	WG2169075
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/11/2023 10:58	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 10:58	WG2169075

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 10:58	WG2169075
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 10:58	WG2169075
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 10:58	WG2169075
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 10:58	WG2169075
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 10:58	WG2169075
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 10:58	WG2169075
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 10:58	WG2169075
Vinyl chloride	12.0		0.0273	0.100	1	11/11/2023 10:58	WG2169075
Xylenes, Total	U		0.191	0.260	1	11/11/2023 10:58	WG2169075
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 10:58	WG2169075
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 10:58	WG2169075
Iodomethane	U		0.242	0.500	1	11/11/2023 10:58	WG2169075
Allyl chloride	U		0.580	1.00	1	11/11/2023 10:58	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J3~~	0.0560	0.200	1	11/11/2023 10:58	WG2169075
(S) Toluene-d8	*97.8*			*75.0-131*		*11/11/2023 10:58*	WG2169075
(S) Toluene-d8	*90.9*			*75.0-131*		*11/14/2023 23:10*	WG2170865
(S) 4-Bromofluorobenzene	*93.4*			*67.0-138*		*11/11/2023 10:58*	WG2169075
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/14/2023 23:10*	WG2170865
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/11/2023 10:58*	WG2169075
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*11/14/2023 23:10*	WG2170865

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.55 J+	C5 J4	0.548	1.00	1	11/11/2023 11:18	WG2169075
Acrylonitrile	U		0.0760	0.500	1	11/11/2023 11:18	WG2169075
Benzene	1.81		0.0160	0.0400	1	11/11/2023 11:18	WG2169075
Bromobenzene	U		0.0420	0.500	1	11/11/2023 11:18	WG2169075
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 11:18	WG2169075
Bromoform	U		0.239	1.00	1	11/11/2023 11:18	WG2169075
Bromomethane	U		0.148	0.500	1	11/11/2023 11:18	WG2169075
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/11/2023 11:18	WG2169075
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 11:18	WG2169075
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 11:18	WG2169075
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 11:18	WG2169075
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 11:18	WG2169075
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 11:18	WG2169075
Chloroethane	U		0.0432	0.200	1	11/11/2023 11:18	WG2169075
Chloroform	U	~~J4~~	0.0166	0.100	1	11/11/2023 11:18	WG2169075
Chloromethane	U		0.0556	0.500	1	11/11/2023 11:18	WG2169075
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 11:18	WG2169075
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 11:18	WG2169075
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 11:18	WG2169075
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 11:18	WG2169075
Dibromomethane	U	~~J4~~	0.0400	0.200	1	11/11/2023 11:18	WG2169075
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 11:18	WG2169075
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 11:18	WG2169075
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 11:18	WG2169075
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 11:18	WG2169075
1,1-Dichloroethane	0.0510	J	0.0230	0.100	1	11/11/2023 11:18	WG2169075
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 11:18	WG2169075
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 11:18	WG2169075
cis-1,2-Dichloroethene	13.9		0.0276	0.100	1	11/11/2023 11:18	WG2169075
trans-1,2-Dichloroethene	0.316		0.0572	0.200	1	11/11/2023 11:18	WG2169075
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 11:18	WG2169075
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 11:18	WG2169075
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 11:18	WG2169075
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 11:18	WG2169075
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 11:18	WG2169075
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 11:18	WG2169075
Di-isopropyl ether	U		0.0140	0.0400	1	11/11/2023 11:18	WG2169075
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 11:18	WG2169075
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 11:18	WG2169075
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 11:18	WG2169075
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 11:18	WG2169075
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 11:18	WG2169075
Methylene Chloride	U		0.265	1.00	1	11/11/2023 11:18	WG2169075
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 11:18	WG2169075
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 11:18	WG2169075
Naphthalene	0.243 J	C3 J	0.124	0.500	1	11/11/2023 11:18	WG2169075
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 11:18	WG2169075
Styrene	U		0.109	0.500	1	11/11/2023 11:18	WG2169075
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 11:18	WG2169075
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 11:18	WG2169075
1,1,2-Trichlorotrifluoroethane	U	~~J3~~	0.0270	0.100	1	11/11/2023 11:18	WG2169075
Tetrachloroethene	0.0360	J	0.0280	0.100	1	11/11/2023 11:18	WG2169075
Toluene	U		0.0500	0.200	1	11/11/2023 11:18	WG2169075
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/11/2023 11:18	WG2169075
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/11/2023 11:18	WG2169075
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 11:18	WG2169075

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/11/2023 11:18	WG2169075
Trichloroethene	U			0.0160	0.0400	1	11/11/2023 11:18	WG2169075
Trichlorofluoromethane	U			0.0200	0.100	1	11/11/2023 11:18	WG2169075
1,2,3-Trichloropropane	U			0.204	0.500	1	11/11/2023 11:18	WG2169075
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/11/2023 11:18	WG2169075
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/11/2023 11:18	WG2169075
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/11/2023 11:18	WG2169075
Vinyl chloride	5.25			0.0273	0.100	1	11/11/2023 11:18	WG2169075
Xylenes, Total	U			0.191	0.260	1	11/11/2023 11:18	WG2169075
Ethyl Ether	U			0.0170	0.100	1	11/11/2023 11:18	WG2169075
Tetrahydrofuran	U			0.0900	0.500	1	11/11/2023 11:18	WG2169075
Iodomethane	U			0.242	0.500	1	11/11/2023 11:18	WG2169075
Allyl chloride	U			0.580	1.00	1	11/11/2023 11:18	WG2169075
Trans-1,4-Dichloro-2-butene	U	UJ	C3 ~~J3~~	0.0560	0.200	1	11/11/2023 11:18	WG2169075
(S) Toluene-d8	*93.8*				*75.0-131*		*11/11/2023 11:18*	WG2169075
(S) 4-Bromofluorobenzene	*93.4*				*67.0-138*		*11/11/2023 11:18*	WG2169075
(S) 1,2-Dichloroethane-d4	*106*				*70.0-130*		*11/11/2023 11:18*	WG2169075

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

Analyte	Result	Qualifier		MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U			0.548	1.00	1	11/12/2023 00:55	WG2169081
Acrylonitrile	U			0.0760	0.500	1	11/12/2023 00:55	WG2169081
Benzene	0.0190		J	0.0160	0.0400	1	11/12/2023 00:55	WG2169081
Bromobenzene	U			0.0420	0.500	1	11/12/2023 00:55	WG2169081
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 00:55	WG2169081
Bromoform	U			0.239	1.00	1	11/12/2023 00:55	WG2169081
Bromomethane	U			0.148	0.500	1	11/12/2023 00:55	WG2169081
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/12/2023 00:55	WG2169081
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 00:55	WG2169081
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 00:55	WG2169081
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 00:55	WG2169081
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 00:55	WG2169081
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 00:55	WG2169081
Chloroethane	U			0.0432	0.200	1	11/12/2023 00:55	WG2169081
Chloroform	U			0.0166	0.100	1	11/12/2023 00:55	WG2169081
Chloromethane	U			0.0556	0.500	1	11/12/2023 00:55	WG2169081
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 00:55	WG2169081
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 00:55	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ	C3	0.204	1.00	1	11/12/2023 00:55	WG2169081
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 00:55	WG2169081
Dibromomethane	U			0.0400	0.200	1	11/12/2023 00:55	WG2169081
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 00:55	WG2169081
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 00:55	WG2169081
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 00:55	WG2169081
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 00:55	WG2169081
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 00:55	WG2169081
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 00:55	WG2169081
1,1-Dichloroethene	U			0.0200	0.100	1	11/12/2023 00:55	WG2169081
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/12/2023 00:55	WG2169081
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 00:55	WG2169081
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 00:55	WG2169081
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 00:55	WG2169081
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 00:55	WG2169081
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 00:55	WG2169081
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 00:55	WG2169081
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 00:55	WG2169081
Di-isopropyl ether	U			0.0140	0.0400	1	11/12/2023 00:55	WG2169081
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 00:55	WG2169081
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 00:55	WG2169081
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 00:55	WG2169081
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 00:55	WG2169081
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 00:55	WG2169081
Methylene Chloride	U			0.265	1.00	1	11/12/2023 00:55	WG2169081
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 00:55	WG2169081
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 00:55	WG2169081
Naphthalene	U	UJ	C3	0.124	0.500	1	11/12/2023 00:55	WG2169081
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 00:55	WG2169081
Styrene	U	UJ	C3	0.109	0.500	1	11/12/2023 00:55	WG2169081
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 00:55	WG2169081
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 00:55	WG2169081
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 00:55	WG2169081
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 00:55	WG2169081
Toluene	U			0.0500	0.200	1	11/12/2023 00:55	WG2169081
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/12/2023 00:55	WG2169081
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/12/2023 00:55	WG2169081
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 00:55	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:55	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:55	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:55	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:55	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:55	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:55	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:55	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:55	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:55	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:55	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:55	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 00:55	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:55	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 00:55	WG2169081
(S) Toluene-d8	*98.7*			*75.0-131*		*11/12/2023 00:55*	WG2169081
(S) 4-Bromofluorobenzene	*98.8*			*67.0-138*		*11/12/2023 00:55*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 00:55*	WG2169081

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	428000		8450	20000	1	11/12/2023 15:41	WG2169670

Sample Narrative:
L1675140-05 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	769 J-	T8	15.0	50.0	1	11/09/2023 01:26	WG2167488

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26400		379	1000	1	11/08/2023 22:51	WG2167255
Nitrate	74.4	J	48.0	100	1	11/08/2023 22:51	WG2167255
Sulfate	89200		594	5000	1	11/08/2023 22:51	WG2167255

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3110		102	1000	1	11/25/2023 15:36	WG2175135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1560		28.1	100	1	11/15/2023 17:56	WG2168468
Manganese	3400		14.1	100	20	11/15/2023 18:19	WG2168468

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	5600		0.287	0.678	1	11/14/2023 14:21	WG2168264
Ethane	8.80		0.296	1.29	1	11/14/2023 14:21	WG2168264
Ethene	U		0.422	1.27	1	11/14/2023 14:21	WG2168264

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		5.48	10.0	10	11/12/2023 05:03	WG2169081
Acrylonitrile	U		0.760	5.00	10	11/12/2023 05:03	WG2169081
Benzene	U		0.160	0.400	10	11/12/2023 05:03	WG2169081
Bromobenzene	U		0.420	5.00	10	11/12/2023 05:03	WG2169081
Bromodichloromethane	U		0.315	1.00	10	11/12/2023 05:03	WG2169081
Bromoform	U		2.39	10.0	10	11/12/2023 05:03	WG2169081
Bromomethane	U		1.48	5.00	10	11/12/2023 05:03	WG2169081
n-Butylbenzene	U UJ	C3	1.53	5.00	10	11/12/2023 05:03	WG2169081
sec-Butylbenzene	U		1.01	5.00	10	11/12/2023 05:03	WG2169081
tert-Butylbenzene	U		0.620	2.00	10	11/12/2023 05:03	WG2169081
Carbon tetrachloride	U		0.432	2.00	10	11/12/2023 05:03	WG2169081
Chlorobenzene	U		0.229	1.00	10	11/12/2023 05:03	WG2169081
Chlorodibromomethane	U		0.180	1.00	10	11/12/2023 05:03	WG2169081
Chloroethane	U		0.432	2.00	10	11/12/2023 05:03	WG2169081
Chloroform	U		0.166	1.00	10	11/12/2023 05:03	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U		0.556	5.00	10	11/12/2023 05:03	WG2169081
2-Chlorotoluene	U		0.368	1.00	10	11/12/2023 05:03	WG2169081
4-Chlorotoluene	U		0.452	2.00	10	11/12/2023 05:03	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	2.04	10.0	10	11/12/2023 05:03	WG2169081
1,2-Dibromoethane	U		0.210	1.00	10	11/12/2023 05:03	WG2169081
Dibromomethane	U		0.400	2.00	10	11/12/2023 05:03	WG2169081
1,2-Dichlorobenzene	U		0.580	2.00	10	11/12/2023 05:03	WG2169081
1,3-Dichlorobenzene	U		0.680	2.00	10	11/12/2023 05:03	WG2169081
1,4-Dichlorobenzene	U		0.788	2.00	10	11/12/2023 05:03	WG2169081
Dichlorodifluoromethane	U		0.327	1.00	10	11/12/2023 05:03	WG2169081
1,1-Dichloroethane	U		0.230	1.00	10	11/12/2023 05:03	WG2169081
1,2-Dichloroethane	U		0.190	1.00	10	11/12/2023 05:03	WG2169081
1,1-Dichloroethene	1.78		0.200	1.00	10	11/12/2023 05:03	WG2169081
cis-1,2-Dichloroethene	682		0.276	1.00	10	11/12/2023 05:03	WG2169081
trans-1,2-Dichloroethene	6.14		0.572	2.00	10	11/12/2023 05:03	WG2169081
1,2-Dichloropropane	U		0.508	2.00	10	11/12/2023 05:03	WG2169081
1,1-Dichloropropene	U		0.280	1.00	10	11/12/2023 05:03	WG2169081
1,3-Dichloropropane	U		0.700	2.00	10	11/12/2023 05:03	WG2169081
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/12/2023 05:03	WG2169081
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/12/2023 05:03	WG2169081
2,2-Dichloropropane	U		0.317	1.00	10	11/12/2023 05:03	WG2169081
Di-isopropyl ether	U		0.140	0.400	10	11/12/2023 05:03	WG2169081
Ethylbenzene	U		0.212	1.00	10	11/12/2023 05:03	WG2169081
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/12/2023 05:03	WG2169081
Isopropylbenzene	U		0.345	1.00	10	11/12/2023 05:03	WG2169081
p-Isopropyltoluene	U		0.932	2.00	10	11/12/2023 05:03	WG2169081
2-Butanone (MEK)	U		5.00	10.0	10	11/12/2023 05:03	WG2169081
Methylene Chloride	U		2.65	10.0	10	11/12/2023 05:03	WG2169081
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/12/2023 05:03	WG2169081
Methyl tert-butyl ether	U		0.118	0.400	10	11/12/2023 05:03	WG2169081
Naphthalene	U	UJ C3	1.24	5.00	10	11/12/2023 05:03	WG2169081
n-Propylbenzene	U		0.472	2.00	10	11/12/2023 05:03	WG2169081
Styrene	U	UJ C3	1.09	5.00	10	11/12/2023 05:03	WG2169081
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/12/2023 05:03	WG2169081
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/12/2023 05:03	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/12/2023 05:03	WG2169081
Tetrachloroethene	231		0.280	1.00	10	11/12/2023 05:03	WG2169081
Toluene	U		0.500	2.00	10	11/12/2023 05:03	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.250	5.00	10	11/12/2023 05:03	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	1.93	5.00	10	11/12/2023 05:03	WG2169081
1,1,1-Trichloroethane	U		0.110	1.00	10	11/12/2023 05:03	WG2169081
1,1,2-Trichloroethane	U		0.353	1.00	10	11/12/2023 05:03	WG2169081
Trichloroethene	180		0.160	0.400	10	11/12/2023 05:03	WG2169081
Trichlorofluoromethane	U		0.200	1.00	10	11/12/2023 05:03	WG2169081
1,2,3-Trichloropropane	U		2.04	5.00	10	11/12/2023 05:03	WG2169081
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/12/2023 05:03	WG2169081
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/12/2023 05:03	WG2169081
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/12/2023 05:03	WG2169081
Vinyl chloride	1.40		0.273	1.00	10	11/12/2023 05:03	WG2169081
Xylenes, Total	U		1.91	2.60	10	11/12/2023 05:03	WG2169081
Ethyl Ether	U		0.170	1.00	10	11/12/2023 05:03	WG2169081
Tetrahydrofuran	U		0.900	5.00	10	11/12/2023 05:03	WG2169081
Iodomethane	U		2.42	5.00	10	11/12/2023 05:03	WG2169081
Allyl chloride	U		5.80	10.0	10	11/12/2023 05:03	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/12/2023 05:03	WG2169081
(S) Toluene-d8	*100*			*75.0-131*		*11/12/2023 05:03*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*84.9*			*67.0-138*		*11/12/2023 05:03*	WG2169081
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/12/2023 05:03*	WG2169081

Sample Narrative:

L1675140-05 WG2169081: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:14	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 01:14	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 01:14	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:14	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:14	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 01:14	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 01:14	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 01:14	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:14	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:14	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:14	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:14	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:14	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 01:14	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 01:14	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 01:14	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:14	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:14	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 01:14	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:14	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:14	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:14	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:14	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:14	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:14	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:14	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:14	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:14	WG2169081
cis-1,2-Dichloroethene	6.49		0.0276	0.100	1	11/12/2023 01:14	WG2169081
trans-1,2-Dichloroethene	0.105	J	0.0572	0.200	1	11/12/2023 01:14	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:14	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:14	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:14	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:14	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:14	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:14	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 01:14	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:14	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:14	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:14	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:14	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:14	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:14	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:14	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:14	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 01:14	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:14	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 01:14	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:14	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:14	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:14	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:14	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 01:14	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 01:14	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 01:14	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:14	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:14	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:14	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:14	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:14	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:14	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:14	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:14	WG2169081
Vinyl chloride	0.0900	J	0.0273	0.100	1	11/12/2023 01:14	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:14	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:14	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:14	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 01:14	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:14	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 01:14	WG2169081
(S) Toluene-d8	*96.2*			*75.0-131*		*11/12/2023 01:14*	WG2169081
(S) 4-Bromofluorobenzene	*94.4*			*67.0-138*		*11/12/2023 01:14*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 01:14*	WG2169081

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	226000		8450	20000	1	11/12/2023 15:46	WG2169670

Sample Narrative:
L1675140-07 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	3400 J-	T8	150	500	10	11/09/2023 01:26	WG2167488

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13900		379	1000	1	11/08/2023 23:31	WG2167255
Nitrate	85.0	J	48.0	100	1	11/08/2023 23:31	WG2167255
Sulfate	238000		5940	50000	10	11/09/2023 04:49	WG2167255

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2140		102	1000	1	11/25/2023 15:54	WG2175135

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3720		140	500	5	11/15/2023 18:22	WG2168468
Manganese	678		3.52	25.0	5	11/15/2023 18:22	WG2168468

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1200		0.287	0.678	1	11/15/2023 10:41	WG2170079
Ethane	5.42		0.296	1.29	1	11/15/2023 10:41	WG2170079
Ethene	2.20		0.422	1.27	1	11/15/2023 10:41	WG2170079

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		11.0	20.0	20	11/12/2023 05:22	WG2169081
Acrylonitrile	U		1.52	10.0	20	11/12/2023 05:22	WG2169081
Benzene	U		0.320	0.800	20	11/12/2023 05:22	WG2169081
Bromobenzene	U		0.840	10.0	20	11/12/2023 05:22	WG2169081
Bromodichloromethane	U		0.630	2.00	20	11/12/2023 05:22	WG2169081
Bromoform	U		4.78	20.0	20	11/12/2023 05:22	WG2169081
Bromomethane	U		2.96	10.0	20	11/12/2023 05:22	WG2169081
n-Butylbenzene	U UJ	C3	3.06	10.0	20	11/12/2023 05:22	WG2169081
sec-Butylbenzene	U		2.02	10.0	20	11/12/2023 05:22	WG2169081
tert-Butylbenzene	U		1.24	4.00	20	11/12/2023 05:22	WG2169081
Carbon tetrachloride	U		0.864	4.00	20	11/12/2023 05:22	WG2169081
Chlorobenzene	U		0.458	2.00	20	11/12/2023 05:22	WG2169081
Chlorodibromomethane	U		0.360	2.00	20	11/12/2023 05:22	WG2169081
Chloroethane	U		0.864	4.00	20	11/12/2023 05:22	WG2169081
Chloroform	U		0.332	2.00	20	11/12/2023 05:22	WG2169081

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloromethane	U		1.11	10.0	20	11/12/2023 05:22	WG2169081
2-Chlorotoluene	U		0.736	2.00	20	11/12/2023 05:22	WG2169081
4-Chlorotoluene	U		0.904	4.00	20	11/12/2023 05:22	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	4.08	20.0	20	11/12/2023 05:22	WG2169081
1,2-Dibromoethane	U		0.420	2.00	20	11/12/2023 05:22	WG2169081
Dibromomethane	U		0.800	4.00	20	11/12/2023 05:22	WG2169081
1,2-Dichlorobenzene	U		1.16	4.00	20	11/12/2023 05:22	WG2169081
1,3-Dichlorobenzene	U		1.36	4.00	20	11/12/2023 05:22	WG2169081
1,4-Dichlorobenzene	U		1.58	4.00	20	11/12/2023 05:22	WG2169081
Dichlorodifluoromethane	U		0.654	2.00	20	11/12/2023 05:22	WG2169081
1,1-Dichloroethane	U		0.460	2.00	20	11/12/2023 05:22	WG2169081
1,2-Dichloroethane	U		0.380	2.00	20	11/12/2023 05:22	WG2169081
1,1-Dichloroethene	1.58	J	0.400	2.00	20	11/12/2023 05:22	WG2169081
cis-1,2-Dichloroethene	429		0.552	2.00	20	11/12/2023 05:22	WG2169081
trans-1,2-Dichloroethene	2.10	J	1.14	4.00	20	11/12/2023 05:22	WG2169081
1,2-Dichloropropane	U		1.02	4.00	20	11/12/2023 05:22	WG2169081
1,1-Dichloropropene	U		0.560	2.00	20	11/12/2023 05:22	WG2169081
1,3-Dichloropropane	U		1.40	4.00	20	11/12/2023 05:22	WG2169081
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/12/2023 05:22	WG2169081
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/12/2023 05:22	WG2169081
2,2-Dichloropropane	U		0.634	2.00	20	11/12/2023 05:22	WG2169081
Di-isopropyl ether	U		0.280	0.800	20	11/12/2023 05:22	WG2169081
Ethylbenzene	U		0.424	2.00	20	11/12/2023 05:22	WG2169081
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/12/2023 05:22	WG2169081
Isopropylbenzene	U		0.690	2.00	20	11/12/2023 05:22	WG2169081
p-Isopropyltoluene	U		1.86	4.00	20	11/12/2023 05:22	WG2169081
2-Butanone (MEK)	U		10.0	20.0	20	11/12/2023 05:22	WG2169081
Methylene Chloride	U		5.30	20.0	20	11/12/2023 05:22	WG2169081
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/12/2023 05:22	WG2169081
Methyl tert-butyl ether	U		0.236	0.800	20	11/12/2023 05:22	WG2169081
Naphthalene	U	UJ C3	2.48	10.0	20	11/12/2023 05:22	WG2169081
n-Propylbenzene	U		0.944	4.00	20	11/12/2023 05:22	WG2169081
Styrene	U	UJ C3	2.18	10.0	20	11/12/2023 05:22	WG2169081
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/12/2023 05:22	WG2169081
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/12/2023 05:22	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	11/12/2023 05:22	WG2169081
Tetrachloroethene	3.68		0.560	2.00	20	11/12/2023 05:22	WG2169081
Toluene	U		1.00	4.00	20	11/12/2023 05:22	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.500	10.0	20	11/12/2023 05:22	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	3.86	10.0	20	11/12/2023 05:22	WG2169081
1,1,1-Trichloroethane	U		0.220	2.00	20	11/12/2023 05:22	WG2169081
1,1,2-Trichloroethane	U		0.706	2.00	20	11/12/2023 05:22	WG2169081
Trichloroethene	26.8		0.320	0.800	20	11/12/2023 05:22	WG2169081
Trichlorofluoromethane	U		0.400	2.00	20	11/12/2023 05:22	WG2169081
1,2,3-Trichloropropane	U		4.08	10.0	20	11/12/2023 05:22	WG2169081
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/12/2023 05:22	WG2169081
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/12/2023 05:22	WG2169081
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/12/2023 05:22	WG2169081
Vinyl chloride	13.2		0.546	2.00	20	11/12/2023 05:22	WG2169081
Xylenes, Total	U		3.82	5.20	20	11/12/2023 05:22	WG2169081
Ethyl Ether	U		0.340	2.00	20	11/12/2023 05:22	WG2169081
Tetrahydrofuran	U		1.80	10.0	20	11/12/2023 05:22	WG2169081
Iodomethane	U		4.84	10.0	20	11/12/2023 05:22	WG2169081
Allyl chloride	U		11.6	20.0	20	11/12/2023 05:22	WG2169081
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	11/12/2023 05:22	WG2169081
(S) Toluene-d8	*99.9*			*75.0-131*		*11/12/2023 05:22*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*87.9*			*67.0-138*		*11/12/2023 05:22*	WG2169081
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 05:22*	WG2169081

Sample Narrative:

L1675140-07 WG2169081: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/17/2023 05:06	WG2171873
Acrylonitrile	U		0.0760	0.500	1	11/17/2023 05:06	WG2171873
Benzene	U		0.0160	0.0400	1	11/17/2023 05:06	WG2171873
Bromobenzene	U		0.0420	0.500	1	11/17/2023 05:06	WG2171873
Bromodichloromethane	U		0.0315	0.100	1	11/17/2023 05:06	WG2171873
Bromoform	U		0.239	1.00	1	11/17/2023 05:06	WG2171873
Bromomethane	U		0.148	0.500	1	11/17/2023 05:06	WG2171873
n-Butylbenzene	U		0.153	0.500	1	11/17/2023 05:06	WG2171873
sec-Butylbenzene	U		0.101	0.500	1	11/17/2023 05:06	WG2171873
tert-Butylbenzene	U		0.0620	0.200	1	11/17/2023 05:06	WG2171873
Carbon tetrachloride	U		0.0432	0.200	1	11/17/2023 05:06	WG2171873
Chlorobenzene	U		0.0229	0.100	1	11/17/2023 05:06	WG2171873
Chlorodibromomethane	U		0.0180	0.100	1	11/17/2023 05:06	WG2171873
Chloroethane	U		0.0432	0.200	1	11/17/2023 05:06	WG2171873
Chloroform	U		0.0166	0.100	1	11/17/2023 05:06	WG2171873
Chloromethane	U		0.0556	0.500	1	11/17/2023 05:06	WG2171873
2-Chlorotoluene	U		0.0368	0.100	1	11/17/2023 05:06	WG2171873
4-Chlorotoluene	U		0.0452	0.200	1	11/17/2023 05:06	WG2171873
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/17/2023 05:06	WG2171873
1,2-Dibromoethane	U		0.0210	0.100	1	11/17/2023 05:06	WG2171873
Dibromomethane	U		0.0400	0.200	1	11/17/2023 05:06	WG2171873
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/17/2023 05:06	WG2171873
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/17/2023 05:06	WG2171873
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/17/2023 05:06	WG2171873
Dichlorodifluoromethane	U		0.0327	0.100	1	11/17/2023 05:06	WG2171873
1,1-Dichloroethane	U		0.0230	0.100	1	11/17/2023 05:06	WG2171873
1,2-Dichloroethane	U		0.0190	0.100	1	11/17/2023 05:06	WG2171873
1,1-Dichloroethene	0.198		0.0200	0.100	1	11/17/2023 05:06	WG2171873
cis-1,2-Dichloroethene	95.1		0.276	1.00	10	11/12/2023 05:42	WG2169081
trans-1,2-Dichloroethene	0.203		0.0572	0.200	1	11/17/2023 05:06	WG2171873
1,2-Dichloropropane	U		0.0508	0.200	1	11/17/2023 05:06	WG2171873
1,1-Dichloropropene	U		0.0280	0.100	1	11/17/2023 05:06	WG2171873
1,3-Dichloropropane	U		0.0700	0.200	1	11/17/2023 05:06	WG2171873
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/17/2023 05:06	WG2171873
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/17/2023 05:06	WG2171873
2,2-Dichloropropane	U	J3	0.0317	0.100	1	11/17/2023 05:06	WG2171873
Di-isopropyl ether	U		0.0140	0.0400	1	11/17/2023 05:06	WG2171873
Ethylbenzene	U		0.0212	0.100	1	11/17/2023 05:06	WG2171873
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/17/2023 05:06	WG2171873
Isopropylbenzene	U		0.0345	0.100	1	11/17/2023 05:06	WG2171873
p-Isopropyltoluene	U		0.0932	0.200	1	11/17/2023 05:06	WG2171873
2-Butanone (MEK)	U		0.500	1.00	1	11/17/2023 05:06	WG2171873
Methylene Chloride	U		0.265	1.00	1	11/17/2023 05:06	WG2171873
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/17/2023 05:06	WG2171873
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/17/2023 05:06	WG2171873
Naphthalene	U	UJ C3	0.124	0.500	1	11/17/2023 05:06	WG2171873
n-Propylbenzene	U		0.0472	0.200	1	11/17/2023 05:06	WG2171873
Styrene	U	UJ C3	0.109	0.500	1	11/17/2023 05:06	WG2171873
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/17/2023 05:06	WG2171873
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/17/2023 05:06	WG2171873
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/17/2023 05:06	WG2171873
Tetrachloroethene	U		0.0280	0.100	1	11/17/2023 05:06	WG2171873
Toluene	0.0520	J	0.0500	0.200	1	11/17/2023 05:06	WG2171873
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/17/2023 05:06	WG2171873
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/17/2023 05:06	WG2171873
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/17/2023 05:06	WG2171873

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/17/2023 05:06	WG2171873
Trichloroethene	0.376		0.0160	0.0400	1	11/17/2023 05:06	WG2171873
Trichlorofluoromethane	U		0.0200	0.100	1	11/17/2023 05:06	WG2171873
1,2,3-Trichloropropane	U		0.204	0.500	1	11/17/2023 05:06	WG2171873
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/17/2023 05:06	WG2171873
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/17/2023 05:06	WG2171873
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/17/2023 05:06	WG2171873
Vinyl chloride	35.3		0.0273	0.100	1	11/17/2023 05:06	WG2171873
Xylenes, Total	U		0.191	0.260	1	11/17/2023 05:06	WG2171873
Ethyl Ether	0.0460	J	0.0170	0.100	1	11/17/2023 05:06	WG2171873
Tetrahydrofuran	U		0.0900	0.500	1	11/17/2023 05:06	WG2171873
Iodomethane	U		0.242	0.500	1	11/17/2023 05:06	WG2171873
Allyl chloride	U		0.580	1.00	1	11/17/2023 05:06	WG2171873
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/17/2023 05:06	WG2171873
(S) Toluene-d8	*99.4*			*75.0-131*		*11/12/2023 05:42*	WG2169081
(S) Toluene-d8	*103*			*75.0-131*		*11/17/2023 05:06*	WG2171873
(S) 4-Bromofluorobenzene	*85.7*			*67.0-138*		*11/12/2023 05:42*	WG2169081
(S) 4-Bromofluorobenzene	*84.7*			*67.0-138*		*11/17/2023 05:06*	WG2171873
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 05:42*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/17/2023 05:06*	WG2171873

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

Analyte	Result	Qualifier		MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U			0.548	1.00	1	11/12/2023 01:33	WG2169081
Acrylonitrile	U			0.0760	0.500	1	11/12/2023 01:33	WG2169081
Benzene	0.0220		J	0.0160	0.0400	1	11/12/2023 01:33	WG2169081
Bromobenzene	U			0.0420	0.500	1	11/12/2023 01:33	WG2169081
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 01:33	WG2169081
Bromoform	U			0.239	1.00	1	11/12/2023 01:33	WG2169081
Bromomethane	U			0.148	0.500	1	11/12/2023 01:33	WG2169081
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/12/2023 01:33	WG2169081
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 01:33	WG2169081
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 01:33	WG2169081
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 01:33	WG2169081
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 01:33	WG2169081
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 01:33	WG2169081
Chloroethane	U			0.0432	0.200	1	11/12/2023 01:33	WG2169081
Chloroform	U			0.0166	0.100	1	11/12/2023 01:33	WG2169081
Chloromethane	U			0.0556	0.500	1	11/12/2023 01:33	WG2169081
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 01:33	WG2169081
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 01:33	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ	C3	0.204	1.00	1	11/12/2023 01:33	WG2169081
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 01:33	WG2169081
Dibromomethane	U			0.0400	0.200	1	11/12/2023 01:33	WG2169081
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 01:33	WG2169081
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 01:33	WG2169081
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 01:33	WG2169081
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 01:33	WG2169081
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 01:33	WG2169081
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 01:33	WG2169081
1,1-Dichloroethene	U			0.0200	0.100	1	11/12/2023 01:33	WG2169081
cis-1,2-Dichloroethene	0.996			0.0276	0.100	1	11/12/2023 01:33	WG2169081
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 01:33	WG2169081
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 01:33	WG2169081
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 01:33	WG2169081
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 01:33	WG2169081
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 01:33	WG2169081
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 01:33	WG2169081
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 01:33	WG2169081
Di-isopropyl ether	U			0.0140	0.0400	1	11/12/2023 01:33	WG2169081
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 01:33	WG2169081
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 01:33	WG2169081
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 01:33	WG2169081
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 01:33	WG2169081
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 01:33	WG2169081
Methylene Chloride	U			0.265	1.00	1	11/12/2023 01:33	WG2169081
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 01:33	WG2169081
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 01:33	WG2169081
Naphthalene	U	UJ	C3	0.124	0.500	1	11/12/2023 01:33	WG2169081
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 01:33	WG2169081
Styrene	U	UJ	C3	0.109	0.500	1	11/12/2023 01:33	WG2169081
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 01:33	WG2169081
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 01:33	WG2169081
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 01:33	WG2169081
Tetrachloroethene	0.0430		J	0.0280	0.100	1	11/12/2023 01:33	WG2169081
Toluene	U			0.0500	0.200	1	11/12/2023 01:33	WG2169081
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/12/2023 01:33	WG2169081
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/12/2023 01:33	WG2169081
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 01:33	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:33	WG2169081
Trichloroethene	0.0790		0.0160	0.0400	1	11/12/2023 01:33	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:33	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:33	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:33	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:33	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:33	WG2169081
Vinyl chloride	6.28		0.0273	0.100	1	11/12/2023 01:33	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:33	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:33	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:33	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 01:33	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:33	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 01:33	WG2169081
(S) Toluene-d8	*98.2*			*75.0-131*		*11/12/2023 01:33*	WG2169081
(S) 4-Bromofluorobenzene	*92.8*			*67.0-138*		*11/12/2023 01:33*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 01:33*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:52	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 01:52	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 01:52	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:52	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:52	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 01:52	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 01:52	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 01:52	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:52	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:52	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:52	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:52	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:52	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 01:52	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 01:52	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 01:52	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:52	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:52	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 01:52	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:52	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:52	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:52	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:52	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:52	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:52	WG2169081
1,1-Dichloroethane	0.818		0.0230	0.100	1	11/12/2023 01:52	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:52	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:52	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:52	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:52	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:52	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:52	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:52	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:52	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:52	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:52	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 01:52	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:52	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:52	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:52	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:52	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:52	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:52	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:52	WG2169081
Methyl tert-butyl ether	0.0150	J	0.0118	0.0400	1	11/12/2023 01:52	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 01:52	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:52	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 01:52	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:52	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:52	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:52	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:52	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 01:52	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 01:52	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 01:52	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:52	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:52	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:52	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:52	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:52	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:52	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:52	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:52	WG2169081
Vinyl chloride	0.222		0.0273	0.100	1	11/12/2023 01:52	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:52	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:52	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:52	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 01:52	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:52	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 01:52	WG2169081
(S) Toluene-d8	*97.2*			*75.0-131*		*11/12/2023 01:52*	WG2169081
(S) 4-Bromofluorobenzene	*92.6*			*67.0-138*		*11/12/2023 01:52*	WG2169081
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 01:52*	WG2169081

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.77	U ~~C5~~	0.548	1.00	1	11/12/2023 02:11	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 02:11	WG2169081
Benzene	0.0270	J	0.0160	0.0400	1	11/12/2023 02:11	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:11	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:11	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 02:11	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 02:11	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 02:11	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:11	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:11	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:11	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:11	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:11	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 02:11	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 02:11	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 02:11	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:11	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:11	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 02:11	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:11	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:11	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:11	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:11	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:11	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:11	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:11	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:11	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:11	WG2169081
cis-1,2-Dichloroethene	0.263		0.0276	0.100	1	11/12/2023 02:11	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:11	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:11	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:11	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:11	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:11	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:11	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:11	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 02:11	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:11	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:11	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:11	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:11	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:11	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:11	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:11	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:11	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 02:11	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:11	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 02:11	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:11	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:11	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:11	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:11	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 02:11	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 02:11	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 02:11	WG2169081 JC 2/1/24
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:11	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:11	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:11	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:11	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:11	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:11	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:11	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:11	WG2169081
Vinyl chloride	0.103		0.0273	0.100	1	11/12/2023 02:11	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:11	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:11	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:11	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 02:11	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:11	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 02:11	WG2169081
(S) Toluene-d8	*96.8*			*75.0-131*		*11/12/2023 02:11*	WG2169081
(S) 4-Bromofluorobenzene	*90.2*			*67.0-138*		*11/12/2023 02:11*	WG2169081
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/12/2023 02:11*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:30	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 02:30	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 02:30	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:30	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:30	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 02:30	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 02:30	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 02:30	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:30	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:30	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:30	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:30	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:30	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 02:30	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 02:30	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 02:30	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:30	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:30	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 02:30	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:30	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:30	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:30	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:30	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:30	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:30	WG2169081
1,1-Dichloroethane	0.0310	J	0.0230	0.100	1	11/12/2023 02:30	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:30	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:30	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 02:30	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:30	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:30	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:30	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:30	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:30	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:30	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:30	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 02:30	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:30	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:30	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:30	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:30	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:30	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:30	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:30	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:30	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 02:30	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:30	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 02:30	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:30	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:30	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:30	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:30	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 02:30	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 02:30	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 02:30	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:30	WG2169081

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

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:30	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:30	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:30	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:30	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:30	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:30	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:30	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 02:30	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:30	WG2169081
Ethyl Ether	0.120		0.0170	0.100	1	11/12/2023 02:30	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:30	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 02:30	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:30	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 02:30	WG2169081
(S) Toluene-d8	*99.6*			*75.0-131*		*11/12/2023 02:30*	WG2169081
(S) 4-Bromofluorobenzene	*94.6*			*67.0-138*		*11/12/2023 02:30*	WG2169081
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/12/2023 02:30*	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:49	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 02:49	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 02:49	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:49	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:49	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 02:49	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 02:49	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 02:49	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:49	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:49	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:49	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:49	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:49	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 02:49	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 02:49	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 02:49	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:49	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:49	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 02:49	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:49	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:49	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:49	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:49	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:49	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:49	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:49	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:49	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:49	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 02:49	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:49	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:49	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:49	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:49	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:49	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:49	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:49	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 02:49	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:49	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:49	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:49	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:49	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:49	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:49	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:49	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:49	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 02:49	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:49	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 02:49	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:49	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:49	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:49	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:49	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 02:49	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 02:49	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 02:49	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:49	WG2169081

JC 2/1/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:49	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 02:49	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:49	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:49	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:49	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:49	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:49	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 02:49	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:49	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:49	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:49	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 02:49	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:49	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 02:49	WG2169081
(S) Toluene-d8	*97.8*			*75.0-131*		*11/12/2023 02:49*	WG2169081
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*11/12/2023 02:49*	WG2169081
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/12/2023 02:49*	WG2169081

JC 2/1/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	U		11.0	20.0	20	11/12/2023 06:01	WG2169081	
Acrylonitrile	U		1.52	10.0	20	11/12/2023 06:01	WG2169081	
Benzene	U		0.320	0.800	20	11/12/2023 06:01	WG2169081	
Bromobenzene	U		0.840	10.0	20	11/12/2023 06:01	WG2169081	
Bromodichloromethane	U		0.630	2.00	20	11/12/2023 06:01	WG2169081	
Bromoform	U		4.78	20.0	20	11/12/2023 06:01	WG2169081	
Bromomethane	U		2.96	10.0	20	11/12/2023 06:01	WG2169081	
n-Butylbenzene	U	UJ C3	3.06	10.0	20	11/12/2023 06:01	WG2169081	
sec-Butylbenzene	U		2.02	10.0	20	11/12/2023 06:01	WG2169081	
tert-Butylbenzene	U		1.24	4.00	20	11/12/2023 06:01	WG2169081	
Carbon tetrachloride	U		0.864	4.00	20	11/12/2023 06:01	WG2169081	
Chlorobenzene	U		0.458	2.00	20	11/12/2023 06:01	WG2169081	
Chlorodibromomethane	U		0.360	2.00	20	11/12/2023 06:01	WG2169081	
Chloroethane	U		0.864	4.00	20	11/12/2023 06:01	WG2169081	
Chloroform	U		0.332	2.00	20	11/12/2023 06:01	WG2169081	
Chloromethane	U		1.11	10.0	20	11/12/2023 06:01	WG2169081	
2-Chlorotoluene	U		0.736	2.00	20	11/12/2023 06:01	WG2169081	
4-Chlorotoluene	U		0.904	4.00	20	11/12/2023 06:01	WG2169081	
1,2-Dibromo-3-Chloropropane	U	UJ C3	4.08	20.0	20	11/12/2023 06:01	WG2169081	
1,2-Dibromoethane	U		0.420	2.00	20	11/12/2023 06:01	WG2169081	
Dibromomethane	U		0.800	4.00	20	11/12/2023 06:01	WG2169081	
1,2-Dichlorobenzene	U		1.16	4.00	20	11/12/2023 06:01	WG2169081	
1,3-Dichlorobenzene	U		1.36	4.00	20	11/12/2023 06:01	WG2169081	
1,4-Dichlorobenzene	U		1.58	4.00	20	11/12/2023 06:01	WG2169081	
Dichlorodifluoromethane	U		0.654	2.00	20	11/12/2023 06:01	WG2169081	
1,1-Dichloroethane	U		0.460	2.00	20	11/12/2023 06:01	WG2169081	
1,2-Dichloroethane	U		0.380	2.00	20	11/12/2023 06:01	WG2169081	
1,1-Dichloroethene	2.08		0.400	2.00	20	11/12/2023 06:01	WG2169081	
cis-1,2-Dichloroethene	322		0.552	2.00	20	11/12/2023 06:01	WG2169081	
trans-1,2-Dichloroethene	3.12	J	1.14	4.00	20	11/12/2023 06:01	WG2169081	
1,2-Dichloropropane	U		1.02	4.00	20	11/12/2023 06:01	WG2169081	
1,1-Dichloropropene	U		0.560	2.00	20	11/12/2023 06:01	WG2169081	
1,3-Dichloropropane	U		1.40	4.00	20	11/12/2023 06:01	WG2169081	
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/12/2023 06:01	WG2169081	
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/12/2023 06:01	WG2169081	
2,2-Dichloropropane	U		0.634	2.00	20	11/12/2023 06:01	WG2169081	
Di-isopropyl ether	U		0.280	0.800	20	11/12/2023 06:01	WG2169081	
Ethylbenzene	U		0.424	2.00	20	11/12/2023 06:01	WG2169081	
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/12/2023 06:01	WG2169081	
Isopropylbenzene	U		0.690	2.00	20	11/12/2023 06:01	WG2169081	
p-Isopropyltoluene	U		1.86	4.00	20	11/12/2023 06:01	WG2169081	
2-Butanone (MEK)	U		10.0	20.0	20	11/12/2023 06:01	WG2169081	
Methylene Chloride	U		5.30	20.0	20	11/12/2023 06:01	WG2169081	
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/12/2023 06:01	WG2169081	
Methyl tert-butyl ether	U		0.236	0.800	20	11/12/2023 06:01	WG2169081	
Naphthalene	U	UJ C3	2.48	10.0	20	11/12/2023 06:01	WG2169081	
n-Propylbenzene	U		0.944	4.00	20	11/12/2023 06:01	WG2169081	
Styrene	U	UJ C3	2.18	10.0	20	11/12/2023 06:01	WG2169081	
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/12/2023 06:01	WG2169081	
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/12/2023 06:01	WG2169081	
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	11/12/2023 06:01	WG2169081	
Tetrachloroethene	U		0.560	2.00	20	11/12/2023 06:01	WG2169081	
Toluene	U		1.00	4.00	20	11/12/2023 06:01	WG2169081	
1,2,3-Trichlorobenzene	U	UJ C3	0.500	10.0	20	11/12/2023 06:01	WG2169081	JC 2/1/24
1,2,4-Trichlorobenzene	U	UJ C3	3.86	10.0	20	11/12/2023 06:01	WG2169081	
1,1,1-Trichloroethane	U		0.220	2.00	20	11/12/2023 06:01	WG2169081	

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.706	2.00	20	11/12/2023 06:01	WG2169081
Trichloroethene	2.00		0.320	0.800	20	11/12/2023 06:01	WG2169081
Trichlorofluoromethane	U		0.400	2.00	20	11/12/2023 06:01	WG2169081
1,2,3-Trichloropropane	U		4.08	10.0	20	11/12/2023 06:01	WG2169081
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/12/2023 06:01	WG2169081
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/12/2023 06:01	WG2169081
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/12/2023 06:01	WG2169081
Vinyl chloride	64.3		0.546	2.00	20	11/12/2023 06:01	WG2169081
Xylenes, Total	U		3.82	5.20	20	11/12/2023 06:01	WG2169081
Ethyl Ether	U		0.340	2.00	20	11/12/2023 06:01	WG2169081
Tetrahydrofuran	U		1.80	10.0	20	11/12/2023 06:01	WG2169081
Iodomethane	U		4.84	10.0	20	11/12/2023 06:01	WG2169081
Allyl chloride	U		11.6	20.0	20	11/12/2023 06:01	WG2169081
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	11/12/2023 06:01	WG2169081
(S) Toluene-d8	*99.9*			*75.0-131*		*11/12/2023 06:01*	WG2169081
(S) 4-Bromofluorobenzene	*87.5*			*67.0-138*		*11/12/2023 06:01*	WG2169081
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 06:01*	WG2169081

Sample Narrative:

L1675231-05 WG2169081: Target compounds too high to run at a lower dilution.

JC 2/1/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	459000		8450	20000	1	11/12/2023 16:03	WG2169670

Sample Narrative:
L1675231-06 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	3930		379	1000	1	11/09/2023 02:16	WG2167331
Nitrate	88.1 U	~~B J~~	48.0	100	1	11/09/2023 02:16	WG2167331
Sulfate	2260	J	594	5000	1	11/09/2023 02:16	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4500		102	1000	1	11/21/2023 23:18	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	8080		28.1	100	1	11/16/2023 19:19	WG2168469
Manganese	2840		0.704	5.00	1	11/16/2023 19:19	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1750		0.287	0.678	1	11/15/2023 10:46	WG2170079
Ethane	3.80		0.296	1.29	1	11/15/2023 10:46	WG2170079
Ethene	U		0.422	1.27	1	11/15/2023 10:46	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U		0.548	1.00	1	11/12/2023 03:08	WG2169081	
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 03:08	WG2169081	
Benzene	0.0220	J	0.0160	0.0400	1	11/12/2023 03:08	WG2169081	
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:08	WG2169081	
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:08	WG2169081	
Bromoform	U		0.239	1.00	1	11/12/2023 03:08	WG2169081	
Bromomethane	U		0.148	0.500	1	11/12/2023 03:08	WG2169081	
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/12/2023 03:08	WG2169081	
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:08	WG2169081	
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:08	WG2169081	
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:08	WG2169081	
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:08	WG2169081	
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:08	WG2169081	
Chloroethane	U		0.0432	0.200	1	11/12/2023 03:08	WG2169081	
Chloroform	U		0.0166	0.100	1	11/12/2023 03:08	WG2169081	
Chloromethane	U		0.0556	0.500	1	11/12/2023 03:08	WG2169081	
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:08	WG2169081	
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:08	WG2169081	
1,2-Dibromo-3-Chloropropane	U UJ	C3	0.204	1.00	1	11/12/2023 03:08	WG2169081	JC 2/14/24
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:08	WG2169081	

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:08	WG2169081	
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:08	WG2169081	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:08	WG2169081	
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:08	WG2169081	
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:08	WG2169081	
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:08	WG2169081	
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 03:08	WG2169081	
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:08	WG2169081	
cis-1,2-Dichloroethene	0.672		0.0276	0.100	1	11/12/2023 03:08	WG2169081	
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:08	WG2169081	
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:08	WG2169081	
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:08	WG2169081	
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:08	WG2169081	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:08	WG2169081	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:08	WG2169081	
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:08	WG2169081	
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 03:08	WG2169081	
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:08	WG2169081	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:08	WG2169081	
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:08	WG2169081	
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:08	WG2169081	
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:08	WG2169081	
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:08	WG2169081	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:08	WG2169081	
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 03:08	WG2169081	
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 03:08	WG2169081	
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:08	WG2169081	
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 03:08	WG2169081	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:08	WG2169081	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:08	WG2169081	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:08	WG2169081	
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:08	WG2169081	
Toluene	0.0570	J	0.0500	0.200	1	11/12/2023 03:08	WG2169081	
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 03:08	WG2169081	
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 03:08	WG2169081	
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:08	WG2169081	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:08	WG2169081	
Trichloroethene	0.0420		0.0160	0.0400	1	11/12/2023 03:08	WG2169081	
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:08	WG2169081	
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:08	WG2169081	
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:08	WG2169081	
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:08	WG2169081	
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:08	WG2169081	
Vinyl chloride	1.01		0.0273	0.100	1	11/12/2023 03:08	WG2169081	
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:08	WG2169081	
Ethyl Ether	0.161		0.0170	0.100	1	11/12/2023 03:08	WG2169081	
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:08	WG2169081	
Iodomethane	U		0.242	0.500	1	11/12/2023 03:08	WG2169081	
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:08	WG2169081	
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 03:08	WG2169081	
(S) Toluene-d8	*97.7*			*75.0-131*		*11/12/2023 03:08*	WG2169081	
(S) 4-Bromofluorobenzene	*89.4*			*67.0-138*		*11/12/2023 03:08*	WG2169081	
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/12/2023 03:08*	WG2169081	JC 2/14/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	525000		8450	20000	1	11/12/2023 16:08	WG2169670

Sample Narrative:
L1675231-07 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22600		379	1000	1	11/09/2023 02:29	WG2167331
Nitrate	634	~~B~~	48.0	100	1	11/09/2023 02:29	WG2167331
Sulfate	6930		594	5000	1	11/09/2023 02:29	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3850		102	1000	1	11/21/2023 23:38	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11000		28.1	100	1	11/16/2023 20:19	WG2168469
Manganese	1430		0.704	5.00	1	11/16/2023 20:19	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	3800		0.287	0.678	1	11/15/2023 10:53	WG2170079
Ethane	23.7		0.296	1.29	1	11/15/2023 10:53	WG2170079
Ethene	9.88		0.422	1.27	1	11/15/2023 10:53	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		11.0	20.0	20	11/12/2023 06:20	WG2169081
Acrylonitrile	U		1.52	10.0	20	11/12/2023 06:20	WG2169081
Benzene	1.90		0.320	0.800	20	11/12/2023 06:20	WG2169081
Bromobenzene	U		0.840	10.0	20	11/12/2023 06:20	WG2169081
Bromodichloromethane	U		0.630	2.00	20	11/12/2023 06:20	WG2169081
Bromoform	U		4.78	20.0	20	11/12/2023 06:20	WG2169081
Bromomethane	U		2.96	10.0	20	11/12/2023 06:20	WG2169081
n-Butylbenzene	U	UJ C3	3.06	10.0	20	11/12/2023 06:20	WG2169081
sec-Butylbenzene	U		2.02	10.0	20	11/12/2023 06:20	WG2169081
tert-Butylbenzene	U		1.24	4.00	20	11/12/2023 06:20	WG2169081
Carbon tetrachloride	U		0.864	4.00	20	11/12/2023 06:20	WG2169081
Chlorobenzene	U		0.458	2.00	20	11/12/2023 06:20	WG2169081
Chlorodibromomethane	U		0.360	2.00	20	11/12/2023 06:20	WG2169081
Chloroethane	U		0.864	4.00	20	11/12/2023 06:20	WG2169081
Chloroform	U		0.332	2.00	20	11/12/2023 06:20	WG2169081
Chloromethane	U		1.11	10.0	20	11/12/2023 06:20	WG2169081
2-Chlorotoluene	U		0.736	2.00	20	11/12/2023 06:20	WG2169081
4-Chlorotoluene	U		0.904	4.00	20	11/12/2023 06:20	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	4.08	20.0	20	11/12/2023 06:20	WG2169081
1,2-Dibromoethane	U		0.420	2.00	20	11/12/2023 06:20	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.800	4.00	20	11/12/2023 06:20	WG2169081
1,2-Dichlorobenzene	U		1.16	4.00	20	11/12/2023 06:20	WG2169081
1,3-Dichlorobenzene	U		1.36	4.00	20	11/12/2023 06:20	WG2169081
1,4-Dichlorobenzene	U		1.58	4.00	20	11/12/2023 06:20	WG2169081
Dichlorodifluoromethane	U		0.654	2.00	20	11/12/2023 06:20	WG2169081
1,1-Dichloroethane	U		0.460	2.00	20	11/12/2023 06:20	WG2169081
1,2-Dichloroethane	U		0.380	2.00	20	11/12/2023 06:20	WG2169081
1,1-Dichloroethene	U		0.400	2.00	20	11/12/2023 06:20	WG2169081
cis-1,2-Dichloroethene	277		0.552	2.00	20	11/12/2023 06:20	WG2169081
trans-1,2-Dichloroethene	1.24	J	1.14	4.00	20	11/12/2023 06:20	WG2169081
1,2-Dichloropropane	U		1.02	4.00	20	11/12/2023 06:20	WG2169081
1,1-Dichloropropene	U		0.560	2.00	20	11/12/2023 06:20	WG2169081
1,3-Dichloropropane	U		1.40	4.00	20	11/12/2023 06:20	WG2169081
cis-1,3-Dichloropropene	U		0.542	2.00	20	11/12/2023 06:20	WG2169081
trans-1,3-Dichloropropene	U		1.22	4.00	20	11/12/2023 06:20	WG2169081
2,2-Dichloropropane	U		0.634	2.00	20	11/12/2023 06:20	WG2169081
Di-isopropyl ether	U		0.280	0.800	20	11/12/2023 06:20	WG2169081
Ethylbenzene	U		0.424	2.00	20	11/12/2023 06:20	WG2169081
Hexachloro-1,3-butadiene	U		10.2	20.0	20	11/12/2023 06:20	WG2169081
Isopropylbenzene	U		0.690	2.00	20	11/12/2023 06:20	WG2169081
p-Isopropyltoluene	U		1.86	4.00	20	11/12/2023 06:20	WG2169081
2-Butanone (MEK)	U		10.0	20.0	20	11/12/2023 06:20	WG2169081
Methylene Chloride	U		5.30	20.0	20	11/12/2023 06:20	WG2169081
4-Methyl-2-pentanone (MIBK)	U		8.00	20.0	20	11/12/2023 06:20	WG2169081
Methyl tert-butyl ether	U		0.236	0.800	20	11/12/2023 06:20	WG2169081
Naphthalene	U	UJ C3	2.48	10.0	20	11/12/2023 06:20	WG2169081
n-Propylbenzene	U		0.944	4.00	20	11/12/2023 06:20	WG2169081
Styrene	U	UJ C3	2.18	10.0	20	11/12/2023 06:20	WG2169081
1,1,1,2-Tetrachloroethane	U		0.400	2.00	20	11/12/2023 06:20	WG2169081
1,1,2,2-Tetrachloroethane	U		0.312	2.00	20	11/12/2023 06:20	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.540	2.00	20	11/12/2023 06:20	WG2169081
Tetrachloroethene	4.48		0.560	2.00	20	11/12/2023 06:20	WG2169081
Toluene	U		1.00	4.00	20	11/12/2023 06:20	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.500	10.0	20	11/12/2023 06:20	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	3.86	10.0	20	11/12/2023 06:20	WG2169081
1,1,1-Trichloroethane	U		0.220	2.00	20	11/12/2023 06:20	WG2169081
1,1,2-Trichloroethane	U		0.706	2.00	20	11/12/2023 06:20	WG2169081
Trichloroethene	4.18		0.320	0.800	20	11/12/2023 06:20	WG2169081
Trichlorofluoromethane	U		0.400	2.00	20	11/12/2023 06:20	WG2169081
1,2,3-Trichloropropane	U		4.08	10.0	20	11/12/2023 06:20	WG2169081
1,2,4-Trimethylbenzene	U		0.928	4.00	20	11/12/2023 06:20	WG2169081
1,2,3-Trimethylbenzene	U		0.920	4.00	20	11/12/2023 06:20	WG2169081
1,3,5-Trimethylbenzene	U		0.864	4.00	20	11/12/2023 06:20	WG2169081
Vinyl chloride	104		0.546	2.00	20	11/12/2023 06:20	WG2169081
Xylenes, Total	U		3.82	5.20	20	11/12/2023 06:20	WG2169081
Ethyl Ether	U		0.340	2.00	20	11/12/2023 06:20	WG2169081
Tetrahydrofuran	U		1.80	10.0	20	11/12/2023 06:20	WG2169081
Iodomethane	U		4.84	10.0	20	11/12/2023 06:20	WG2169081
Allyl chloride	U		11.6	20.0	20	11/12/2023 06:20	WG2169081
Trans-1,4-Dichloro-2-butene	U		1.12	4.00	20	11/12/2023 06:20	WG2169081
(S) Toluene-d8	*97.9*			*75.0-131*		*11/12/2023 06:20*	WG2169081
(S) 4-Bromofluorobenzene	*86.7*			*67.0-138*		*11/12/2023 06:20*	WG2169081
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 06:20*	WG2169081

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Sample Narrative:

L1675231-07 WG2169081: Target compounds too high to run at a lower dilution.

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.32 U	~~C5~~	0.548	1.00	1	11/12/2023 03:28	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 03:28	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 03:28	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:28	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:28	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 03:28	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 03:28	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 03:28	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:28	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:28	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:28	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:28	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:28	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 03:28	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 03:28	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 03:28	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:28	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:28	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 03:28	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:28	WG2169081
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:28	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:28	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:28	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:28	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:28	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 03:28	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 03:28	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:28	WG2169081
cis-1,2-Dichloroethene	0.147		0.0276	0.100	1	11/12/2023 03:28	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 03:28	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 03:28	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:28	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:28	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:28	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:28	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:28	WG2169081
Di-isopropyl ether	0.0450		0.0140	0.0400	1	11/12/2023 03:28	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:28	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:28	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:28	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:28	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:28	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:28	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:28	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 03:28	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 03:28	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:28	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 03:28	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:28	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:28	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:28	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:28	WG2169081
Toluene	U		0.0500	0.200	1	11/12/2023 03:28	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 03:28	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 03:28	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:28	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:28	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 03:28	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:28	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:28	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:28	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:28	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:28	WG2169081
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 03:28	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:28	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 03:28	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:28	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 03:28	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:28	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 03:28	WG2169081
(S) Toluene-d8	*99.1*			*75.0-131*		*11/12/2023 03:28*	WG2169081
(S) 4-Bromofluorobenzene	*91.8*			*67.0-138*		*11/12/2023 03:28*	WG2169081
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 03:28*	WG2169081

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

Analyte	Result	Qualifier		MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U			0.548	1.00	1	11/12/2023 03:47	WG2169081
Acrylonitrile	U			0.0760	0.500	1	11/12/2023 03:47	WG2169081
Benzene	U			0.0160	0.0400	1	11/12/2023 03:47	WG2169081
Bromobenzene	U			0.0420	0.500	1	11/12/2023 03:47	WG2169081
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 03:47	WG2169081
Bromoform	U			0.239	1.00	1	11/12/2023 03:47	WG2169081
Bromomethane	U			0.148	0.500	1	11/12/2023 03:47	WG2169081
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/12/2023 03:47	WG2169081
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 03:47	WG2169081
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 03:47	WG2169081
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 03:47	WG2169081
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 03:47	WG2169081
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 03:47	WG2169081
Chloroethane	U			0.0432	0.200	1	11/12/2023 03:47	WG2169081
Chloroform	U			0.0166	0.100	1	11/12/2023 03:47	WG2169081
Chloromethane	U			0.0556	0.500	1	11/12/2023 03:47	WG2169081
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 03:47	WG2169081
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 03:47	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ	C3	0.204	1.00	1	11/12/2023 03:47	WG2169081
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 03:47	WG2169081
Dibromomethane	U			0.0400	0.200	1	11/12/2023 03:47	WG2169081
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 03:47	WG2169081
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 03:47	WG2169081
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 03:47	WG2169081
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 03:47	WG2169081
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 03:47	WG2169081
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 03:47	WG2169081
1,1-Dichloroethene	U			0.0200	0.100	1	11/12/2023 03:47	WG2169081
cis-1,2-Dichloroethene	0.0650		J	0.0276	0.100	1	11/12/2023 03:47	WG2169081
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 03:47	WG2169081
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 03:47	WG2169081
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 03:47	WG2169081
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 03:47	WG2169081
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 03:47	WG2169081
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 03:47	WG2169081
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 03:47	WG2169081
Di-isopropyl ether	U			0.0140	0.0400	1	11/12/2023 03:47	WG2169081
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 03:47	WG2169081
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 03:47	WG2169081
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 03:47	WG2169081
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 03:47	WG2169081
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 03:47	WG2169081
Methylene Chloride	U			0.265	1.00	1	11/12/2023 03:47	WG2169081
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 03:47	WG2169081
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 03:47	WG2169081
Naphthalene	U	UJ	C3	0.124	0.500	1	11/12/2023 03:47	WG2169081
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 03:47	WG2169081
Styrene	U	UJ	C3	0.109	0.500	1	11/12/2023 03:47	WG2169081
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 03:47	WG2169081
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 03:47	WG2169081
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 03:47	WG2169081
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 03:47	WG2169081
Toluene	U			0.0500	0.200	1	11/12/2023 03:47	WG2169081
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/12/2023 03:47	WG2169081
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/12/2023 03:47	WG2169081
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 03:47	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:47	WG2169081
Trichloroethene	0.0690		0.0160	0.0400	1	11/12/2023 03:47	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:47	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:47	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:47	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:47	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:47	WG2169081
Vinyl chloride	0.805		0.0273	0.100	1	11/12/2023 03:47	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:47	WG2169081
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 03:47	WG2169081
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:47	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 03:47	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:47	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 03:47	WG2169081
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 03:47*	WG2169081
(S) 4-Bromofluorobenzene	*90.3*			*67.0-138*		*11/12/2023 03:47*	WG2169081
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 03:47*	WG2169081

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	635000		8450	20000	1	11/12/2023 16:12	WG2169670

Sample Narrative:
L1675231-10 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	22100		379	1000	1	11/09/2023 03:07	WG2167331
Nitrate	860		48.0	100	1	11/09/2023 03:07	WG2167331
Sulfate	70900	J- J6	594	5000	1	11/09/2023 03:07	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5920		102	1000	1	11/22/2023 01:23	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	257		28.1	100	1	11/16/2023 20:23	WG2168469
Manganese	3640		0.704	5.00	1	11/16/2023 20:23	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	205		0.287	0.678	1	11/15/2023 11:01	WG2170079
Ethane	1.33		0.296	1.29	1	11/15/2023 11:01	WG2170079
Ethene	U		0.422	1.27	1	11/15/2023 11:01	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	62.1	J+ C5	0.548	1.00	1	11/12/2023 04:06	WG2169081
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 04:06	WG2169081
Benzene	U		0.0160	0.0400	1	11/12/2023 04:06	WG2169081
Bromobenzene	U		0.0420	0.500	1	11/12/2023 04:06	WG2169081
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 04:06	WG2169081
Bromoform	U		0.239	1.00	1	11/12/2023 04:06	WG2169081
Bromomethane	U		0.148	0.500	1	11/12/2023 04:06	WG2169081
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 04:06	WG2169081
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 04:06	WG2169081
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 04:06	WG2169081
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 04:06	WG2169081
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 04:06	WG2169081
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 04:06	WG2169081
Chloroethane	U		0.0432	0.200	1	11/12/2023 04:06	WG2169081
Chloroform	U		0.0166	0.100	1	11/12/2023 04:06	WG2169081
Chloromethane	U		0.0556	0.500	1	11/12/2023 04:06	WG2169081
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 04:06	WG2169081
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 04:06	WG2169081
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 04:06	WG2169081
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 04:06	WG2169081

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/12/2023 04:06	WG2169081
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 04:06	WG2169081
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 04:06	WG2169081
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 04:06	WG2169081
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 04:06	WG2169081
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 04:06	WG2169081
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 04:06	WG2169081
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 04:06	WG2169081
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 04:06	WG2169081
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 04:06	WG2169081
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 04:06	WG2169081
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 04:06	WG2169081
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 04:06	WG2169081
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 04:06	WG2169081
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 04:06	WG2169081
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 04:06	WG2169081
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 04:06	WG2169081
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 04:06	WG2169081
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 04:06	WG2169081
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 04:06	WG2169081
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 04:06	WG2169081
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 04:06	WG2169081
Methylene Chloride	U		0.265	1.00	1	11/12/2023 04:06	WG2169081
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 04:06	WG2169081
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 04:06	WG2169081
Naphthalene	U	UJ C3	0.124	0.500	1	11/12/2023 04:06	WG2169081
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 04:06	WG2169081
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 04:06	WG2169081
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 04:06	WG2169081
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 04:06	WG2169081
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 04:06	WG2169081
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 04:06	WG2169081
Toluene	0.0640	J	0.0500	0.200	1	11/12/2023 04:06	WG2169081
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 04:06	WG2169081
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 04:06	WG2169081
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 04:06	WG2169081
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:06	WG2169081
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 04:06	WG2169081
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:06	WG2169081
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:06	WG2169081
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:06	WG2169081
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:06	WG2169081
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:06	WG2169081
Vinyl chloride	0.698		0.0273	0.100	1	11/12/2023 04:06	WG2169081
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:06	WG2169081
Ethyl Ether	0.0670	J	0.0170	0.100	1	11/12/2023 04:06	WG2169081
Tetrahydrofuran	0.544		0.0900	0.500	1	11/12/2023 04:06	WG2169081
Iodomethane	U		0.242	0.500	1	11/12/2023 04:06	WG2169081
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:06	WG2169081
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 04:06	WG2169081
(S) Toluene-d8	*96.9*			*75.0-131*		*11/12/2023 04:06*	WG2169081
(S) 4-Bromofluorobenzene	*90.2*			*67.0-138*		*11/12/2023 04:06*	WG2169081
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 04:06*	WG2169081

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	613000		8450	20000	1	11/12/2023 16:17	WG2169670

Sample Narrative:
L1675231-11 WG2169670: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	57300		379	1000	1	11/09/2023 03:20	WG2167331
Nitrate	82.8	U ~~B J~~	48.0	100	1	11/09/2023 03:20	WG2167331
Sulfate	5270		594	5000	1	11/09/2023 03:20	WG2167331

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10900		204	2000	2	11/22/2023 01:42	WG2175201

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2520		28.1	100	1	11/16/2023 20:26	WG2168469
Manganese	1760		0.704	5.00	1	11/16/2023 20:26	WG2168469

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	664		0.287	0.678	1	11/15/2023 11:07	WG2170079
Ethane	14.1		0.296	1.29	1	11/15/2023 11:07	WG2170079
Ethene	17.1		0.422	1.27	1	11/15/2023 11:07	WG2170079

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.18	U ~~C5~~	0.548	1.00	1	11/17/2023 05:25	WG2171873
Acrylonitrile	U		0.0760	0.500	1	11/17/2023 05:25	WG2171873
Benzene	U		0.0160	0.0400	1	11/17/2023 05:25	WG2171873
Bromobenzene	U		0.0420	0.500	1	11/17/2023 05:25	WG2171873
Bromodichloromethane	U		0.0315	0.100	1	11/17/2023 05:25	WG2171873
Bromoform	U		0.239	1.00	1	11/17/2023 05:25	WG2171873
Bromomethane	U		0.148	0.500	1	11/17/2023 05:25	WG2171873
n-Butylbenzene	U		0.153	0.500	1	11/17/2023 05:25	WG2171873
sec-Butylbenzene	U		0.101	0.500	1	11/17/2023 05:25	WG2171873
tert-Butylbenzene	U		0.0620	0.200	1	11/17/2023 05:25	WG2171873
Carbon tetrachloride	U		0.0432	0.200	1	11/17/2023 05:25	WG2171873
Chlorobenzene	U		0.0229	0.100	1	11/17/2023 05:25	WG2171873
Chlorodibromomethane	U		0.0180	0.100	1	11/17/2023 05:25	WG2171873
Chloroethane	U		0.0432	0.200	1	11/17/2023 05:25	WG2171873
Chloroform	U		0.0166	0.100	1	11/17/2023 05:25	WG2171873
Chloromethane	U		0.0556	0.500	1	11/17/2023 05:25	WG2171873
2-Chlorotoluene	U		0.0368	0.100	1	11/17/2023 05:25	WG2171873
4-Chlorotoluene	U		0.0452	0.200	1	11/17/2023 05:25	WG2171873
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/17/2023 05:25	WG2171873
1,2-Dibromoethane	U		0.0210	0.100	1	11/17/2023 05:25	WG2171873

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.0400	0.200	1	11/17/2023 05:25	WG2171873
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/17/2023 05:25	WG2171873
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/17/2023 05:25	WG2171873
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/17/2023 05:25	WG2171873
Dichlorodifluoromethane	U		0.0327	0.100	1	11/17/2023 05:25	WG2171873
1,1-Dichloroethane	U		0.0230	0.100	1	11/17/2023 05:25	WG2171873
1,2-Dichloroethane	U		0.0190	0.100	1	11/17/2023 05:25	WG2171873
1,1-Dichloroethene	U		0.0200	0.100	1	11/17/2023 05:25	WG2171873
cis-1,2-Dichloroethene	4.12		0.0276	0.100	1	11/17/2023 05:25	WG2171873
trans-1,2-Dichloroethene	0.126	J	0.0572	0.200	1	11/17/2023 05:25	WG2171873
1,2-Dichloropropane	U		0.0508	0.200	1	11/17/2023 05:25	WG2171873
1,1-Dichloropropene	U		0.0280	0.100	1	11/17/2023 05:25	WG2171873
1,3-Dichloropropane	U		0.0700	0.200	1	11/17/2023 05:25	WG2171873
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/17/2023 05:25	WG2171873
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/17/2023 05:25	WG2171873
2,2-Dichloropropane	U	~~J3~~	0.0317	0.100	1	11/17/2023 05:25	WG2171873
Di-isopropyl ether	U		0.0140	0.0400	1	11/17/2023 05:25	WG2171873
Ethylbenzene	0.0710	J	0.0212	0.100	1	11/17/2023 05:25	WG2171873
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/17/2023 05:25	WG2171873
Isopropylbenzene	U		0.0345	0.100	1	11/17/2023 05:25	WG2171873
p-Isopropyltoluene	U		0.0932	0.200	1	11/17/2023 05:25	WG2171873
2-Butanone (MEK)	U		0.500	1.00	1	11/17/2023 05:25	WG2171873
Methylene Chloride	U		0.265	1.00	1	11/17/2023 05:25	WG2171873
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/17/2023 05:25	WG2171873
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/17/2023 05:25	WG2171873
Naphthalene	U	UJ C3	0.124	0.500	1	11/17/2023 05:25	WG2171873
n-Propylbenzene	U		0.0472	0.200	1	11/17/2023 05:25	WG2171873
Styrene	U	UJ C3	0.109	0.500	1	11/17/2023 05:25	WG2171873
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/17/2023 05:25	WG2171873
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/17/2023 05:25	WG2171873
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/17/2023 05:25	WG2171873
Tetrachloroethene	U		0.0280	0.100	1	11/17/2023 05:25	WG2171873
Toluene	0.281		0.0500	0.200	1	11/17/2023 05:25	WG2171873
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/17/2023 05:25	WG2171873
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/17/2023 05:25	WG2171873
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/17/2023 05:25	WG2171873
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/17/2023 05:25	WG2171873
Trichloroethene	0.111		0.0160	0.0400	1	11/17/2023 05:25	WG2171873
Trichlorofluoromethane	U		0.0200	0.100	1	11/17/2023 05:25	WG2171873
1,2,3-Trichloropropane	U		0.204	0.500	1	11/17/2023 05:25	WG2171873
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/17/2023 05:25	WG2171873
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/17/2023 05:25	WG2171873
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/17/2023 05:25	WG2171873
Vinyl chloride	3.50		0.0273	0.100	1	11/17/2023 05:25	WG2171873
Xylenes, Total	0.421		0.191	0.260	1	11/17/2023 05:25	WG2171873
Ethyl Ether	U		0.0170	0.100	1	11/17/2023 05:25	WG2171873
Tetrahydrofuran	U		0.0900	0.500	1	11/17/2023 05:25	WG2171873
Iodomethane	U		0.242	0.500	1	11/17/2023 05:25	WG2171873
Allyl chloride	U		0.580	1.00	1	11/17/2023 05:25	WG2171873
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/17/2023 05:25	WG2171873
(S) Toluene-d8	*103*			*75.0-131*		*11/17/2023 05:25*	WG2171873
(S) 4-Bromofluorobenzene	*83.4*			*67.0-138*		*11/17/2023 05:25*	WG2171873
(S) 1,2-Dichloroethane-d4	*107*			*70.0-130*		*11/17/2023 05:25*	WG2171873

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	294000		8450	20000	1	11/14/2023 09:07	WG2170180

Sample Narrative:
L1675715-01 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	594	J- T8	15.0	50.0	1	11/09/2023 17:21	WG2168182

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28500		379	1000	1	11/09/2023 23:46	WG2168164
Nitrate	86.7	J	48.0	100	1	11/09/2023 23:46	WG2168164
Sulfate	25100		594	5000	1	11/09/2023 23:46	WG2168164

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2420		102	1000	1	11/24/2023 10:51	WG2176775

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	510		28.1	100	1	11/13/2023 22:59	WG2168470
Manganese	315		3.52	25.0	5	11/13/2023 23:13	WG2168470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1350		0.287	0.678	1	11/17/2023 13:36	WG2172256
Ethane	4.03		0.296	1.29	1	11/17/2023 13:36	WG2172256
Ethene	U		0.422	1.27	1	11/17/2023 13:36	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	U		0.548	1.00	1	11/11/2023 23:32	WG2169502	
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/11/2023 23:32	WG2169502	
Benzene	U		0.0160	0.0400	1	11/11/2023 23:32	WG2169502	
Bromobenzene	U		0.0420	0.500	1	11/11/2023 23:32	WG2169502	
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 23:32	WG2169502	
Bromoform	U		0.239	1.00	1	11/11/2023 23:32	WG2169502	
Bromomethane	U		0.148	0.500	1	11/11/2023 23:32	WG2169502	
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 23:32	WG2169502	
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 23:32	WG2169502	
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 23:32	WG2169502	
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 23:32	WG2169502	
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 23:32	WG2169502	
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 23:32	WG2169502	
Chloroethane	U	UJ C3	0.0432	0.200	1	11/11/2023 23:32	WG2169502	JC 2/1/24
Chloroform	U		0.0166	0.100	1	11/11/2023 23:32	WG2169502	

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/11/2023 23:32	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/11/2023 23:32	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/11/2023 23:32	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/11/2023 23:32	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/11/2023 23:32	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/11/2023 23:32	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/11/2023 23:32	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/11/2023 23:32	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/11/2023 23:32	WG2169502
1,2-Dichloroethane	U			0.0190	0.100	1	11/11/2023 23:32	WG2169502
1,1-Dichloroethene	U			0.0200	0.100	1	11/11/2023 23:32	WG2169502
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/11/2023 23:32	WG2169502
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/11/2023 23:32	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/11/2023 23:32	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/11/2023 23:32	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/11/2023 23:32	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/11/2023 23:32	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/11/2023 23:32	WG2169502
Di-isopropyl ether	U	UJ	C3	0.0140	0.0400	1	11/11/2023 23:32	WG2169502
Ethylbenzene	0.0940		J	0.0212	0.100	1	11/11/2023 23:32	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/11/2023 23:32	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/11/2023 23:32	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/11/2023 23:32	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/11/2023 23:32	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/11/2023 23:32	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/11/2023 23:32	WG2169502
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/11/2023 23:32	WG2169502
Naphthalene	U			0.124	0.500	1	11/11/2023 23:32	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/11/2023 23:32	WG2169502
Styrene	U			0.109	0.500	1	11/11/2023 23:32	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/11/2023 23:32	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/11/2023 23:32	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/11/2023 23:32	WG2169502
Tetrachloroethene	U			0.0280	0.100	1	11/11/2023 23:32	WG2169502
Toluene	U			0.0500	0.200	1	11/11/2023 23:32	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/11/2023 23:32	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/11/2023 23:32	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/11/2023 23:32	WG2169502
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/11/2023 23:32	WG2169502
Trichloroethene	U			0.0160	0.0400	1	11/11/2023 23:32	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/11/2023 23:32	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/11/2023 23:32	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/11/2023 23:32	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/11/2023 23:32	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/11/2023 23:32	WG2169502
Vinyl chloride	U			0.0273	0.100	1	11/11/2023 23:32	WG2169502
Xylenes, Total	0.273			0.191	0.260	1	11/11/2023 23:32	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/11/2023 23:32	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/11/2023 23:32	WG2169502
Iodomethane	U			0.242	0.500	1	11/11/2023 23:32	WG2169502
Allyl chloride	U			0.580	1.00	1	11/11/2023 23:32	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/11/2023 23:32	WG2169502
(S) Toluene-d8	*103*				*75.0-131*		*11/11/2023 23:32*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/11/2023 23:32*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/11/2023 23:32*	WG2169502

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	126000		8450	20000	1	11/14/2023 09:24	WG2170180

Sample Narrative:
L1675715-02 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	1080	T8	15.0	50.0	1	11/09/2023 17:21	WG2168182

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15700		379	1000	1	11/10/2023 03:57	WG2168191
Nitrate	310		48.0	100	1	11/10/2023 03:57	WG2168191
Sulfate	43800		594	5000	1	11/10/2023 03:57	WG2168191

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1470	B	102	1000	1	11/24/2023 11:09	WG2176775

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1720		28.1	100	1	11/13/2023 23:02	WG2168470
Manganese	107		0.704	5.00	1	11/13/2023 23:02	WG2168470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	40.2		0.287	0.678	1	11/17/2023 13:40	WG2172256
Ethane	U		0.296	1.29	1	11/17/2023 13:40	WG2172256
Ethene	1.25	J	0.422	1.27	1	11/17/2023 13:40	WG2172256

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/11/2023 23:52	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/11/2023 23:52	WG2169502
Benzene	0.0480		0.0160	0.0400	1	11/11/2023 23:52	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/11/2023 23:52	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 23:52	WG2169502
Bromoform	U		0.239	1.00	1	11/11/2023 23:52	WG2169502
Bromomethane	U		0.148	0.500	1	11/11/2023 23:52	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 23:52	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 23:52	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 23:52	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 23:52	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 23:52	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 23:52	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/11/2023 23:52	WG2169502
Chloroform	U		0.0166	0.100	1	11/11/2023 23:52	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U	C3	0.0556	0.500	1	11/11/2023 23:52	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 23:52	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 23:52	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 23:52	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 23:52	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 23:52	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 23:52	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 23:52	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 23:52	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 23:52	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 23:52	WG2169502
cis-1,2-Dichloroethene	1.82		0.0276	0.100	1	11/11/2023 23:52	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 23:52	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 23:52	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 23:52	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 23:52	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 23:52	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 23:52	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/11/2023 23:52	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/11/2023 23:52	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 23:52	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 23:52	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 23:52	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 23:52	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/11/2023 23:52	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 23:52	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 23:52	WG2169502
Naphthalene	U		0.124	0.500	1	11/11/2023 23:52	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 23:52	WG2169502
Styrene	U		0.109	0.500	1	11/11/2023 23:52	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 23:52	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 23:52	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 23:52	WG2169502
Tetrachloroethene	0.0710	J	0.0280	0.100	1	11/11/2023 23:52	WG2169502
Toluene	0.140	J	0.0500	0.200	1	11/11/2023 23:52	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/11/2023 23:52	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/11/2023 23:52	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 23:52	WG2169502
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 23:52	WG2169502
Trichloroethene	0.319		0.0160	0.0400	1	11/11/2023 23:52	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 23:52	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 23:52	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 23:52	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 23:52	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 23:52	WG2169502
Vinyl chloride	0.423		0.0273	0.100	1	11/11/2023 23:52	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/11/2023 23:52	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 23:52	WG2169502
Tetrahydrofuran	0.505		0.0900	0.500	1	11/11/2023 23:52	WG2169502
Iodomethane	U		0.242	0.500	1	11/11/2023 23:52	WG2169502
Allyl chloride	U		0.580	1.00	1	11/11/2023 23:52	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/11/2023 23:52	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/11/2023 23:52*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/11/2023 23:52*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*11/11/2023 23:52*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	1.74		0.548	1.00	1	11/12/2023 00:11	WG2169502	
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 00:11	WG2169502	
Benzene	U		0.0160	0.0400	1	11/12/2023 00:11	WG2169502	
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:11	WG2169502	
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:11	WG2169502	
Bromoform	U		0.239	1.00	1	11/12/2023 00:11	WG2169502	
Bromomethane	U		0.148	0.500	1	11/12/2023 00:11	WG2169502	
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:11	WG2169502	
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:11	WG2169502	
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:11	WG2169502	
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:11	WG2169502	
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:11	WG2169502	
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:11	WG2169502	
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 00:11	WG2169502	
Chloroform	U		0.0166	0.100	1	11/12/2023 00:11	WG2169502	
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 00:11	WG2169502	
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:11	WG2169502	
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:11	WG2169502	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:11	WG2169502	
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:11	WG2169502	
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:11	WG2169502	
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:11	WG2169502	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:11	WG2169502	
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:11	WG2169502	
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:11	WG2169502	
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:11	WG2169502	
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:11	WG2169502	
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502	
cis-1,2-Dichloroethene	0.0340	J	0.0276	0.100	1	11/12/2023 00:11	WG2169502	
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:11	WG2169502	
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:11	WG2169502	
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:11	WG2169502	
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:11	WG2169502	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:11	WG2169502	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:11	WG2169502	
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:11	WG2169502	
Di-isopropyl ether	0.0830	J- C3	0.0140	0.0400	1	11/12/2023 00:11	WG2169502	
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:11	WG2169502	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:11	WG2169502	
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:11	WG2169502	
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:11	WG2169502	
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:11	WG2169502	
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:11	WG2169502	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:11	WG2169502	
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:11	WG2169502	
Naphthalene	U		0.124	0.500	1	11/12/2023 00:11	WG2169502	
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:11	WG2169502	
Styrene	U		0.109	0.500	1	11/12/2023 00:11	WG2169502	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:11	WG2169502	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:11	WG2169502	
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:11	WG2169502	
Toluene	U		0.0500	0.200	1	11/12/2023 00:11	WG2169502	
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:11	WG2169502	
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:11	WG2169502	
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:11	WG2169502	JC 2/1/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:11	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:11	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:11	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:11	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:11	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:11	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:11	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:11	WG2169502
Ethyl Ether	0.267		0.0170	0.100	1	11/12/2023 00:11	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:11	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:11	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:11	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 00:11	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 00:11*	WG2169502
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 00:11*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*11/12/2023 00:11*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.67		0.548	1.00	1	11/12/2023 00:29	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 00:29	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:29	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:29	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:29	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:29	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:29	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:29	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:29	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:29	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:29	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:29	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:29	WG2169502
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 00:29	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:29	WG2169502
Chloromethane	U UJ	C3	0.0556	0.500	1	11/12/2023 00:29	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:29	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:29	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:29	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:29	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:29	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:29	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:29	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:29	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:29	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:29	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:29	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:29	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:29	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:29	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:29	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:29	WG2169502
Di-isopropyl ether	U UJ	C3	0.0140	0.0400	1	11/12/2023 00:29	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:29	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:29	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:29	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:29	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:29	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:29	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:29	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:29	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:29	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:29	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:29	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:29	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:29	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:29	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:29	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:29	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:29	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:29	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:29	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:29	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:29	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:29	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:29	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:29	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:29	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:29	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:29	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:29	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:29	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:29	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 00:29	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 00:29*	WG2169502
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/12/2023 00:29*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*11/12/2023 00:29*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.01		0.548	1.00	1	11/12/2023 00:48	WG2169502
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 00:48	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:48	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:48	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:48	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:48	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:48	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:48	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:48	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:48	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:48	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:48	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:48	WG2169502
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 00:48	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:48	WG2169502
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 00:48	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:48	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:48	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:48	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:48	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:48	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:48	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:48	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:48	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:48	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:48	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:48	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:48	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:48	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:48	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:48	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:48	WG2169502
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 00:48	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:48	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:48	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:48	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:48	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:48	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:48	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:48	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:48	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:48	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:48	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:48	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:48	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:48	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:48	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:48	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:48	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:48	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:48	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:48	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:48	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:48	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:48	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:48	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:48	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:48	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:48	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:48	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:48	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:48	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:48	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 00:48	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 00:48*	WG2169502
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/12/2023 00:48*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/12/2023 00:48*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91		0.548	1.00	1	11/12/2023 01:06	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 01:06	WG2169502
Benzene	0.0210	J	0.0160	0.0400	1	11/12/2023 01:06	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:06	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:06	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:06	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:06	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:06	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:06	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:06	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:06	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:06	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:06	WG2169502
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 01:06	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:06	WG2169502
Chloromethane	U UJ	C3	0.0556	0.500	1	11/12/2023 01:06	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:06	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:06	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:06	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:06	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:06	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:06	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:06	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:06	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:06	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:06	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:06	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:06	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:06	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:06	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:06	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:06	WG2169502
Di-isopropyl ether	U UJ	C3	0.0140	0.0400	1	11/12/2023 01:06	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:06	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:06	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:06	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:06	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:06	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:06	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:06	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:06	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:06	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:06	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:06	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:06	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:06	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:06	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:06	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:06	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:06	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:06	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 01:06	WG2169502
Trichloroethene	U			0.0160	0.0400	1	11/12/2023 01:06	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 01:06	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 01:06	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 01:06	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 01:06	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 01:06	WG2169502
Vinyl chloride	0.0840		J	0.0273	0.100	1	11/12/2023 01:06	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/12/2023 01:06	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/12/2023 01:06	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 01:06	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 01:06	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 01:06	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 01:06	WG2169502
(S) Toluene-d8	*103*				*75.0-131*		*11/12/2023 01:06*	WG2169502
(S) 4-Bromofluorobenzene	*108*				*67.0-138*		*11/12/2023 01:06*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.6*				*70.0-130*		*11/12/2023 01:06*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:26	WG2169502
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 01:26	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 01:26	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:26	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:26	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:26	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:26	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:26	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:26	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:26	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:26	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:26	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:26	WG2169502
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 01:26	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:26	WG2169502
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 01:26	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:26	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:26	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:26	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:26	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:26	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:26	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:26	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:26	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:26	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:26	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:26	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:26	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:26	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:26	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:26	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:26	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:26	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:26	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:26	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:26	WG2169502
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 01:26	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:26	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:26	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:26	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:26	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:26	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:26	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:26	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:26	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:26	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:26	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:26	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:26	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:26	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:26	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:26	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:26	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:26	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:26	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:26	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:26	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:26	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:26	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:26	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:26	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:26	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:26	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 01:26	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:26	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:26	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:26	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 01:26	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:26	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 01:26	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2023 01:26*	WG2169502
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 01:26*	WG2169502
(S) 1,2-Dichloroethane-d4	*97.2*			*70.0-130*		*11/12/2023 01:26*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 01:45	WG2169502
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 01:45	WG2169502
Benzene	0.0540		0.0160	0.0400	1	11/12/2023 01:45	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:45	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:45	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:45	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:45	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:45	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:45	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:45	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:45	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:45	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:45	WG2169502
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 01:45	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:45	WG2169502
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 01:45	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:45	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:45	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:45	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:45	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:45	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:45	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:45	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:45	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:45	WG2169502
1,1-Dichloroethane	0.118		0.0230	0.100	1	11/12/2023 01:45	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:45	WG2169502
1,1-Dichloroethene	2.64		0.0200	0.100	1	11/12/2023 01:45	WG2169502
cis-1,2-Dichloroethene	522		0.552	2.00	20	11/16/2023 04:50	WG2171758
trans-1,2-Dichloroethene	0.611		0.0572	0.200	1	11/12/2023 01:45	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:45	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:45	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:45	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:45	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:45	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:45	WG2169502
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 01:45	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:45	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:45	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:45	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:45	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:45	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:45	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:45	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:45	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:45	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:45	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:45	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:45	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:45	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:45	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:45	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:45	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:45	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:45	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:45	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 01:45	WG2169502
Trichloroethene	0.0800			0.0160	0.0400	1	11/12/2023 01:45	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 01:45	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 01:45	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 01:45	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 01:45	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 01:45	WG2169502
Vinyl chloride	50.0			0.0273	0.100	1	11/12/2023 01:45	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/12/2023 01:45	WG2169502
Ethyl Ether	0.0530		J	0.0170	0.100	1	11/12/2023 01:45	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 01:45	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 01:45	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 01:45	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 01:45	WG2169502
(S) Toluene-d8	*102*				*75.0-131*		*11/12/2023 01:45*	WG2169502
(S) Toluene-d8	*106*				*75.0-131*		*11/16/2023 04:50*	WG2171758
(S) 4-Bromofluorobenzene	*103*				*67.0-138*		*11/12/2023 01:45*	WG2169502
(S) 4-Bromofluorobenzene	*99.3*				*67.0-138*		*11/16/2023 04:50*	WG2171758
(S) 1,2-Dichloroethane-d4	*96.6*				*70.0-130*		*11/12/2023 01:45*	WG2169502
(S) 1,2-Dichloroethane-d4	*102*				*70.0-130*		*11/16/2023 04:50*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		2.74	5.00	5	11/13/2023 08:05	WG2169946
Acrylonitrile	U		0.380	2.50	5	11/13/2023 08:05	WG2169946
Benzene	U		0.0800	0.200	5	11/13/2023 08:05	WG2169946
Bromobenzene	U		0.210	2.50	5	11/13/2023 08:05	WG2169946
Bromodichloromethane	U		0.158	0.500	5	11/13/2023 08:05	WG2169946
Bromoform	U		1.20	5.00	5	11/13/2023 08:05	WG2169946
Bromomethane	U		0.740	2.50	5	11/13/2023 08:05	WG2169946
n-Butylbenzene	U		0.765	2.50	5	11/13/2023 08:05	WG2169946
sec-Butylbenzene	U		0.505	2.50	5	11/13/2023 08:05	WG2169946
tert-Butylbenzene	U		0.310	1.00	5	11/13/2023 08:05	WG2169946
Carbon tetrachloride	U		0.216	1.00	5	11/13/2023 08:05	WG2169946
Chlorobenzene	U		0.115	0.500	5	11/13/2023 08:05	WG2169946
Chlorodibromomethane	U		0.0900	0.500	5	11/13/2023 08:05	WG2169946
Chloroethane	U		0.216	1.00	5	11/13/2023 08:05	WG2169946
Chloroform	U		0.0830	0.500	5	11/13/2023 08:05	WG2169946
Chloromethane	U		0.278	2.50	5	11/13/2023 08:05	WG2169946
2-Chlorotoluene	U		0.184	0.500	5	11/13/2023 08:05	WG2169946
4-Chlorotoluene	U		0.226	1.00	5	11/13/2023 08:05	WG2169946
1,2-Dibromo-3-Chloropropane	U		1.02	5.00	5	11/13/2023 08:05	WG2169946
1,2-Dibromoethane	U		0.105	0.500	5	11/13/2023 08:05	WG2169946
Dibromomethane	U		0.200	1.00	5	11/13/2023 08:05	WG2169946
1,2-Dichlorobenzene	U		0.290	1.00	5	11/13/2023 08:05	WG2169946
1,3-Dichlorobenzene	U		0.340	1.00	5	11/13/2023 08:05	WG2169946
1,4-Dichlorobenzene	U		0.394	1.00	5	11/13/2023 08:05	WG2169946
Dichlorodifluoromethane	U		0.164	0.500	5	11/13/2023 08:05	WG2169946
1,1-Dichloroethane	U		0.115	0.500	5	11/13/2023 08:05	WG2169946
1,2-Dichloroethane	U		0.0950	0.500	5	11/13/2023 08:05	WG2169946
1,1-Dichloroethene	U		0.100	0.500	5	11/13/2023 08:05	WG2169946
cis-1,2-Dichloroethene	14.1		0.138	0.500	5	11/13/2023 08:05	WG2169946
trans-1,2-Dichloroethene	U		0.286	1.00	5	11/13/2023 08:05	WG2169946
1,2-Dichloropropane	U		0.254	1.00	5	11/13/2023 08:05	WG2169946
1,1-Dichloropropene	U		0.140	0.500	5	11/13/2023 08:05	WG2169946
1,3-Dichloropropane	U		0.350	1.00	5	11/13/2023 08:05	WG2169946
cis-1,3-Dichloropropene	U		0.136	0.500	5	11/13/2023 08:05	WG2169946
trans-1,3-Dichloropropene	U		0.306	1.00	5	11/13/2023 08:05	WG2169946
2,2-Dichloropropane	U		0.159	0.500	5	11/13/2023 08:05	WG2169946
Di-isopropyl ether	U		0.0700	0.200	5	11/13/2023 08:05	WG2169946
Ethylbenzene	U		0.106	0.500	5	11/13/2023 08:05	WG2169946
Hexachloro-1,3-butadiene	U		2.54	5.00	5	11/13/2023 08:05	WG2169946
Isopropylbenzene	U		0.173	0.500	5	11/13/2023 08:05	WG2169946
p-Isopropyltoluene	U		0.466	1.00	5	11/13/2023 08:05	WG2169946
2-Butanone (MEK)	U		2.50	5.00	5	11/13/2023 08:05	WG2169946
Methylene Chloride	U		1.33	5.00	5	11/13/2023 08:05	WG2169946
4-Methyl-2-pentanone (MIBK)	U		2.00	5.00	5	11/13/2023 08:05	WG2169946
Methyl tert-butyl ether	U		0.0590	0.200	5	11/13/2023 08:05	WG2169946
Naphthalene	U		0.620	2.50	5	11/13/2023 08:05	WG2169946
n-Propylbenzene	U		0.236	1.00	5	11/13/2023 08:05	WG2169946
Styrene	U		0.545	2.50	5	11/13/2023 08:05	WG2169946
1,1,1,2-Tetrachloroethane	U		0.100	0.500	5	11/13/2023 08:05	WG2169946
1,1,2,2-Tetrachloroethane	U		0.0780	0.500	5	11/13/2023 08:05	WG2169946
1,1,2-Trichlorotrifluoroethane	U		0.135	0.500	5	11/13/2023 08:05	WG2169946
Tetrachloroethene	0.980		0.140	0.500	5	11/13/2023 08:05	WG2169946
Toluene	U		0.250	1.00	5	11/13/2023 08:05	WG2169946
1,2,3-Trichlorobenzene	U		0.125	2.50	5	11/13/2023 08:05	WG2169946
1,2,4-Trichlorobenzene	U		0.965	2.50	5	11/13/2023 08:05	WG2169946
1,1,1-Trichloroethane	U		0.0550	0.500	5	11/13/2023 08:05	WG2169946

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.177	0.500	5	11/13/2023 08:05	WG2169946
Trichloroethene	2.05		0.0800	0.200	5	11/13/2023 08:05	WG2169946
Trichlorofluoromethane	U		0.100	0.500	5	11/13/2023 08:05	WG2169946
1,2,3-Trichloropropane	U		1.02	2.50	5	11/13/2023 08:05	WG2169946
1,2,4-Trimethylbenzene	U		0.232	1.00	5	11/13/2023 08:05	WG2169946
1,2,3-Trimethylbenzene	U		0.230	1.00	5	11/13/2023 08:05	WG2169946
1,3,5-Trimethylbenzene	U		0.216	1.00	5	11/13/2023 08:05	WG2169946
Vinyl chloride	4.53		0.137	0.500	5	11/13/2023 08:05	WG2169946
Xylenes, Total	U		0.955	1.30	5	11/13/2023 08:05	WG2169946
Ethyl Ether	U		0.0850	0.500	5	11/13/2023 08:05	WG2169946
Tetrahydrofuran	U		0.450	2.50	5	11/13/2023 08:05	WG2169946
Iodomethane	U		1.21	2.50	5	11/13/2023 08:05	WG2169946
Allyl chloride	U		2.90	5.00	5	11/13/2023 08:05	WG2169946
Trans-1,4-Dichloro-2-butene	U		0.280	1.00	5	11/13/2023 08:05	WG2169946
(S) Toluene-d8	*92.9*			*75.0-131*		*11/13/2023 08:05*	WG2169946
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/13/2023 08:05*	WG2169946
(S) 1,2-Dichloroethane-d4	*94.9*			*70.0-130*		*11/13/2023 08:05*	WG2169946

Sample Narrative:

L1675773-03 WG2169946: Lowest possible dilution due to sample foaming.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	U		0.548	1.00	1	11/12/2023 02:03	WG2169502	
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 02:03	WG2169502	
Benzene	U		0.0160	0.0400	1	11/12/2023 02:03	WG2169502	
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:03	WG2169502	
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:03	WG2169502	
Bromoform	U		0.239	1.00	1	11/12/2023 02:03	WG2169502	
Bromomethane	U		0.148	0.500	1	11/12/2023 02:03	WG2169502	
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:03	WG2169502	
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:03	WG2169502	
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:03	WG2169502	
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:03	WG2169502	
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:03	WG2169502	
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:03	WG2169502	
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 02:03	WG2169502	
Chloroform	U		0.0166	0.100	1	11/12/2023 02:03	WG2169502	
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 02:03	WG2169502	
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:03	WG2169502	
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:03	WG2169502	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:03	WG2169502	
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:03	WG2169502	
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:03	WG2169502	
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:03	WG2169502	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:03	WG2169502	
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:03	WG2169502	
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:03	WG2169502	
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 02:03	WG2169502	
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:03	WG2169502	
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 02:03	WG2169502	
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/16/2023 05:09	WG2171758	
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 02:03	WG2169502	
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:03	WG2169502	
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:03	WG2169502	
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:03	WG2169502	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:03	WG2169502	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:03	WG2169502	
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:03	WG2169502	
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 02:03	WG2169502	
Ethylbenzene	0.0680	J	0.0212	0.100	1	11/12/2023 02:03	WG2169502	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:03	WG2169502	
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:03	WG2169502	
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:03	WG2169502	
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:03	WG2169502	
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:03	WG2169502	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:03	WG2169502	
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:03	WG2169502	
Naphthalene	U		0.124	0.500	1	11/12/2023 02:03	WG2169502	
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:03	WG2169502	
Styrene	U		0.109	0.500	1	11/12/2023 02:03	WG2169502	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:03	WG2169502	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:03	WG2169502	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:03	WG2169502	
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:03	WG2169502	
Toluene	0.153	J	0.0500	0.200	1	11/12/2023 02:03	WG2169502	
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:03	WG2169502	
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:03	WG2169502	JC 2/14/24
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:03	WG2169502	

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 02:03	WG2169502
Trichloroethene	U			0.0160	0.0400	1	11/12/2023 02:03	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 02:03	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 02:03	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 02:03	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 02:03	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 02:03	WG2169502
Vinyl chloride	U			0.0273	0.100	1	11/12/2023 02:03	WG2169502
Xylenes, Total	0.257		J	0.191	0.260	1	11/12/2023 02:03	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/12/2023 02:03	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 02:03	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 02:03	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 02:03	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 02:03	WG2169502
(S) Toluene-d8	*104*				*75.0-131*		*11/12/2023 02:03*	WG2169502
(S) Toluene-d8	*106*				*75.0-131*		*11/16/2023 05:09*	WG2171758
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*11/12/2023 02:03*	WG2169502
(S) 4-Bromofluorobenzene	*97.7*				*67.0-138*		*11/16/2023 05:09*	WG2171758
(S) 1,2-Dichloroethane-d4	*94.3*				*70.0-130*		*11/12/2023 02:03*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*				*70.0-130*		*11/16/2023 05:09*	WG2171758

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	732000		8450	20000	1	11/14/2023 09:29	WG2170180

Sample Narrative:
L1675773-05 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	17400 J-	T8	300	1000	20	11/09/2023 21:34	WG2168318

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20900		379	1000	1	11/10/2023 05:51	WG2168191
Nitrate	50.3	J	48.0	100	1	11/10/2023 05:51	WG2168191
Sulfate	28700		594	5000	1	11/10/2023 05:51	WG2168191

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	13400		102	1000	1	11/24/2023 23:11	WG2176951

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	16900		28.1	100	1	11/16/2023 20:12	WG2168476
Manganese	1980		0.704	5.00	1	11/16/2023 20:12	WG2168476

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1600		0.287	0.678	1	11/17/2023 14:38	WG2172256
Ethane	39.3		0.296	1.29	1	11/17/2023 14:38	WG2172256
Ethene	7.54		0.422	1.27	1	11/17/2023 14:38	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:22	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 02:22	WG2169502
Benzene	4.19		0.0160	0.0400	1	11/12/2023 02:22	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:22	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:22	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:22	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:22	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:22	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:22	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:22	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:22	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:22	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:22	WG2169502
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 02:22	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:22	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/12/2023 02:22	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 02:22	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 02:22	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/12/2023 02:22	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 02:22	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/12/2023 02:22	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 02:22	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 02:22	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 02:22	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 02:22	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 02:22	WG2169502
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 02:22	WG2169502
1,1-Dichloroethene	2.05			0.0200	0.100	1	11/12/2023 02:22	WG2169502
cis-1,2-Dichloroethene	622			0.552	2.00	20	11/16/2023 05:28	WG2171758
trans-1,2-Dichloroethene	3.76			0.0572	0.200	1	11/12/2023 02:22	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 02:22	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 02:22	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 02:22	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 02:22	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 02:22	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 02:22	WG2169502
Di-isopropyl ether	0.0830	J-	C3	0.0140	0.0400	1	11/12/2023 02:22	WG2169502
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 02:22	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 02:22	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 02:22	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 02:22	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 02:22	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/12/2023 02:22	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 02:22	WG2169502
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 02:22	WG2169502
Naphthalene	U			0.124	0.500	1	11/12/2023 02:22	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 02:22	WG2169502
Styrene	U			0.109	0.500	1	11/12/2023 02:22	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 02:22	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 02:22	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 02:22	WG2169502
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 02:22	WG2169502
Toluene	0.0940		J	0.0500	0.200	1	11/12/2023 02:22	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/12/2023 02:22	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/12/2023 02:22	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 02:22	WG2169502
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 02:22	WG2169502
Trichloroethene	0.512			0.0160	0.0400	1	11/12/2023 02:22	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 02:22	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 02:22	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 02:22	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 02:22	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 02:22	WG2169502
Vinyl chloride	43.0			0.0273	0.100	1	11/12/2023 02:22	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/12/2023 02:22	WG2169502
Ethyl Ether	0.292			0.0170	0.100	1	11/12/2023 02:22	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 02:22	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 02:22	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 02:22	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 02:22	WG2169502
(S) Toluene-d8	*101*				*75.0-131*		*11/12/2023 02:22*	WG2169502

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) Toluene-d8	*102*			*75.0-131*		*11/16/2023 05:28*	WG2171758
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/12/2023 02:22*	WG2169502
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*11/16/2023 05:28*	WG2171758
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*11/12/2023 02:22*	WG2169502
(S) 1,2-Dichloroethane-d4	*99.8*			*70.0-130*		*11/16/2023 05:28*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:40	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 02:40	WG2169502
Benzene	0.0360	J	0.0160	0.0400	1	11/12/2023 02:40	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:40	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:40	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:40	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:40	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:40	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:40	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:40	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:40	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:40	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:40	WG2169502
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 02:40	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:40	WG2169502
Chloromethane	U UJ	C3	0.0556	0.500	1	11/12/2023 02:40	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:40	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:40	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:40	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:40	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:40	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:40	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:40	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:40	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:40	WG2169502
1,1-Dichloroethane	0.459		0.0230	0.100	1	11/12/2023 02:40	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 02:40	WG2169502
1,1-Dichloroethene	0.324		0.0200	0.100	1	11/12/2023 02:40	WG2169502
cis-1,2-Dichloroethene	65.2		0.0276	0.100	1	11/12/2023 02:40	WG2169502
trans-1,2-Dichloroethene	0.142	J	0.0572	0.200	1	11/12/2023 02:40	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:40	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:40	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:40	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:40	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:40	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:40	WG2169502
Di-isopropyl ether	U UJ	C3	0.0140	0.0400	1	11/12/2023 02:40	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:40	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:40	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:40	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:40	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:40	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:40	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:40	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:40	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 02:40	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:40	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 02:40	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:40	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:40	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:40	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 02:40	WG2169502
Toluene	0.0560	J	0.0500	0.200	1	11/12/2023 02:40	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:40	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:40	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:40	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 02:40	WG2169502
Trichloroethene	1.03		0.0160	0.0400	1	11/12/2023 02:40	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 02:40	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 02:40	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 02:40	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 02:40	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 02:40	WG2169502
Vinyl chloride	3.96		0.0273	0.100	1	11/12/2023 02:40	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 02:40	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 02:40	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 02:40	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 02:40	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 02:40	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 02:40	WG2169502
(S) Toluene-d8	*96.5*			*75.0-131*		*11/12/2023 02:40*	WG2169502
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 02:40*	WG2169502
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2023 02:40*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 02:59	WG2169502
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 02:59	WG2169502
Benzene	0.0410		0.0160	0.0400	1	11/12/2023 02:59	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 02:59	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 02:59	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 02:59	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 02:59	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 02:59	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 02:59	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 02:59	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 02:59	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 02:59	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 02:59	WG2169502
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 02:59	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 02:59	WG2169502
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 02:59	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 02:59	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 02:59	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 02:59	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 02:59	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 02:59	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 02:59	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 02:59	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 02:59	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 02:59	WG2169502
1,1-Dichloroethane	0.425		0.0230	0.100	1	11/12/2023 02:59	WG2169502
1,2-Dichloroethane	0.181		0.0190	0.100	1	11/12/2023 02:59	WG2169502
1,1-Dichloroethene	0.321		0.0200	0.100	1	11/12/2023 02:59	WG2169502
cis-1,2-Dichloroethene	64.9		0.0276	0.100	1	11/12/2023 02:59	WG2169502
trans-1,2-Dichloroethene	0.116	J	0.0572	0.200	1	11/12/2023 02:59	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 02:59	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 02:59	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 02:59	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 02:59	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 02:59	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 02:59	WG2169502
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 02:59	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 02:59	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 02:59	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 02:59	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 02:59	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 02:59	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 02:59	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 02:59	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 02:59	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 02:59	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 02:59	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 02:59	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 02:59	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 02:59	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 02:59	WG2169502
Tetrachloroethene	0.0460	J	0.0280	0.100	1	11/12/2023 02:59	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 02:59	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 02:59	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 02:59	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 02:59	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 02:59	WG2169502
Trichloroethene	1.07			0.0160	0.0400	1	11/12/2023 02:59	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 02:59	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 02:59	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 02:59	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 02:59	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 02:59	WG2169502
Vinyl chloride	3.82			0.0273	0.100	1	11/12/2023 02:59	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/12/2023 02:59	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/12/2023 02:59	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 02:59	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 02:59	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 02:59	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 02:59	WG2169502
(S) Toluene-d8	*99.6*				*75.0-131*		*11/12/2023 02:59*	WG2169502
(S) 4-Bromofluorobenzene	*107*				*67.0-138*		*11/12/2023 02:59*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*				*70.0-130*		*11/12/2023 02:59*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 03:18	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 03:18	WG2169502
Benzene	42.2		0.0160	0.0400	1	11/12/2023 03:18	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:18	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:18	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 03:18	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 03:18	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 03:18	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:18	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:18	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:18	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:18	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:18	WG2169502
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 03:18	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 03:18	WG2169502
Chloromethane	U UJ	C3	0.0556	0.500	1	11/12/2023 03:18	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 03:18	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 03:18	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 03:18	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 03:18	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 03:18	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 03:18	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 03:18	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 03:18	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 03:18	WG2169502
1,1-Dichloroethane	0.323		0.0230	0.100	1	11/12/2023 03:18	WG2169502
1,2-Dichloroethane	0.930		0.0190	0.100	1	11/12/2023 03:18	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 03:18	WG2169502
cis-1,2-Dichloroethene	3.20		0.0276	0.100	1	11/12/2023 03:18	WG2169502
trans-1,2-Dichloroethene	0.0610	J	0.0572	0.200	1	11/12/2023 03:18	WG2169502
1,2-Dichloropropane	0.309		0.0508	0.200	1	11/12/2023 03:18	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 03:18	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 03:18	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 03:18	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 03:18	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 03:18	WG2169502
Di-isopropyl ether	0.180 J-	C3	0.0140	0.0400	1	11/12/2023 03:18	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 03:18	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 03:18	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 03:18	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 03:18	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 03:18	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 03:18	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 03:18	WG2169502
Methyl tert-butyl ether	0.155		0.0118	0.0400	1	11/12/2023 03:18	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 03:18	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 03:18	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 03:18	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 03:18	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 03:18	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 03:18	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 03:18	WG2169502
Toluene	0.179	J	0.0500	0.200	1	11/12/2023 03:18	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 03:18	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 03:18	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 03:18	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:18	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 03:18	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:18	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:18	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:18	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:18	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:18	WG2169502
Vinyl chloride	18.7		0.0273	0.100	1	11/12/2023 03:18	WG2169502
Xylenes, Total	0.243	J	0.191	0.260	1	11/12/2023 03:18	WG2169502
Ethyl Ether	0.196		0.0170	0.100	1	11/12/2023 03:18	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:18	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 03:18	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:18	WG2169502
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/12/2023 03:18	WG2169502
(S) Toluene-d8	*104*			*75.0-131*		*11/12/2023 03:18*	WG2169502
(S) 4-Bromofluorobenzene	*107*			*67.0-138*		*11/12/2023 03:18*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.4*			*70.0-130*		*11/12/2023 03:18*	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	4.16			0.548	1.00	1	11/12/2023 03:36	WG2169502
Acrylonitrile	U	UJ	C3	0.0760	0.500	1	11/12/2023 03:36	WG2169502
Benzene	0.0350		J	0.0160	0.0400	1	11/12/2023 03:36	WG2169502
Bromobenzene	U			0.0420	0.500	1	11/12/2023 03:36	WG2169502
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 03:36	WG2169502
Bromoform	U			0.239	1.00	1	11/12/2023 03:36	WG2169502
Bromomethane	U			0.148	0.500	1	11/12/2023 03:36	WG2169502
n-Butylbenzene	U			0.153	0.500	1	11/12/2023 03:36	WG2169502
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 03:36	WG2169502
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 03:36	WG2169502
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 03:36	WG2169502
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 03:36	WG2169502
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 03:36	WG2169502
Chloroethane	U	UJ	C3	0.0432	0.200	1	11/12/2023 03:36	WG2169502
Chloroform	U			0.0166	0.100	1	11/12/2023 03:36	WG2169502
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/12/2023 03:36	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 03:36	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 03:36	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/12/2023 03:36	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 03:36	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/12/2023 03:36	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 03:36	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 03:36	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 03:36	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 03:36	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 03:36	WG2169502
1,2-Dichloroethane	0.0380		J	0.0190	0.100	1	11/12/2023 03:36	WG2169502
1,1-Dichloroethene	U			0.0200	0.100	1	11/12/2023 03:36	WG2169502
cis-1,2-Dichloroethene	0.0760		J	0.0276	0.100	1	11/12/2023 03:36	WG2169502
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 03:36	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 03:36	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 03:36	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 03:36	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 03:36	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 03:36	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 03:36	WG2169502
Di-isopropyl ether	0.135	J-	C3	0.0140	0.0400	1	11/12/2023 03:36	WG2169502
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 03:36	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 03:36	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 03:36	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 03:36	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 03:36	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/12/2023 03:36	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 03:36	WG2169502
Methyl tert-butyl ether	0.0910			0.0118	0.0400	1	11/12/2023 03:36	WG2169502
Naphthalene	U			0.124	0.500	1	11/12/2023 03:36	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 03:36	WG2169502
Styrene	U			0.109	0.500	1	11/12/2023 03:36	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 03:36	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 03:36	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 03:36	WG2169502
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 03:36	WG2169502
Toluene	0.0560		J	0.0500	0.200	1	11/12/2023 03:36	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/12/2023 03:36	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/12/2023 03:36	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 03:36	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 03:36	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 03:36	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 03:36	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 03:36	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 03:36	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 03:36	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 03:36	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 03:36	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 03:36	WG2169502
Ethyl Ether	0.0590	J	0.0170	0.100	1	11/12/2023 03:36	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 03:36	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 03:36	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 03:36	WG2169502
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/12/2023 03:36	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 03:36*	WG2169502
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2023 03:36*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/12/2023 03:36*	WG2169502

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	921000		8450	20000	1	11/14/2023 09:32	WG2170180

Sample Narrative:
L1675773-10 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	5800 J-	T8	75.0	250	5	11/09/2023 21:36	WG2168318

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	1020000		3790	10000	10	11/10/2023 01:08	WG2168164
Nitrate	483	J	480	1000	10	11/10/2023 01:08	WG2168164
Sulfate	13200	J	5940	50000	10	11/10/2023 01:08	WG2168164

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5300		102	1000	1	11/24/2023 23:31	WG2176951

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	6600		28.1	100	1	11/16/2023 20:15	WG2168476
Manganese	1580		0.704	5.00	1	11/16/2023 20:15	WG2168476

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10900 J-	Q	2.87	6.78	10	11/30/2023 11:59	WG2179195
Ethane	111		0.296	1.29	1	11/17/2023 14:42	WG2172256
Ethene	7.07		0.422	1.27	1	11/17/2023 14:42	WG2172256

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.78		0.548	1.00	1	11/12/2023 03:55	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 03:55	WG2169502
Benzene	0.0220	J	0.0160	0.0400	1	11/12/2023 03:55	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 03:55	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 03:55	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 03:55	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 03:55	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 03:55	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 03:55	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 03:55	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 03:55	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 03:55	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 03:55	WG2169502 JC 2/14/24
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 03:55	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 03:55	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/12/2023 03:55	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 03:55	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 03:55	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/12/2023 03:55	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 03:55	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/12/2023 03:55	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 03:55	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 03:55	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 03:55	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 03:55	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 03:55	WG2169502
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 03:55	WG2169502
1,1-Dichloroethene	0.184			0.0200	0.100	1	11/12/2023 03:55	WG2169502
cis-1,2-Dichloroethene	0.267			0.0276	0.100	1	11/12/2023 03:55	WG2169502
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 03:55	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 03:55	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 03:55	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 03:55	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 03:55	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 03:55	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 03:55	WG2169502
Di-isopropyl ether	U	UJ	C3	0.0140	0.0400	1	11/12/2023 03:55	WG2169502
Ethylbenzene	0.0300		J	0.0212	0.100	1	11/12/2023 03:55	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 03:55	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 03:55	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 03:55	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 03:55	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/12/2023 03:55	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 03:55	WG2169502
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 03:55	WG2169502
Naphthalene	U			0.124	0.500	1	11/12/2023 03:55	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 03:55	WG2169502
Styrene	U			0.109	0.500	1	11/12/2023 03:55	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 03:55	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 03:55	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 03:55	WG2169502
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 03:55	WG2169502
Toluene	U			0.0500	0.200	1	11/12/2023 03:55	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/12/2023 03:55	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/12/2023 03:55	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 03:55	WG2169502
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 03:55	WG2169502
Trichloroethene	0.0690			0.0160	0.0400	1	11/12/2023 03:55	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 03:55	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 03:55	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 03:55	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 03:55	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 03:55	WG2169502
Vinyl chloride	0.211			0.0273	0.100	1	11/12/2023 03:55	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/12/2023 03:55	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/12/2023 03:55	WG2169502
Tetrahydrofuran	0.685			0.0900	0.500	1	11/12/2023 03:55	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 03:55	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 03:55	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 03:55	WG2169502
(S) Toluene-d8	*104*				*75.0-131*		*11/12/2023 03:55*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 03:55*	WG2169502
(S) 1,2-Dichloroethane-d4	*96.6*			*70.0-130*		*11/12/2023 03:55*	WG2169502

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

Analyte	Result	Qualifier		MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U			0.548	1.00	1	11/12/2023 04:14	WG2169502
Acrylonitrile	U	UJ	C3	0.0760	0.500	1	11/12/2023 04:14	WG2169502
Benzene	0.654			0.0160	0.0400	1	11/12/2023 04:14	WG2169502
Bromobenzene	U			0.0420	0.500	1	11/12/2023 04:14	WG2169502
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 04:14	WG2169502
Bromoform	U			0.239	1.00	1	11/12/2023 04:14	WG2169502
Bromomethane	U			0.148	0.500	1	11/12/2023 04:14	WG2169502
n-Butylbenzene	U			0.153	0.500	1	11/12/2023 04:14	WG2169502
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 04:14	WG2169502
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 04:14	WG2169502
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 04:14	WG2169502
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 04:14	WG2169502
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 04:14	WG2169502
Chloroethane	U	UJ	C3	0.0432	0.200	1	11/12/2023 04:14	WG2169502
Chloroform	U			0.0166	0.100	1	11/12/2023 04:14	WG2169502
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/12/2023 04:14	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 04:14	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 04:14	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/12/2023 04:14	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 04:14	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/12/2023 04:14	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 04:14	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 04:14	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 04:14	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 04:14	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 04:14	WG2169502
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 04:14	WG2169502
1,1-Dichloroethene	2.43			0.0200	0.100	1	11/12/2023 04:14	WG2169502
cis-1,2-Dichloroethene	895			1.38	5.00	50	11/16/2023 05:46	WG2171758
trans-1,2-Dichloroethene	4.44			0.0572	0.200	1	11/12/2023 04:14	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 04:14	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 04:14	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 04:14	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 04:14	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 04:14	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 04:14	WG2169502
Di-isopropyl ether	0.0420	J-	C3	0.0140	0.0400	1	11/12/2023 04:14	WG2169502
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 04:14	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 04:14	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 04:14	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 04:14	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 04:14	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/12/2023 04:14	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 04:14	WG2169502
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 04:14	WG2169502
Naphthalene	U			0.124	0.500	1	11/12/2023 04:14	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 04:14	WG2169502
Styrene	U			0.109	0.500	1	11/12/2023 04:14	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 04:14	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 04:14	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 04:14	WG2169502
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 04:14	WG2169502
Toluene	U			0.0500	0.200	1	11/12/2023 04:14	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/12/2023 04:14	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/12/2023 04:14	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 04:14	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:14	WG2169502
Trichloroethene	0.0930		0.0160	0.0400	1	11/12/2023 04:14	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:14	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:14	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:14	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:14	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:14	WG2169502
Vinyl chloride	40.6		0.0273	0.100	1	11/12/2023 04:14	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:14	WG2169502
Ethyl Ether	0.141		0.0170	0.100	1	11/12/2023 04:14	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 04:14	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 04:14	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:14	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 04:14	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 04:14*	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/16/2023 05:46*	WG2171758
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 04:14*	WG2169502
(S) 4-Bromofluorobenzene	*97.2*			*67.0-138*		*11/16/2023 05:46*	WG2171758
(S) 1,2-Dichloroethane-d4	*95.5*			*70.0-130*		*11/12/2023 04:14*	WG2169502
(S) 1,2-Dichloroethane-d4	*100*			*70.0-130*		*11/16/2023 05:46*	WG2171758

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 04:33	WG2169502
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 04:33	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 04:33	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 04:33	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 04:33	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 04:33	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 04:33	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 04:33	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 04:33	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 04:33	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 04:33	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 04:33	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 04:33	WG2169502
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 04:33	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 04:33	WG2169502
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 04:33	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 04:33	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 04:33	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 04:33	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 04:33	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 04:33	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 04:33	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 04:33	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 04:33	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 04:33	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 04:33	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 04:33	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 04:33	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/16/2023 06:05	WG2171758
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 04:33	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 04:33	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 04:33	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 04:33	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 04:33	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 04:33	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 04:33	WG2169502
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 04:33	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 04:33	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 04:33	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 04:33	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 04:33	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 04:33	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 04:33	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 04:33	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 04:33	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 04:33	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 04:33	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 04:33	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 04:33	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 04:33	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 04:33	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 04:33	WG2169502
Toluene	0.106	J	0.0500	0.200	1	11/12/2023 04:33	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 04:33	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 04:33	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 04:33	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:33	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 04:33	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:33	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:33	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:33	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:33	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:33	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 04:33	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:33	WG2169502
Ethyl Ether	0.0620	J	0.0170	0.100	1	11/12/2023 04:33	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 04:33	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 04:33	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:33	WG2169502
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/12/2023 04:33	WG2169502
(S) Toluene-d8	*99.4*			*75.0-131*		*11/12/2023 04:33*	WG2169502
(S) Toluene-d8	*106*			*75.0-131*		*11/16/2023 06:05*	WG2171758
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 04:33*	WG2169502
(S) 4-Bromofluorobenzene	*98.9*			*67.0-138*		*11/16/2023 06:05*	WG2171758
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/12/2023 04:33*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/16/2023 06:05*	WG2171758

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U			0.548	1.00	1	11/12/2023 04:52	WG2169502
Acrylonitrile	U	UJ	C3	0.0760	0.500	1	11/12/2023 04:52	WG2169502
Benzene	0.0330		J	0.0160	0.0400	1	11/12/2023 04:52	WG2169502
Bromobenzene	U			0.0420	0.500	1	11/12/2023 04:52	WG2169502
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 04:52	WG2169502
Bromoform	U			0.239	1.00	1	11/12/2023 04:52	WG2169502
Bromomethane	U			0.148	0.500	1	11/12/2023 04:52	WG2169502
n-Butylbenzene	U			0.153	0.500	1	11/12/2023 04:52	WG2169502
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 04:52	WG2169502
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 04:52	WG2169502
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 04:52	WG2169502
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 04:52	WG2169502
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 04:52	WG2169502
Chloroethane	U	UJ	C3	0.0432	0.200	1	11/12/2023 04:52	WG2169502
Chloroform	U			0.0166	0.100	1	11/12/2023 04:52	WG2169502
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/12/2023 04:52	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 04:52	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 04:52	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/12/2023 04:52	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 04:52	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/12/2023 04:52	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 04:52	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 04:52	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 04:52	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 04:52	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 04:52	WG2169502
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 04:52	WG2169502
1,1-Dichloroethene	0.0410		J	0.0200	0.100	1	11/12/2023 04:52	WG2169502
cis-1,2-Dichloroethene	9.92			0.0276	0.100	1	11/12/2023 04:52	WG2169502
trans-1,2-Dichloroethene	0.0860		J	0.0572	0.200	1	11/12/2023 04:52	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 04:52	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 04:52	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 04:52	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 04:52	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 04:52	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/12/2023 04:52	WG2169502
Di-isopropyl ether	U	UJ	C3	0.0140	0.0400	1	11/12/2023 04:52	WG2169502
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 04:52	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 04:52	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/12/2023 04:52	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 04:52	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/12/2023 04:52	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/12/2023 04:52	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 04:52	WG2169502
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 04:52	WG2169502
Naphthalene	U			0.124	0.500	1	11/12/2023 04:52	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 04:52	WG2169502
Styrene	U			0.109	0.500	1	11/12/2023 04:52	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 04:52	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 04:52	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 04:52	WG2169502
Tetrachloroethene	2.06			0.0280	0.100	1	11/12/2023 04:52	WG2169502
Toluene	U			0.0500	0.200	1	11/12/2023 04:52	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/12/2023 04:52	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/12/2023 04:52	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 04:52	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 04:52	WG2169502
Trichloroethene	4.17		0.0160	0.0400	1	11/12/2023 04:52	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 04:52	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 04:52	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 04:52	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 04:52	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 04:52	WG2169502
Vinyl chloride	0.0810	J	0.0273	0.100	1	11/12/2023 04:52	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 04:52	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 04:52	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 04:52	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 04:52	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 04:52	WG2169502
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/12/2023 04:52	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 04:52*	WG2169502
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/12/2023 04:52*	WG2169502
(S) 1,2-Dichloroethane-d4	*96.8*			*70.0-130*		*11/12/2023 04:52*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 05:11	WG2169502
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/12/2023 05:11	WG2169502
Benzene	0.0360	J	0.0160	0.0400	1	11/12/2023 05:11	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 05:11	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 05:11	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 05:11	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 05:11	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 05:11	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 05:11	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 05:11	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 05:11	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 05:11	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 05:11	WG2169502
Chloroethane	U UJ	C3	0.0432	0.200	1	11/12/2023 05:11	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 05:11	WG2169502
Chloromethane	U UJ	C3	0.0556	0.500	1	11/12/2023 05:11	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 05:11	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 05:11	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 05:11	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 05:11	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 05:11	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 05:11	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 05:11	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 05:11	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 05:11	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 05:11	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 05:11	WG2169502
1,1-Dichloroethene	0.0740	J	0.0200	0.100	1	11/12/2023 05:11	WG2169502
cis-1,2-Dichloroethene	10.1		0.0276	0.100	1	11/12/2023 05:11	WG2169502
trans-1,2-Dichloroethene	0.120	J	0.0572	0.200	1	11/12/2023 05:11	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 05:11	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 05:11	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 05:11	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 05:11	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 05:11	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 05:11	WG2169502
Di-isopropyl ether	0.0480 J-	C3	0.0140	0.0400	1	11/12/2023 05:11	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 05:11	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 05:11	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 05:11	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 05:11	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 05:11	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 05:11	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 05:11	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 05:11	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 05:11	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 05:11	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 05:11	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 05:11	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 05:11	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 05:11	WG2169502
Tetrachloroethene	2.23		0.0280	0.100	1	11/12/2023 05:11	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 05:11	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 05:11	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 05:11	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 05:11	WG2169502

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 05:11	WG2169502
Trichloroethene	4.27			0.0160	0.0400	1	11/12/2023 05:11	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 05:11	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 05:11	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 05:11	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 05:11	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 05:11	WG2169502
Vinyl chloride	U			0.0273	0.100	1	11/12/2023 05:11	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/12/2023 05:11	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/12/2023 05:11	WG2169502
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 05:11	WG2169502
Iodomethane	U			0.242	0.500	1	11/12/2023 05:11	WG2169502
Allyl chloride	U			0.580	1.00	1	11/12/2023 05:11	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/12/2023 05:11	WG2169502
(S) Toluene-d8	*105*				*75.0-131*		*11/12/2023 05:11*	WG2169502
(S) 4-Bromofluorobenzene	*106*				*67.0-138*		*11/12/2023 05:11*	WG2169502
(S) 1,2-Dichloroethane-d4	*93.4*				*70.0-130*		*11/12/2023 05:11*	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/12/2023 05:29	WG2169502
Acrylonitrile	U	UJ C3	0.0760	0.500	1	11/12/2023 05:29	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 05:29	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 05:29	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 05:29	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 05:29	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 05:29	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 05:29	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 05:29	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 05:29	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 05:29	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 05:29	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 05:29	WG2169502
Chloroethane	U	UJ C3	0.0432	0.200	1	11/12/2023 05:29	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 05:29	WG2169502
Chloromethane	U	UJ C3	0.0556	0.500	1	11/12/2023 05:29	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 05:29	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 05:29	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 05:29	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 05:29	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 05:29	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 05:29	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 05:29	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 05:29	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 05:29	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 05:29	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 05:29	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 05:29	WG2169502
cis-1,2-Dichloroethene	0.360		0.0276	0.100	1	11/12/2023 05:29	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 05:29	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 05:29	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 05:29	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 05:29	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 05:29	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 05:29	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 05:29	WG2169502
Di-isopropyl ether	U	UJ C3	0.0140	0.0400	1	11/12/2023 05:29	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 05:29	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 05:29	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 05:29	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 05:29	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 05:29	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 05:29	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 05:29	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 05:29	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 05:29	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 05:29	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 05:29	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 05:29	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 05:29	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 05:29	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 05:29	WG2169502
Toluene	0.0580	J	0.0500	0.200	1	11/12/2023 05:29	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 05:29	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 05:29	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 05:29	WG2169502

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 05:29	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 05:29	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 05:29	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 05:29	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 05:29	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 05:29	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 05:29	WG2169502
Vinyl chloride	1.10		0.0273	0.100	1	11/12/2023 05:29	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 05:29	WG2169502
Ethyl Ether	0.186		0.0170	0.100	1	11/12/2023 05:29	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 05:29	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 05:29	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 05:29	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/12/2023 05:29	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 05:29*	WG2169502
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/12/2023 05:29*	WG2169502
(S) 1,2-Dichloroethane-d4	*99.9*			*70.0-130*		*11/12/2023 05:29*	WG2169502

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	1.51	U	~~C5~~ J4	0.548	1.00	1	11/12/2023 09:32	WG2169514	
Acrylonitrile	U			0.0760	0.500	1	11/12/2023 09:32	WG2169514	
Benzene	U			0.0160	0.0400	1	11/12/2023 09:32	WG2169514	
Bromobenzene	U			0.0420	0.500	1	11/12/2023 09:32	WG2169514	
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 09:32	WG2169514	
Bromoform	U	UJ	C3	0.239	1.00	1	11/12/2023 09:32	WG2169514	
Bromomethane	U			0.148	0.500	1	11/12/2023 09:32	WG2169514	
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/12/2023 09:32	WG2169514	
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 09:32	WG2169514	
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 09:32	WG2169514	
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 09:32	WG2169514	
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 09:32	WG2169514	
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 09:32	WG2169514	
Chloroethane	U			0.0432	0.200	1	11/12/2023 09:32	WG2169514	
Chloroform	U			0.0166	0.100	1	11/12/2023 09:32	WG2169514	
Chloromethane	U			0.0556	0.500	1	11/12/2023 09:32	WG2169514	
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 09:32	WG2169514	
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 09:32	WG2169514	
1,2-Dibromo-3-Chloropropane	U	UJ	C3	0.204	1.00	1	11/12/2023 09:32	WG2169514	
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 09:32	WG2169514	
Dibromomethane	U			0.0400	0.200	1	11/12/2023 09:32	WG2169514	
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 09:32	WG2169514	
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 09:32	WG2169514	
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 09:32	WG2169514	
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 09:32	WG2169514	
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 09:32	WG2169514	
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 09:32	WG2169514	
1,1-Dichloroethene	U			0.0200	0.100	1	11/12/2023 09:32	WG2169514	
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/12/2023 09:32	WG2169514	
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 09:32	WG2169514	
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 09:32	WG2169514	
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 09:32	WG2169514	
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 09:32	WG2169514	
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 09:32	WG2169514	
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 09:32	WG2169514	
2,2-Dichloropropane	U	UJ	C3	0.0317	0.100	1	11/12/2023 09:32	WG2169514	
Di-isopropyl ether	U			0.0140	0.0400	1	11/12/2023 09:32	WG2169514	
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 09:32	WG2169514	
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 09:32	WG2169514	
Isopropylbenzene	U	UJ	C3	0.0345	0.100	1	11/12/2023 09:32	WG2169514	
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 09:32	WG2169514	
2-Butanone (MEK)	U		~~J3~~	0.500	1.00	1	11/12/2023 09:32	WG2169514	
Methylene Chloride	U			0.265	1.00	1	11/12/2023 09:32	WG2169514	
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 09:32	WG2169514	
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 09:32	WG2169514	
Naphthalene	U	UJ	C3 J4	0.124	0.500	1	11/12/2023 09:32	WG2169514	
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 09:32	WG2169514	
Styrene	U	UJ	C3	0.109	0.500	1	11/12/2023 09:32	WG2169514	
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 09:32	WG2169514	
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 09:32	WG2169514	
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 09:32	WG2169514	
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 09:32	WG2169514	
Toluene	U			0.0500	0.200	1	11/12/2023 09:32	WG2169514	
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/12/2023 09:32	WG2169514	
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/12/2023 09:32	WG2169514	JC 2/15/24
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 09:32	WG2169514	

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/12/2023 09:32	WG2169514
Trichloroethene	U			0.0160	0.0400	1	11/12/2023 09:32	WG2169514
Trichlorofluoromethane	U			0.0200	0.100	1	11/12/2023 09:32	WG2169514
1,2,3-Trichloropropane	U			0.204	0.500	1	11/12/2023 09:32	WG2169514
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/12/2023 09:32	WG2169514
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/12/2023 09:32	WG2169514
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/12/2023 09:32	WG2169514
Vinyl chloride	0.154	J-	C3	0.0273	0.100	1	11/12/2023 09:32	WG2169514
Xylenes, Total	U			0.191	0.260	1	11/12/2023 09:32	WG2169514
Ethyl Ether	U			0.0170	0.100	1	11/12/2023 09:32	WG2169514
Tetrahydrofuran	U			0.0900	0.500	1	11/12/2023 09:32	WG2169514
Iodomethane	U			0.242	0.500	1	11/12/2023 09:32	WG2169514
Allyl chloride	U			0.580	1.00	1	11/12/2023 09:32	WG2169514
Trans-1,4-Dichloro-2-butene	U			0.0560	0.200	1	11/12/2023 09:32	WG2169514
(S) Toluene-d8	*99.6*				*75.0-131*		*11/12/2023 09:32*	WG2169514
(S) 4-Bromofluorobenzene	*87.5*				*67.0-138*		*11/12/2023 09:32*	WG2169514
(S) 1,2-Dichloroethane-d4	*108*				*70.0-130*		*11/12/2023 09:32*	WG2169514

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.67	U	~~C5 J4~~	0.548	1.00	1	11/12/2023 09:51	WG2169514
Acrylonitrile	U			0.0760	0.500	1	11/12/2023 09:51	WG2169514
Benzene	U			0.0160	0.0400	1	11/12/2023 09:51	WG2169514
Bromobenzene	U			0.0420	0.500	1	11/12/2023 09:51	WG2169514
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 09:51	WG2169514
Bromoform	U	UJ	C3	0.239	1.00	1	11/12/2023 09:51	WG2169514
Bromomethane	U			0.148	0.500	1	11/12/2023 09:51	WG2169514
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/12/2023 09:51	WG2169514
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 09:51	WG2169514
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 09:51	WG2169514
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 09:51	WG2169514
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 09:51	WG2169514
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 09:51	WG2169514
Chloroethane	U			0.0432	0.200	1	11/12/2023 09:51	WG2169514
Chloroform	U			0.0166	0.100	1	11/12/2023 09:51	WG2169514
Chloromethane	U			0.0556	0.500	1	11/12/2023 09:51	WG2169514
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 09:51	WG2169514
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 09:51	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ	C3	0.204	1.00	1	11/12/2023 09:51	WG2169514
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 09:51	WG2169514
Dibromomethane	U			0.0400	0.200	1	11/12/2023 09:51	WG2169514
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 09:51	WG2169514
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 09:51	WG2169514
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 09:51	WG2169514
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 09:51	WG2169514
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 09:51	WG2169514
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 09:51	WG2169514
1,1-Dichloroethene	U			0.0200	0.100	1	11/12/2023 09:51	WG2169514
cis-1,2-Dichloroethene	U			0.0276	0.100	1	11/12/2023 09:51	WG2169514
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/12/2023 09:51	WG2169514
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 09:51	WG2169514
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 09:51	WG2169514
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 09:51	WG2169514
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 09:51	WG2169514
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 09:51	WG2169514
2,2-Dichloropropane	U	UJ	C3	0.0317	0.100	1	11/12/2023 09:51	WG2169514
Di-isopropyl ether	U			0.0140	0.0400	1	11/12/2023 09:51	WG2169514
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 09:51	WG2169514
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 09:51	WG2169514
Isopropylbenzene	U	UJ	C3	0.0345	0.100	1	11/12/2023 09:51	WG2169514
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 09:51	WG2169514
2-Butanone (MEK)	U		~~J3~~	0.500	1.00	1	11/12/2023 09:51	WG2169514
Methylene Chloride	U			0.265	1.00	1	11/12/2023 09:51	WG2169514
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 09:51	WG2169514
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 09:51	WG2169514
Naphthalene	U	UJ	C3 J4	0.124	0.500	1	11/12/2023 09:51	WG2169514
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 09:51	WG2169514
Styrene	U	UJ	C3	0.109	0.500	1	11/12/2023 09:51	WG2169514
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 09:51	WG2169514
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 09:51	WG2169514
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 09:51	WG2169514
Tetrachloroethene	U			0.0280	0.100	1	11/12/2023 09:51	WG2169514
Toluene	U			0.0500	0.200	1	11/12/2023 09:51	WG2169514
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/12/2023 09:51	WG2169514
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/12/2023 09:51	WG2169514
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 09:51	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 09:51	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 09:51	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 09:51	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 09:51	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 09:51	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 09:51	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 09:51	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 09:51	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 09:51	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 09:51	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 09:51	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 09:51	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 09:51	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 09:51	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 09:51*	WG2169514
(S) 4-Bromofluorobenzene	*86.9*			*67.0-138*		*11/12/2023 09:51*	WG2169514
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/12/2023 09:51*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 10:10	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 10:10	WG2169514
Benzene	1.02		0.0160	0.0400	1	11/12/2023 10:10	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 10:10	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 10:10	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 10:10	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 10:10	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 10:10	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 10:10	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 10:10	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 10:10	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 10:10	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 10:10	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 10:10	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 10:10	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 10:10	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 10:10	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 10:10	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 10:10	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 10:10	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 10:10	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 10:10	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 10:10	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 10:10	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 10:10	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 10:10	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 10:10	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 10:10	WG2169514
cis-1,2-Dichloroethene	7.68		0.0276	0.100	1	11/12/2023 10:10	WG2169514
trans-1,2-Dichloroethene	0.0700	J	0.0572	0.200	1	11/12/2023 10:10	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 10:10	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 10:10	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 10:10	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 10:10	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 10:10	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 10:10	WG2169514
Di-isopropyl ether	0.0530		0.0140	0.0400	1	11/12/2023 10:10	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 10:10	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 10:10	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 10:10	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 10:10	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 10:10	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 10:10	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 10:10	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 10:10	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 10:10	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 10:10	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 10:10	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 10:10	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 10:10	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 10:10	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 10:10	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 10:10	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 10:10	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 10:10	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 10:10	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 10:10	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 10:10	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 10:10	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 10:10	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 10:10	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 10:10	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 10:10	WG2169514
Vinyl chloride	5.16	J- C3	0.0273	0.100	1	11/12/2023 10:10	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 10:10	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 10:10	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 10:10	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 10:10	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 10:10	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 10:10	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 10:10*	WG2169514
(S) 4-Bromofluorobenzene	*88.5*			*67.0-138*		*11/12/2023 10:10*	WG2169514
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 10:10*	WG2169514

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 10:29	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 10:29	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 10:29	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 10:29	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 10:29	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 10:29	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 10:29	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 10:29	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 10:29	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 10:29	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 10:29	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 10:29	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 10:29	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 10:29	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 10:29	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 10:29	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 10:29	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 10:29	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 10:29	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 10:29	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 10:29	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 10:29	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 10:29	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 10:29	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 10:29	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 10:29	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 10:29	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 10:29	WG2169514
cis-1,2-Dichloroethene	0.198		0.0276	0.100	1	11/12/2023 10:29	WG2169514
trans-1,2-Dichloroethene	0.102	J	0.0572	0.200	1	11/12/2023 10:29	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 10:29	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 10:29	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 10:29	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 10:29	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 10:29	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 10:29	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 10:29	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 10:29	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 10:29	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 10:29	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 10:29	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 10:29	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 10:29	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 10:29	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 10:29	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 10:29	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 10:29	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 10:29	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 10:29	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 10:29	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 10:29	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 10:29	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 10:29	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 10:29	WG2169514 JC 2/15/24
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 10:29	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 10:29	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 10:29	WG2169514
Trichloroethene	0.468		0.0160	0.0400	1	11/12/2023 10:29	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 10:29	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 10:29	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 10:29	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 10:29	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 10:29	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 10:29	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 10:29	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 10:29	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 10:29	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 10:29	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 10:29	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 10:29	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 10:29*	WG2169514
(S) 4-Bromofluorobenzene	*83.7*			*67.0-138*		*11/12/2023 10:29*	WG2169514
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/12/2023 10:29*	WG2169514

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	287000		8450	20000	1	11/17/2023 12:50	WG2173141

Sample Narrative:
L1676327-05 WG2173141: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	30900		379	1000	1	11/10/2023 20:31	WG2168926
Nitrate	U		48.0	100	1	11/10/2023 20:31	WG2168926
Sulfate	57000		594	5000	1	11/10/2023 20:31	WG2168926

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2790		102	1000	1	11/29/2023 09:41	WG2178410

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	147	~~B~~	28.1	100	1	11/20/2023 16:38	WG2169907
Manganese	1030		7.04	50.0	10	11/20/2023 17:54	WG2169907

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	317		0.287	0.678	1	11/17/2023 13:58	WG2172277
Ethane	2.79		0.296	1.29	1	11/17/2023 13:58	WG2172277
Ethene	U		0.422	1.27	1	11/17/2023 13:58	WG2172277

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	5.48	10.0	10	11/12/2023 15:17	WG2169514
Acrylonitrile	U		0.760	5.00	10	11/12/2023 15:17	WG2169514
Benzene	U		0.160	0.400	10	11/12/2023 15:17	WG2169514
Bromobenzene	U		0.420	5.00	10	11/12/2023 15:17	WG2169514
Bromodichloromethane	U		0.315	1.00	10	11/12/2023 15:17	WG2169514
Bromoform	U	UJ C3	2.39	10.0	10	11/12/2023 15:17	WG2169514
Bromomethane	U		1.48	5.00	10	11/12/2023 15:17	WG2169514
n-Butylbenzene	U	UJ C3	1.53	5.00	10	11/12/2023 15:17	WG2169514
sec-Butylbenzene	U		1.01	5.00	10	11/12/2023 15:17	WG2169514
tert-Butylbenzene	U		0.620	2.00	10	11/12/2023 15:17	WG2169514
Carbon tetrachloride	U		0.432	2.00	10	11/12/2023 15:17	WG2169514
Chlorobenzene	U		0.229	1.00	10	11/12/2023 15:17	WG2169514
Chlorodibromomethane	U		0.180	1.00	10	11/12/2023 15:17	WG2169514
Chloroethane	U		0.432	2.00	10	11/12/2023 15:17	WG2169514
Chloroform	U		0.166	1.00	10	11/12/2023 15:17	WG2169514
Chloromethane	U		0.556	5.00	10	11/12/2023 15:17	WG2169514
2-Chlorotoluene	U		0.368	1.00	10	11/12/2023 15:17	WG2169514
4-Chlorotoluene	U		0.452	2.00	10	11/12/2023 15:17	WG2169514 JC 2/15/24
1,2-Dibromo-3-Chloropropane	U	UJ C3	2.04	10.0	10	11/12/2023 15:17	WG2169514
1,2-Dibromoethane	U		0.210	1.00	10	11/12/2023 15:17	WG2169514

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.400	2.00	10	11/12/2023 15:17	WG2169514
1,2-Dichlorobenzene	U		0.580	2.00	10	11/12/2023 15:17	WG2169514
1,3-Dichlorobenzene	U		0.680	2.00	10	11/12/2023 15:17	WG2169514
1,4-Dichlorobenzene	U		0.788	2.00	10	11/12/2023 15:17	WG2169514
Dichlorodifluoromethane	U		0.327	1.00	10	11/12/2023 15:17	WG2169514
1,1-Dichloroethane	U		0.230	1.00	10	11/12/2023 15:17	WG2169514
1,2-Dichloroethane	U		0.190	1.00	10	11/12/2023 15:17	WG2169514
1,1-Dichloroethene	0.790	J	0.200	1.00	10	11/12/2023 15:17	WG2169514
cis-1,2-Dichloroethene	293		0.276	1.00	10	11/12/2023 15:17	WG2169514
trans-1,2-Dichloroethene	4.56		0.572	2.00	10	11/12/2023 15:17	WG2169514
1,2-Dichloropropane	U		0.508	2.00	10	11/12/2023 15:17	WG2169514
1,1-Dichloropropene	U		0.280	1.00	10	11/12/2023 15:17	WG2169514
1,3-Dichloropropane	U		0.700	2.00	10	11/12/2023 15:17	WG2169514
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/12/2023 15:17	WG2169514
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/12/2023 15:17	WG2169514
2,2-Dichloropropane	U	UJ C3	0.317	1.00	10	11/12/2023 15:17	WG2169514
Di-isopropyl ether	U		0.140	0.400	10	11/12/2023 15:17	WG2169514
Ethylbenzene	U		0.212	1.00	10	11/12/2023 15:17	WG2169514
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/12/2023 15:17	WG2169514
Isopropylbenzene	U	UJ C3	0.345	1.00	10	11/12/2023 15:17	WG2169514
p-Isopropyltoluene	U		0.932	2.00	10	11/12/2023 15:17	WG2169514
2-Butanone (MEK)	U	~~J3~~	5.00	10.0	10	11/12/2023 15:17	WG2169514
Methylene Chloride	U		2.65	10.0	10	11/12/2023 15:17	WG2169514
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/12/2023 15:17	WG2169514
Methyl tert-butyl ether	U		0.118	0.400	10	11/12/2023 15:17	WG2169514
Naphthalene	U	UJ C3 J4	1.24	5.00	10	11/12/2023 15:17	WG2169514
n-Propylbenzene	U		0.472	2.00	10	11/12/2023 15:17	WG2169514
Styrene	U	UJ C3	1.09	5.00	10	11/12/2023 15:17	WG2169514
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/12/2023 15:17	WG2169514
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/12/2023 15:17	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/12/2023 15:17	WG2169514
Tetrachloroethene	106		0.280	1.00	10	11/12/2023 15:17	WG2169514
Toluene	U		0.500	2.00	10	11/12/2023 15:17	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.250	5.00	10	11/12/2023 15:17	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	1.93	5.00	10	11/12/2023 15:17	WG2169514
1,1,1-Trichloroethane	U		0.110	1.00	10	11/12/2023 15:17	WG2169514
1,1,2-Trichloroethane	U		0.353	1.00	10	11/12/2023 15:17	WG2169514
Trichloroethene	154		0.160	0.400	10	11/12/2023 15:17	WG2169514
Trichlorofluoromethane	U		0.200	1.00	10	11/12/2023 15:17	WG2169514
1,2,3-Trichloropropane	U		2.04	5.00	10	11/12/2023 15:17	WG2169514
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/12/2023 15:17	WG2169514
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/12/2023 15:17	WG2169514
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/12/2023 15:17	WG2169514
Vinyl chloride	U	UJ C3	0.273	1.00	10	11/12/2023 15:17	WG2169514
Xylenes, Total	U		1.91	2.60	10	11/12/2023 15:17	WG2169514
Ethyl Ether	U		0.170	1.00	10	11/12/2023 15:17	WG2169514
Tetrahydrofuran	U		0.900	5.00	10	11/12/2023 15:17	WG2169514
Iodomethane	U		2.42	5.00	10	11/12/2023 15:17	WG2169514
Allyl chloride	U		5.80	10.0	10	11/12/2023 15:17	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.560	2.00	10	11/12/2023 15:17	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 15:17*	WG2169514
(S) 4-Bromofluorobenzene	*84.6*			*67.0-138*		*11/12/2023 15:17*	WG2169514
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 15:17*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.12 U	C5 J4	0.548	1.00	1	11/12/2023 10:48	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 10:48	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 10:48	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 10:48	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 10:48	WG2169514
Bromoform	U UJ	C3	0.239	1.00	1	11/12/2023 10:48	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 10:48	WG2169514
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/12/2023 10:48	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 10:48	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 10:48	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 10:48	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 10:48	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 10:48	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 10:48	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 10:48	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 10:48	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 10:48	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 10:48	WG2169514
1,2-Dibromo-3-Chloropropane	U UJ	C3	0.204	1.00	1	11/12/2023 10:48	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 10:48	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 10:48	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 10:48	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 10:48	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 10:48	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 10:48	WG2169514
1,1-Dichloroethane	0.0330	J	0.0230	0.100	1	11/12/2023 10:48	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 10:48	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 10:48	WG2169514
cis-1,2-Dichloroethene	1.56		0.0276	0.100	1	11/12/2023 10:48	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 10:48	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 10:48	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 10:48	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 10:48	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 10:48	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 10:48	WG2169514
2,2-Dichloropropane	U UJ	C3	0.0317	0.100	1	11/12/2023 10:48	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 10:48	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 10:48	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 10:48	WG2169514
Isopropylbenzene	U UJ	C3	0.0345	0.100	1	11/12/2023 10:48	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 10:48	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 10:48	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 10:48	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 10:48	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 10:48	WG2169514
Naphthalene	U UJ	C3 J4	0.124	0.500	1	11/12/2023 10:48	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 10:48	WG2169514
Styrene	U UJ	C3	0.109	0.500	1	11/12/2023 10:48	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 10:48	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 10:48	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 10:48	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 10:48	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 10:48	WG2169514
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/12/2023 10:48	WG2169514
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/12/2023 10:48	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 10:48	WG2169514

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 10:48	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 10:48	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 10:48	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 10:48	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 10:48	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 10:48	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 10:48	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 10:48	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 10:48	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 10:48	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 10:48	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 10:48	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 10:48	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 10:48	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 10:48*	WG2169514
(S) 4-Bromofluorobenzene	*83.9*			*67.0-138*		*11/12/2023 10:48*	WG2169514
(S) 1,2-Dichloroethane-d4	*110*			*70.0-130*		*11/12/2023 10:48*	WG2169514

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	11.3 J+	C5 J4	0.548	1.00	1	11/12/2023 11:08	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 11:08	WG2169514
Benzene	0.0440		0.0160	0.0400	1	11/12/2023 11:08	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 11:08	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 11:08	WG2169514
Bromoform	U UJ	C3	0.239	1.00	1	11/12/2023 11:08	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 11:08	WG2169514
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/12/2023 11:08	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 11:08	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 11:08	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 11:08	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 11:08	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 11:08	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 11:08	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 11:08	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 11:08	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 11:08	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 11:08	WG2169514
1,2-Dibromo-3-Chloropropane	U UJ	C3	0.204	1.00	1	11/12/2023 11:08	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 11:08	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 11:08	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 11:08	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 11:08	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 11:08	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 11:08	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 11:08	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 11:08	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 11:08	WG2169514
cis-1,2-Dichloroethene	0.125		0.0276	0.100	1	11/12/2023 11:08	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 11:08	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 11:08	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 11:08	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 11:08	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 11:08	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 11:08	WG2169514
2,2-Dichloropropane	U UJ	C3	0.0317	0.100	1	11/12/2023 11:08	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 11:08	WG2169514
Ethylbenzene	0.299		0.0212	0.100	1	11/12/2023 11:08	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 11:08	WG2169514
Isopropylbenzene	U UJ	C3	0.0345	0.100	1	11/12/2023 11:08	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 11:08	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 11:08	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 11:08	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 11:08	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 11:08	WG2169514
Naphthalene	U UJ	C3 J4	0.124	0.500	1	11/12/2023 11:08	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 11:08	WG2169514
Styrene	U UJ	C3	0.109	0.500	1	11/12/2023 11:08	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 11:08	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 11:08	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 11:08	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 11:08	WG2169514
Toluene	1.34		0.0500	0.200	1	11/12/2023 11:08	WG2169514
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/12/2023 11:08	WG2169514 JC 2/15/24
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/12/2023 11:08	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 11:08	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 11:08	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 11:08	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 11:08	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 11:08	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 11:08	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 11:08	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 11:08	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 11:08	WG2169514
Xylenes, Total	1.51		0.191	0.260	1	11/12/2023 11:08	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 11:08	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 11:08	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 11:08	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 11:08	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 11:08	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 11:08*	WG2169514
(S) 4-Bromofluorobenzene	*86.6*			*67.0-138*		*11/12/2023 11:08*	WG2169514
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/12/2023 11:08*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	10.4 J+	C5 J4	0.548	1.00	1	11/12/2023 11:27	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 11:27	WG2169514
Benzene	0.0550		0.0160	0.0400	1	11/12/2023 11:27	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 11:27	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 11:27	WG2169514
Bromoform	U UJ	C3	0.239	1.00	1	11/12/2023 11:27	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 11:27	WG2169514
n-Butylbenzene	U UJ	C3	0.153	0.500	1	11/12/2023 11:27	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 11:27	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 11:27	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 11:27	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 11:27	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 11:27	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 11:27	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 11:27	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 11:27	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 11:27	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 11:27	WG2169514
1,2-Dibromo-3-Chloropropane	U UJ	C3	0.204	1.00	1	11/12/2023 11:27	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 11:27	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 11:27	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 11:27	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 11:27	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 11:27	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 11:27	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 11:27	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 11:27	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 11:27	WG2169514
cis-1,2-Dichloroethene	0.131		0.0276	0.100	1	11/12/2023 11:27	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 11:27	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 11:27	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 11:27	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 11:27	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 11:27	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 11:27	WG2169514
2,2-Dichloropropane	U UJ	C3	0.0317	0.100	1	11/12/2023 11:27	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 11:27	WG2169514
Ethylbenzene	0.295		0.0212	0.100	1	11/12/2023 11:27	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 11:27	WG2169514
Isopropylbenzene	U UJ	C3	0.0345	0.100	1	11/12/2023 11:27	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 11:27	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 11:27	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 11:27	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 11:27	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 11:27	WG2169514
Naphthalene	U UJ	C3 J4	0.124	0.500	1	11/12/2023 11:27	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 11:27	WG2169514
Styrene	U UJ	C3	0.109	0.500	1	11/12/2023 11:27	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 11:27	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 11:27	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 11:27	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 11:27	WG2169514
Toluene	1.38		0.0500	0.200	1	11/12/2023 11:27	WG2169514
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/12/2023 11:27	WG2169514
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/12/2023 11:27	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 11:27	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 11:27	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 11:27	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 11:27	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 11:27	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 11:27	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 11:27	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 11:27	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 11:27	WG2169514
Xylenes, Total	1.50		0.191	0.260	1	11/12/2023 11:27	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 11:27	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 11:27	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 11:27	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 11:27	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 11:27	WG2169514
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 11:27*	WG2169514
(S) 4-Bromofluorobenzene	*85.4*			*67.0-138*		*11/12/2023 11:27*	WG2169514
(S) 1,2-Dichloroethane-d4	*109*			*70.0-130*		*11/12/2023 11:27*	WG2169514

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

Analyte	Result ug/l		Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.64	U	~~C5 J4~~	0.548	1.00	1	11/12/2023 11:46	WG2169514
Acrylonitrile	U			0.0760	0.500	1	11/12/2023 11:46	WG2169514
Benzene	0.153			0.0160	0.0400	1	11/12/2023 11:46	WG2169514
Bromobenzene	U			0.0420	0.500	1	11/12/2023 11:46	WG2169514
Bromodichloromethane	U			0.0315	0.100	1	11/12/2023 11:46	WG2169514
Bromoform	U	UJ	C3	0.239	1.00	1	11/12/2023 11:46	WG2169514
Bromomethane	U			0.148	0.500	1	11/12/2023 11:46	WG2169514
n-Butylbenzene	U	UJ	C3	0.153	0.500	1	11/12/2023 11:46	WG2169514
sec-Butylbenzene	U			0.101	0.500	1	11/12/2023 11:46	WG2169514
tert-Butylbenzene	U			0.0620	0.200	1	11/12/2023 11:46	WG2169514
Carbon tetrachloride	U			0.0432	0.200	1	11/12/2023 11:46	WG2169514
Chlorobenzene	U			0.0229	0.100	1	11/12/2023 11:46	WG2169514
Chlorodibromomethane	U			0.0180	0.100	1	11/12/2023 11:46	WG2169514
Chloroethane	U			0.0432	0.200	1	11/12/2023 11:46	WG2169514
Chloroform	0.0770		J	0.0166	0.100	1	11/12/2023 11:46	WG2169514
Chloromethane	U			0.0556	0.500	1	11/12/2023 11:46	WG2169514
2-Chlorotoluene	U			0.0368	0.100	1	11/12/2023 11:46	WG2169514
4-Chlorotoluene	U			0.0452	0.200	1	11/12/2023 11:46	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ	C3	0.204	1.00	1	11/12/2023 11:46	WG2169514
1,2-Dibromoethane	U			0.0210	0.100	1	11/12/2023 11:46	WG2169514
Dibromomethane	U			0.0400	0.200	1	11/12/2023 11:46	WG2169514
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/12/2023 11:46	WG2169514
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/12/2023 11:46	WG2169514
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/12/2023 11:46	WG2169514
Dichlorodifluoromethane	U			0.0327	0.100	1	11/12/2023 11:46	WG2169514
1,1-Dichloroethane	U			0.0230	0.100	1	11/12/2023 11:46	WG2169514
1,2-Dichloroethane	U			0.0190	0.100	1	11/12/2023 11:46	WG2169514
1,1-Dichloroethene	0.0470		J	0.0200	0.100	1	11/12/2023 11:46	WG2169514
cis-1,2-Dichloroethene	28.0			0.0276	0.100	1	11/12/2023 11:46	WG2169514
trans-1,2-Dichloroethene	0.151		J	0.0572	0.200	1	11/12/2023 11:46	WG2169514
1,2-Dichloropropane	U			0.0508	0.200	1	11/12/2023 11:46	WG2169514
1,1-Dichloropropene	U			0.0280	0.100	1	11/12/2023 11:46	WG2169514
1,3-Dichloropropane	U			0.0700	0.200	1	11/12/2023 11:46	WG2169514
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/12/2023 11:46	WG2169514
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/12/2023 11:46	WG2169514
2,2-Dichloropropane	U	UJ	C3	0.0317	0.100	1	11/12/2023 11:46	WG2169514
Di-isopropyl ether	U			0.0140	0.0400	1	11/12/2023 11:46	WG2169514
Ethylbenzene	U			0.0212	0.100	1	11/12/2023 11:46	WG2169514
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/12/2023 11:46	WG2169514
Isopropylbenzene	U	UJ	C3	0.0345	0.100	1	11/12/2023 11:46	WG2169514
p-Isopropyltoluene	U			0.0932	0.200	1	11/12/2023 11:46	WG2169514
2-Butanone (MEK)	U		~~J3~~	0.500	1.00	1	11/12/2023 11:46	WG2169514
Methylene Chloride	U			0.265	1.00	1	11/12/2023 11:46	WG2169514
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/12/2023 11:46	WG2169514
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/12/2023 11:46	WG2169514
Naphthalene	U	UJ	C3 J4	0.124	0.500	1	11/12/2023 11:46	WG2169514
n-Propylbenzene	U			0.0472	0.200	1	11/12/2023 11:46	WG2169514
Styrene	U		C3	0.109	0.500	1	11/12/2023 11:46	WG2169514
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/12/2023 11:46	WG2169514
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/12/2023 11:46	WG2169514
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/12/2023 11:46	WG2169514
Tetrachloroethene	0.0520		J	0.0280	0.100	1	11/12/2023 11:46	WG2169514
Toluene	U			0.0500	0.200	1	11/12/2023 11:46	WG2169514
1,2,3-Trichlorobenzene	U	UJ	C3	0.0250	0.500	1	11/12/2023 11:46	WG2169514
1,2,4-Trichlorobenzene	U	UJ	C3	0.193	0.500	1	11/12/2023 11:46	WG2169514
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/12/2023 11:46	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 11:46	WG2169514
Trichloroethene	1.04		0.0160	0.0400	1	11/12/2023 11:46	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 11:46	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 11:46	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 11:46	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 11:46	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 11:46	WG2169514
Vinyl chloride	0.217	J- C3	0.0273	0.100	1	11/12/2023 11:46	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 11:46	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 11:46	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 11:46	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 11:46	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 11:46	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 11:46	WG2169514
(S) Toluene-d8	*98.8*			*75.0-131*		*11/12/2023 11:46*	WG2169514
(S) 4-Bromofluorobenzene	*85.4*			*67.0-138*		*11/12/2023 11:46*	WG2169514
(S) 1,2-Dichloroethane-d4	*116*			*70.0-130*		*11/12/2023 11:46*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 12:05	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 12:05	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 12:05	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 12:05	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 12:05	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 12:05	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 12:05	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 12:05	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 12:05	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 12:05	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 12:05	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 12:05	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 12:05	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 12:05	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 12:05	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 12:05	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 12:05	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 12:05	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 12:05	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 12:05	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 12:05	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 12:05	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 12:05	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 12:05	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 12:05	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 12:05	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 12:05	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 12:05	WG2169514
cis-1,2-Dichloroethene	17.7		0.0276	0.100	1	11/12/2023 12:05	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 12:05	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 12:05	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 12:05	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 12:05	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 12:05	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 12:05	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 12:05	WG2169514
Di-isopropyl ether	0.0410		0.0140	0.0400	1	11/12/2023 12:05	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 12:05	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 12:05	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 12:05	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 12:05	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 12:05	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 12:05	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 12:05	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 12:05	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 12:05	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 12:05	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 12:05	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 12:05	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 12:05	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 12:05	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 12:05	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 12:05	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 12:05	WG2169514 JC 2/15/24
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 12:05	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 12:05	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 12:05	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 12:05	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 12:05	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 12:05	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 12:05	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 12:05	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 12:05	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 12:05	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 12:05	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 12:05	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 12:05	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 12:05	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 12:05	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 12:05	WG2169514
(S) Toluene-d8	*99.7*			*75.0-131*		*11/12/2023 12:05*	WG2169514
(S) 4-Bromofluorobenzene	*85.3*			*67.0-138*		*11/12/2023 12:05*	WG2169514
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 12:05*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 12:24	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 12:24	WG2169514
Benzene	4.30		0.0160	0.0400	1	11/12/2023 12:24	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 12:24	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 12:24	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 12:24	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 12:24	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 12:24	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 12:24	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 12:24	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 12:24	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 12:24	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 12:24	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 12:24	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 12:24	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 12:24	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 12:24	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 12:24	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 12:24	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 12:24	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 12:24	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 12:24	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 12:24	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 12:24	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 12:24	WG2169514
1,1-Dichloroethane	0.0380	J	0.0230	0.100	1	11/12/2023 12:24	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 12:24	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 12:24	WG2169514
cis-1,2-Dichloroethene	0.154		0.0276	0.100	1	11/12/2023 12:24	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 12:24	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 12:24	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 12:24	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 12:24	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 12:24	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 12:24	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 12:24	WG2169514
Di-isopropyl ether	0.106		0.0140	0.0400	1	11/12/2023 12:24	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 12:24	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 12:24	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 12:24	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 12:24	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 12:24	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 12:24	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 12:24	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 12:24	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 12:24	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 12:24	WG2169514
Styrene	U	C3	0.109	0.500	1	11/12/2023 12:24	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 12:24	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 12:24	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 12:24	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 12:24	WG2169514
Toluene	0.0790	J	0.0500	0.200	1	11/12/2023 12:24	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 12:24	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 12:24	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 12:24	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 12:24	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 12:24	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 12:24	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 12:24	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 12:24	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 12:24	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 12:24	WG2169514
Vinyl chloride	4.58	J- C3	0.0273	0.100	1	11/12/2023 12:24	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 12:24	WG2169514
Ethyl Ether	0.101		0.0170	0.100	1	11/12/2023 12:24	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 12:24	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 12:24	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 12:24	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 12:24	WG2169514
(S) Toluene-d8	*99.2*			*75.0-131*		*11/12/2023 12:24*	WG2169514
(S) 4-Bromofluorobenzene	*85.7*			*67.0-138*		*11/12/2023 12:24*	WG2169514
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*		*11/12/2023 12:24*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	0.548	1.00	1	11/12/2023 12:43	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 12:43	WG2169514
Benzene	0.0280	J	0.0160	0.0400	1	11/12/2023 12:43	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 12:43	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 12:43	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 12:43	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 12:43	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 12:43	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 12:43	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 12:43	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 12:43	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 12:43	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 12:43	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 12:43	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 12:43	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 12:43	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 12:43	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 12:43	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 12:43	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 12:43	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 12:43	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 12:43	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 12:43	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 12:43	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 12:43	WG2169514
1,1-Dichloroethane	0.0560	J	0.0230	0.100	1	11/12/2023 12:43	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 12:43	WG2169514
1,1-Dichloroethene	0.0290	J	0.0200	0.100	1	11/12/2023 12:43	WG2169514
cis-1,2-Dichloroethene	40.3		0.0276	0.100	1	11/12/2023 12:43	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 12:43	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 12:43	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 12:43	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 12:43	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 12:43	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 12:43	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 12:43	WG2169514
Di-isopropyl ether	0.115		0.0140	0.0400	1	11/12/2023 12:43	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 12:43	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 12:43	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 12:43	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 12:43	WG2169514
2-Butanone (MEK)	U	J3	0.500	1.00	1	11/12/2023 12:43	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 12:43	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 12:43	WG2169514
Methyl tert-butyl ether	0.0170	J	0.0118	0.0400	1	11/12/2023 12:43	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 12:43	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 12:43	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 12:43	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 12:43	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 12:43	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 12:43	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 12:43	WG2169514
Toluene	0.0680	J	0.0500	0.200	1	11/12/2023 12:43	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 12:43	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 12:43	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 12:43	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 12:43	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 12:43	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 12:43	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 12:43	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 12:43	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 12:43	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 12:43	WG2169514
Vinyl chloride	0.289	J- C3	0.0273	0.100	1	11/12/2023 12:43	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 12:43	WG2169514
Ethyl Ether	0.178		0.0170	0.100	1	11/12/2023 12:43	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 12:43	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 12:43	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 12:43	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 12:43	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 12:43*	WG2169514
(S) 4-Bromofluorobenzene	*84.1*			*67.0-138*		*11/12/2023 12:43*	WG2169514
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/12/2023 12:43*	WG2169514

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.51 U	~~C5 J4~~	0.548	1.00	1	11/12/2023 13:02	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 13:02	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 13:02	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 13:02	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 13:02	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 13:02	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 13:02	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 13:02	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 13:02	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 13:02	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 13:02	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 13:02	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 13:02	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 13:02	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 13:02	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 13:02	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 13:02	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 13:02	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 13:02	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 13:02	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 13:02	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 13:02	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 13:02	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 13:02	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 13:02	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 13:02	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 13:02	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 13:02	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 13:02	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 13:02	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 13:02	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 13:02	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 13:02	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 13:02	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 13:02	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 13:02	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 13:02	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 13:02	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 13:02	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 13:02	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 13:02	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 13:02	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 13:02	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 13:02	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 13:02	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 13:02	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 13:02	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 13:02	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 13:02	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 13:02	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 13:02	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 13:02	WG2169514
Toluene	0.143	J	0.0500	0.200	1	11/12/2023 13:02	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 13:02	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 13:02	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 13:02	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 13:02	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 13:02	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 13:02	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 13:02	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 13:02	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 13:02	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 13:02	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 13:02	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 13:02	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 13:02	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 13:02	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 13:02	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 13:02	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 13:02	WG2169514
(S) Toluene-d8	*99.1*			*75.0-131*		*11/12/2023 13:02*	WG2169514
(S) 4-Bromofluorobenzene	*84.5*			*67.0-138*		*11/12/2023 13:02*	WG2169514
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/12/2023 13:02*	WG2169514

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.26	U ~~C5 J4~~	0.548	1.00	1	11/12/2023 13:22	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 13:22	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 13:22	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 13:22	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 13:22	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 13:22	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 13:22	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 13:22	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 13:22	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 13:22	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 13:22	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 13:22	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 13:22	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 13:22	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 13:22	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 13:22	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 13:22	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 13:22	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 13:22	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 13:22	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 13:22	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 13:22	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 13:22	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 13:22	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 13:22	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 13:22	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 13:22	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 13:22	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 13:22	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 13:22	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 13:22	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 13:22	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 13:22	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 13:22	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 13:22	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 13:22	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 13:22	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 13:22	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 13:22	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 13:22	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 13:22	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 13:22	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 13:22	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 13:22	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 13:22	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 13:22	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 13:22	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 13:22	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 13:22	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 13:22	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 13:22	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 13:22	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 13:22	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 13:22	WG2169514 JC 2/15/24
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 13:22	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 13:22	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 13:22	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 13:22	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 13:22	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 13:22	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 13:22	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 13:22	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 13:22	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 13:22	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 13:22	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 13:22	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 13:22	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 13:22	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 13:22	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 13:22	WG2169514
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 13:22*	WG2169514
(S) 4-Bromofluorobenzene	*81.9*			*67.0-138*		*11/12/2023 13:22*	WG2169514
(S) 1,2-Dichloroethane-d4	*115*			*70.0-130*		*11/12/2023 13:22*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 13:41	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 13:41	WG2169514
Benzene	20.4		0.0160	0.0400	1	11/12/2023 13:41	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 13:41	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 13:41	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 13:41	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 13:41	WG2169514
n-Butylbenzene	U	C3	0.153	0.500	1	11/12/2023 13:41	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 13:41	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 13:41	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 13:41	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 13:41	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 13:41	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 13:41	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 13:41	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 13:41	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 13:41	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 13:41	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 13:41	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 13:41	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 13:41	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 13:41	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 13:41	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 13:41	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 13:41	WG2169514
1,1-Dichloroethane	0.0510	J	0.0230	0.100	1	11/12/2023 13:41	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 13:41	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 13:41	WG2169514
cis-1,2-Dichloroethene	5.42		0.0276	0.100	1	11/12/2023 13:41	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 13:41	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 13:41	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 13:41	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 13:41	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 13:41	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 13:41	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 13:41	WG2169514
Di-isopropyl ether	0.364		0.0140	0.0400	1	11/12/2023 13:41	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 13:41	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 13:41	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 13:41	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 13:41	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 13:41	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 13:41	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 13:41	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 13:41	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 13:41	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 13:41	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 13:41	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 13:41	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 13:41	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 13:41	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 13:41	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 13:41	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 13:41	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 13:41	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 13:41	WG2169514

JC 2/15/24

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 13:41	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 13:41	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 13:41	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 13:41	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 13:41	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 13:41	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 13:41	WG2169514
Vinyl chloride	27.8	J-	0.0273	0.100	1	11/12/2023 13:41	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 13:41	WG2169514
Ethyl Ether	0.103		0.0170	0.100	1	11/12/2023 13:41	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 13:41	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 13:41	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 13:41	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 13:41	WG2169514
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 13:41*	WG2169514
(S) 4-Bromofluorobenzene	*85.9*			*67.0-138*		*11/12/2023 13:41*	WG2169514
(S) 1,2-Dichloroethane-d4	*112*			*70.0-130*		*11/12/2023 13:41*	WG2169514

C3

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 14:00	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:00	WG2169514
Benzene	6.74		0.0160	0.0400	1	11/12/2023 14:00	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:00	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:00	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 14:00	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:00	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 14:00	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:00	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:00	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:00	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:00	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:00	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:00	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:00	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:00	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:00	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:00	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 14:00	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:00	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:00	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:00	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:00	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:00	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:00	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:00	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:00	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:00	WG2169514
cis-1,2-Dichloroethene	0.195		0.0276	0.100	1	11/12/2023 14:00	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:00	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:00	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:00	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:00	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:00	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:00	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 14:00	WG2169514
Di-isopropyl ether	0.0550		0.0140	0.0400	1	11/12/2023 14:00	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:00	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:00	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 14:00	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:00	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 14:00	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:00	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:00	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:00	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 14:00	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:00	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 14:00	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:00	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:00	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:00	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:00	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:00	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 14:00	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 14:00	WG2169514 JC 2/15/24
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:00	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:00	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:00	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:00	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:00	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:00	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:00	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:00	WG2169514
Vinyl chloride	0.669	J- C3	0.0273	0.100	1	11/12/2023 14:00	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:00	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 14:00	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:00	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:00	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:00	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:00	WG2169514
(S) Toluene-d8	*98.8*			*75.0-131*		*11/12/2023 14:00*	WG2169514
(S) 4-Bromofluorobenzene	*81.9*			*67.0-138*		*11/12/2023 14:00*	WG2169514
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 14:00*	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 14:19	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:19	WG2169514
Benzene	0.172		0.0160	0.0400	1	11/12/2023 14:19	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:19	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:19	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 14:19	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:19	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 14:19	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:19	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:19	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:19	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:19	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:19	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:19	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:19	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:19	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:19	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:19	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 14:19	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:19	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:19	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:19	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:19	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:19	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:19	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:19	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:19	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:19	WG2169514
cis-1,2-Dichloroethene	8.39		0.0276	0.100	1	11/12/2023 14:19	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:19	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:19	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:19	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:19	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:19	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:19	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 14:19	WG2169514
Di-isopropyl ether	0.0640		0.0140	0.0400	1	11/12/2023 14:19	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:19	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:19	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 14:19	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:19	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 14:19	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:19	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:19	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:19	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 14:19	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:19	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 14:19	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:19	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:19	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:19	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:19	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:19	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 14:19	WG2169514 JC 2/15/24
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 14:19	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:19	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:19	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:19	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:19	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:19	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:19	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:19	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:19	WG2169514
Vinyl chloride	20.7 J-	C3	0.0273	0.100	1	11/12/2023 14:19	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:19	WG2169514
Ethyl Ether	0.0890	J	0.0170	0.100	1	11/12/2023 14:19	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:19	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:19	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:19	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:19	WG2169514
(S) Toluene-d8	*99.9*			*75.0-131*		*11/12/2023 14:19*	WG2169514
(S) 4-Bromofluorobenzene	*84.8*			*67.0-138*		*11/12/2023 14:19*	WG2169514
(S) 1,2-Dichloroethane-d4	*114*			*70.0-130*		*11/12/2023 14:19*	WG2169514

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	~~J4~~	0.548	1.00	1	11/12/2023 14:38	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:38	WG2169514
Benzene	4.90		0.0160	0.0400	1	11/12/2023 14:38	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:38	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:38	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 14:38	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:38	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 14:38	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:38	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:38	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:38	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:38	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:38	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:38	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:38	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:38	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:38	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:38	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 14:38	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:38	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:38	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:38	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:38	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:38	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:38	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:38	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:38	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:38	WG2169514
cis-1,2-Dichloroethene	0.162		0.0276	0.100	1	11/12/2023 14:38	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:38	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:38	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:38	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:38	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:38	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:38	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 14:38	WG2169514
Di-isopropyl ether	0.198		0.0140	0.0400	1	11/12/2023 14:38	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:38	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:38	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 14:38	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:38	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 14:38	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:38	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:38	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:38	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 14:38	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:38	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 14:38	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:38	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:38	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:38	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:38	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:38	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 14:38	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 14:38	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:38	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:38	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:38	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:38	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:38	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:38	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:38	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:38	WG2169514
Vinyl chloride	0.953 J-	C3	0.0273	0.100	1	11/12/2023 14:38	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:38	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 14:38	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:38	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:38	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:38	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:38	WG2169514
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 14:38*	WG2169514
(S) 4-Bromofluorobenzene	*85.8*			*67.0-138*		*11/12/2023 14:38*	WG2169514
(S) 1,2-Dichloroethane-d4	*111*			*70.0-130*		*11/12/2023 14:38*	WG2169514

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

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.62 U	~~C5 J4~~	0.548	1.00	1	11/12/2023 14:58	WG2169514
Acrylonitrile	U		0.0760	0.500	1	11/12/2023 14:58	WG2169514
Benzene	U		0.0160	0.0400	1	11/12/2023 14:58	WG2169514
Bromobenzene	U		0.0420	0.500	1	11/12/2023 14:58	WG2169514
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 14:58	WG2169514
Bromoform	U	UJ C3	0.239	1.00	1	11/12/2023 14:58	WG2169514
Bromomethane	U		0.148	0.500	1	11/12/2023 14:58	WG2169514
n-Butylbenzene	U	UJ C3	0.153	0.500	1	11/12/2023 14:58	WG2169514
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 14:58	WG2169514
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 14:58	WG2169514
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 14:58	WG2169514
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 14:58	WG2169514
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 14:58	WG2169514
Chloroethane	U		0.0432	0.200	1	11/12/2023 14:58	WG2169514
Chloroform	U		0.0166	0.100	1	11/12/2023 14:58	WG2169514
Chloromethane	U		0.0556	0.500	1	11/12/2023 14:58	WG2169514
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 14:58	WG2169514
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 14:58	WG2169514
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/12/2023 14:58	WG2169514
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 14:58	WG2169514
Dibromomethane	U		0.0400	0.200	1	11/12/2023 14:58	WG2169514
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 14:58	WG2169514
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 14:58	WG2169514
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 14:58	WG2169514
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 14:58	WG2169514
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 14:58	WG2169514
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 14:58	WG2169514
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 14:58	WG2169514
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 14:58	WG2169514
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 14:58	WG2169514
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 14:58	WG2169514
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 14:58	WG2169514
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 14:58	WG2169514
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 14:58	WG2169514
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 14:58	WG2169514
2,2-Dichloropropane	U	UJ C3	0.0317	0.100	1	11/12/2023 14:58	WG2169514
Di-isopropyl ether	U		0.0140	0.0400	1	11/12/2023 14:58	WG2169514
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 14:58	WG2169514
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 14:58	WG2169514
Isopropylbenzene	U	UJ C3	0.0345	0.100	1	11/12/2023 14:58	WG2169514
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 14:58	WG2169514
2-Butanone (MEK)	U	~~J3~~	0.500	1.00	1	11/12/2023 14:58	WG2169514
Methylene Chloride	U		0.265	1.00	1	11/12/2023 14:58	WG2169514
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 14:58	WG2169514
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 14:58	WG2169514
Naphthalene	U	UJ C3 J4	0.124	0.500	1	11/12/2023 14:58	WG2169514
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 14:58	WG2169514
Styrene	U	UJ C3	0.109	0.500	1	11/12/2023 14:58	WG2169514
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 14:58	WG2169514
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 14:58	WG2169514
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 14:58	WG2169514
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 14:58	WG2169514
Toluene	U		0.0500	0.200	1	11/12/2023 14:58	WG2169514
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/12/2023 14:58	WG2169514
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/12/2023 14:58	WG2169514
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 14:58	WG2169514

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 14:58	WG2169514
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 14:58	WG2169514
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 14:58	WG2169514
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 14:58	WG2169514
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 14:58	WG2169514
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 14:58	WG2169514
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 14:58	WG2169514
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/12/2023 14:58	WG2169514
Xylenes, Total	U		0.191	0.260	1	11/12/2023 14:58	WG2169514
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 14:58	WG2169514
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 14:58	WG2169514
Iodomethane	U		0.242	0.500	1	11/12/2023 14:58	WG2169514
Allyl chloride	U		0.580	1.00	1	11/12/2023 14:58	WG2169514
Trans-1,4-Dichloro-2-butene	U		0.0560	0.200	1	11/12/2023 14:58	WG2169514
(S) Toluene-d8	*101*			*75.0-131*		*11/12/2023 14:58*	WG2169514
(S) 4-Bromofluorobenzene	*86.2*			*67.0-138*		*11/12/2023 14:58*	WG2169514
(S) 1,2-Dichloroethane-d4	*117*			*70.0-130*		*11/12/2023 14:58*	WG2169514

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MEMORANDUM

TO: Project File **DATE:** February 15, 2024

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 443022-1413001.10.701.04

TASK: EIM Data Validation Level EPA2A for Group 4 – 4th Quarter November-December 2023

LAB: Pace Sample Delivery Group (SDGs): L1676892, L1678545, and L1684448

Thirteen groundwater samples and one trip blank were collected November 2, 14-15, and December 4, 2023, from monitoring wells associated with fourth quarter monitoring at American Linen in Seattle, WA. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. The samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Standard Method (SM) 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A; and
- Metals (iron and manganese) by USEPA Method 6020B.

Fourth quarter analytical results are reported in eighteen SDGs and are validated in four groups. Group 4 consists of three SDGs L1676892 (except sample MW-347-111023), L1678545, and L1684448. Refer to the data validation review on the SDOT Mercer Parcels at American Linen for sample MW-347-111023. The quality assurance review of the laboratory data associated with Group 4 is summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (USEPA, 2020) and USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested with the following discussion:

- SDG L1678545: Review of chain of custody shows sample MW106-111423 (L1678545-02) however the sample was identified in the laboratory report as MW-106-111423. NV5 confirmed that the chain of custody identification was correct. Per NV5 request, Pace revised the sample identification and reissued the associated deliverables on February 13, 2024.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. The samples were received in good condition. No data are qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
The samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The samples were analyzed within the USEPA recommended holding time for alkalinity (14 days) chloride (28 days), sulfate (28 days), nitrate (48 hours), and TOC (28 days) for the preserved water sample from the date of sample collection. All holding time criteria are met with the following discussions and exceptions:

- SDG L1678545: Pace qualified (T8) sample MW-348-111523 chloride and sulfate results to indicate that analytical hold times were exceeded. Sample MW-348-111523 was analyzed for chloride and sulfate within recommended hold times. The laboratory assigned qualifiers (T8) on chloride and sulfate results are crossed out by the data validator.

- SDG L1678545: Nitrate analysis was performed ten days past recommended hold time and associated nitrate results for sample MW-348-111523 are laboratory qualified (T8). Per NFG, holding time exceedance detections are qualified as estimated with low bias

and non-detects are rejected. **Sample MW-348-111523 nitrate detection is qualified as estimated (J).** Refer to the section on Method Blank Results for additional information.

USEPA Method 6020B:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCVs are below laboratory acceptance criteria and showing potential low bias. **Associated sample results with laboratory qualified (C3) results are estimated with potential low bias and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- Multiple SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for several compounds. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCVs are above laboratory acceptance criteria and showing potential high bias. **Associated sample results (detects) with laboratory qualified (C5) results are estimated with potential high bias and qualified (J+).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs) with the following exceptions:

- SDG L1678545 – Analytical batch WG2173848: A low level of chloroform is detected at 0.0550 µg/L and below the RDL (0.100 µg/L) in the VOC method blank. No action is needed as chloroform is either detected above the RDL or not detected in the associated samples.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron and Manganese):
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes were detected in the method blanks below the RDLs. Per Guidance, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. Metals were not detected in the associated samples and general chemistry blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1676892	WG2179167	9060A	TOC	157	J	1000	µg/L	NO
L1678545	WG2177339	9056A	Nitrate	74.5	J	100	µg/L	**YES**
L1678545	WG2182046	9060A	TOC	225	J	1000	µg/L	NO

The target analytes were detected in the method blanks at low levels and below the RDLs. No action is taken for TOC since the associated sample results are greater than the RDLs. A low level of nitrate was detected in method blank below the RDL however due to holding time exceedance the associated result is evaluated as follows:

- SDG L1678545: Nitrate analysis was performed ten days past recommended hold time and associated nitrate results for sample MW-348-111523 are laboratory qualified (T8). **Per NFG, sample MW-348-111523 nitrate detection is qualified as estimated (J) due to a significant holding time exceedance.** The associated method blank is contaminated however no action is taken solely on this basis due to the holding time exceedance. Due to deficiencies (holding time exceedance and blank contamination) directional bias is undetermined.

Trip Blank Results

USEPA Method 8260D:
A trip blank (TB-111523) was collected and submitted for VOC analysis. No target analytes were detected in the trip blank at or above the MDL or RDL.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
An equipment blank was not collected.

Field Duplicate Analyses

Field duplicate pairs were not submitted for Group 4. Refer to LCS/LCSD results for precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D:

Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or $\pm$ 1x RDL for groundwater results <5X the RDL.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters with the following exceptions:

- SDG L1676892 – Analytical batch WG2173609: LCS % R for trans-1,4-dichloro-2-butene is below laboratory acceptance criteria and laboratory qualified (J4). No action is taken since the LCSD % R and RPD are within criteria.

- SDG L1676892 – Analytical batch WG2174693: LCS/LCSD RPD for trans-1,4-dichloro-2-butene is outside of laboratory acceptance criteria and laboratory qualified (J3). No action is taken since the LCSD % R and RPD are within criteria.

- SDG L1678545 – Analytical batch WG2173799: LCS/LCSD RPD for ethyl ether is outside of laboratory acceptance criteria and laboratory qualified (J3). No action is taken since LCS/LCSD % Rs are within criteria.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese):

The LCS % Rs for general chemistry parameters and metals are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were performed on non-client samples. Refer to laboratory control sample results for precision and accuracy results.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
MS/MSD analyses were not performed. Refer to laboratory control sample and laboratory duplicate results for precision and accuracy results.

General Chemistry (Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron and Manganese):
MS or MS/MSD analyses were performed on client and/or on non-client samples within the analytical batches. Client sample MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy but the associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses are reported based on laboratory RDLs for all compounds. RDLs for all targets or selected compounds are elevated in several samples due to method-required dilutions. No action is taken other than to note this and the following:

- SDG L1676892: Select VOC target compounds in sample MW-146-111023 are elevated and the sample was analyzed at a dilution (10X).

Per NV5's request the associated EDDs show result reporting limits (also known as reported detection limit (RDL) or practical quantitation limit (PQL)) and result detection limits (also referred to as method detection limit (MDL)) instead of defaulting to the RDL when reporting the MDL.

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020); and

- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	264000		8450	20000	1	11/16/2023 12:18	WG2172434

Sample Narrative:
L1676892-01 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	71300		379	1000	1	11/11/2023 19:41	WG2169403
Nitrate	72.2	J	48.0	100	1	11/11/2023 19:41	WG2169403
Sulfate	25200		594	5000	1	11/11/2023 19:41	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7020		102	1000	1	12/01/2023 14:47	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4690		28.1	100	1	11/20/2023 19:04	WG2169913
Manganese	354		0.704	5.00	1	11/20/2023 19:04	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1660		0.287	0.678	1	11/20/2023 11:39	WG2173812
Ethane	17.5		0.296	1.29	1	11/20/2023 11:39	WG2173812
Ethene	93.6		0.422	1.27	1	11/20/2023 11:39	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	UJ C3	0.548	1.00	1	11/21/2023 10:04	WG2174693
Acrylonitrile	U		0.0760	0.500	1	11/21/2023 10:04	WG2174693
Benzene	0.0200	J	0.0160	0.0400	1	11/21/2023 10:04	WG2174693
Bromobenzene	U		0.0420	0.500	1	11/21/2023 10:04	WG2174693
Bromodichloromethane	U		0.0315	0.100	1	11/21/2023 10:04	WG2174693
Bromoform	U		0.239	1.00	1	11/21/2023 10:04	WG2174693
Bromomethane	U		0.148	0.500	1	11/21/2023 10:04	WG2174693
n-Butylbenzene	U		0.153	0.500	1	11/21/2023 10:04	WG2174693
sec-Butylbenzene	U		0.101	0.500	1	11/21/2023 10:04	WG2174693
tert-Butylbenzene	U		0.0620	0.200	1	11/21/2023 10:04	WG2174693
Carbon tetrachloride	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Chlorobenzene	U		0.0229	0.100	1	11/21/2023 10:04	WG2174693
Chlorodibromomethane	U		0.0180	0.100	1	11/21/2023 10:04	WG2174693
Chloroethane	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Chloroform	U		0.0166	0.100	1	11/21/2023 10:04	WG2174693
Chloromethane	U	UJ C3	0.0556	0.500	1	11/21/2023 10:04	WG2174693
2-Chlorotoluene	U		0.0368	0.100	1	11/21/2023 10:04	WG2174693
4-Chlorotoluene	U		0.0452	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dibromo-3-Chloropropane	U	UJ C3	0.204	1.00	1	11/21/2023 10:04	WG2174693
1,2-Dibromoethane	U		0.0210	0.100	1	11/21/2023 10:04	WG2174693

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/21/2023 10:04	WG2174693
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/21/2023 10:04	WG2174693
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/21/2023 10:04	WG2174693
Dichlorodifluoromethane	U		0.0327	0.100	1	11/21/2023 10:04	WG2174693
1,1-Dichloroethane	U		0.0230	0.100	1	11/21/2023 10:04	WG2174693
1,2-Dichloroethane	U		0.0190	0.100	1	11/21/2023 10:04	WG2174693
1,1-Dichloroethene	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
cis-1,2-Dichloroethene	0.921		0.0276	0.100	1	11/21/2023 10:04	WG2174693
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dichloropropane	U		0.0508	0.200	1	11/21/2023 10:04	WG2174693
1,1-Dichloropropene	U		0.0280	0.100	1	11/21/2023 10:04	WG2174693
1,3-Dichloropropane	U		0.0700	0.200	1	11/21/2023 10:04	WG2174693
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/21/2023 10:04	WG2174693
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/21/2023 10:04	WG2174693
2,2-Dichloropropane	U		0.0317	0.100	1	11/21/2023 10:04	WG2174693
Di-isopropyl ether	U		0.0140	0.0400	1	11/21/2023 10:04	WG2174693
Ethylbenzene	U		0.0212	0.100	1	11/21/2023 10:04	WG2174693
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/21/2023 10:04	WG2174693
Isopropylbenzene	U		0.0345	0.100	1	11/21/2023 10:04	WG2174693
p-Isopropyltoluene	U		0.0932	0.200	1	11/21/2023 10:04	WG2174693
2-Butanone (MEK)	U		0.500	1.00	1	11/21/2023 10:04	WG2174693
Methylene Chloride	U		0.265	1.00	1	11/21/2023 10:04	WG2174693
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/21/2023 10:04	WG2174693
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/21/2023 10:04	WG2174693
Naphthalene	U	UJ C3	0.124	0.500	1	11/21/2023 10:04	WG2174693
n-Propylbenzene	U		0.0472	0.200	1	11/21/2023 10:04	WG2174693
Styrene	U		0.109	0.500	1	11/21/2023 10:04	WG2174693
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/21/2023 10:04	WG2174693
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/21/2023 10:04	WG2174693
Tetrachloroethene	U		0.0280	0.100	1	11/21/2023 10:04	WG2174693
Toluene	0.0720	J	0.0500	0.200	1	11/21/2023 10:04	WG2174693
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/21/2023 10:04	WG2174693
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/21/2023 10:04	WG2174693
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/21/2023 10:04	WG2174693
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/21/2023 10:04	WG2174693
Trichloroethene	U		0.0160	0.0400	1	11/21/2023 10:04	WG2174693
Trichlorofluoromethane	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
1,2,3-Trichloropropane	U		0.204	0.500	1	11/21/2023 10:04	WG2174693
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/21/2023 10:04	WG2174693
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/21/2023 10:04	WG2174693
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Vinyl chloride	6.62		0.0273	0.100	1	11/21/2023 10:04	WG2174693
Xylenes, Total	U		0.191	0.260	1	11/21/2023 10:04	WG2174693
Ethyl Ether	U		0.0170	0.100	1	11/21/2023 10:04	WG2174693
Tetrahydrofuran	0.183	J	C3 J	0.0900	0.500	1	11/21/2023 10:04	WG2174693
Iodomethane	U		0.242	0.500	1	11/21/2023 10:04	WG2174693
Allyl chloride	U		0.580	1.00	1	11/21/2023 10:04	WG2174693
Trans-1,4-Dichloro-2-butene	U	~~J3~~	0.0560	0.200	1	11/21/2023 10:04	WG2174693
(S) Toluene-d8	*100*			*75.0-131*		*11/21/2023 10:04*	WG2174693
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/21/2023 10:04*	WG2174693
(S) 1,2-Dichloroethane-d4	*94.5*			*70.0-130*		*11/21/2023 10:04*	WG2174693

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	210000		8450	20000	1	11/16/2023 12:33	WG2172434

Sample Narrative:
L1676892-02 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31400		379	1000	1	11/11/2023 19:54	WG2169403
Nitrate	78.0	J	48.0	100	1	11/11/2023 19:54	WG2169403
Sulfate	33400		594	5000	1	11/11/2023 19:54	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1680		102	1000	1	12/01/2023 16:28	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	634		28.1	100	1	11/20/2023 19:07	WG2169913
Manganese	116		0.704	5.00	1	11/20/2023 19:07	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1420		0.287	0.678	1	11/20/2023 11:46	WG2173812
Ethane	3.66		0.296	1.29	1	11/20/2023 11:46	WG2173812
Ethene	11.4		0.422	1.27	1	11/20/2023 11:46	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	60.9	C5	0.548	1.00	1	11/18/2023 01:30	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 01:30	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 01:30	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 01:30	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 01:30	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 01:30	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 01:30	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 01:30	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 01:30	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 01:30	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 01:30	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 01:30	WG2173211
Chloroethane	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Chloroform	U		0.0166	0.100	1	11/18/2023 01:30	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 01:30	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 01:30	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 01:30	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 01:30	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 01:30	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 01:30	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 01:30	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 01:30	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 01:30	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 01:30	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
cis-1,2-Dichloroethene	0.889		0.0276	0.100	1	11/18/2023 01:30	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 01:30	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 01:30	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 01:30	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 01:30	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 01:30	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 01:30	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 01:30	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 01:30	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 01:30	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 01:30	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 01:30	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 01:30	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 01:30	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 01:30	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 01:30	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 01:30	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 01:30	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 01:30	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 01:30	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 01:30	WG2173211
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 01:30	WG2173211
Toluene	0.0530	J	0.0500	0.200	1	11/18/2023 01:30	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 01:30	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 01:30	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 01:30	WG2173211
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 01:30	WG2173211
Trichloroethene	0.124		0.0160	0.0400	1	11/18/2023 01:30	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 01:30	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 01:30	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 01:30	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Vinyl chloride	8.19		0.0273	0.100	1	11/18/2023 01:30	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 01:30	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 01:30	WG2173211
Tetrahydrofuran	6.48		0.0900	0.500	1	11/18/2023 01:30	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 01:30	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 01:30	WG2173211
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 01:30	WG2173211
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 01:30*	WG2173211
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/18/2023 01:30*	WG2173211
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/18/2023 01:30*	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.25 J+	C5	0.548	1.00	1	11/18/2023 01:49	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 01:49	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 01:49	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 01:49	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 01:49	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 01:49	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 01:49	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 01:49	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 01:49	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 01:49	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 01:49	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 01:49	WG2173211
Chloroethane	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Chloroform	U		0.0166	0.100	1	11/18/2023 01:49	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 01:49	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 01:49	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 01:49	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 01:49	WG2173211
Dibromomethane	U		0.0400	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 01:49	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 01:49	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 01:49	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 01:49	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 01:49	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 01:49	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
cis-1,2-Dichloroethene	0.303		0.0276	0.100	1	11/18/2023 01:49	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 01:49	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 01:49	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 01:49	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 01:49	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 01:49	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 01:49	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 01:49	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 01:49	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 01:49	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 01:49	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 01:49	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 01:49	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 01:49	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 01:49	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 01:49	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 01:49	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 01:49	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 01:49	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 01:49	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 01:49	WG2173211
Tetrachloroethene	0.0700	J	0.0280	0.100	1	11/18/2023 01:49	WG2173211
Toluene	U		0.0500	0.200	1	11/18/2023 01:49	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 01:49	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 01:49	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 01:49	WG2173211

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

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/18/2023 01:49	WG2173211
Trichloroethene	0.0330		J	0.0160	0.0400	1	11/18/2023 01:49	WG2173211
Trichlorofluoromethane	U			0.0200	0.100	1	11/18/2023 01:49	WG2173211
1,2,3-Trichloropropane	U			0.204	0.500	1	11/18/2023 01:49	WG2173211
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/18/2023 01:49	WG2173211
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/18/2023 01:49	WG2173211
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/18/2023 01:49	WG2173211
Vinyl chloride	0.231			0.0273	0.100	1	11/18/2023 01:49	WG2173211
Xylenes, Total	U			0.191	0.260	1	11/18/2023 01:49	WG2173211
Ethyl Ether	U			0.0170	0.100	1	11/18/2023 01:49	WG2173211
Tetrahydrofuran	U			0.0900	0.500	1	11/18/2023 01:49	WG2173211
Iodomethane	U			0.242	0.500	1	11/18/2023 01:49	WG2173211
Allyl chloride	U			0.580	1.00	1	11/18/2023 01:49	WG2173211
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/18/2023 01:49	WG2173211
(S) Toluene-d8	*102*				*75.0-131*		*11/18/2023 01:49*	WG2173211
(S) 4-Bromofluorobenzene	*105*				*67.0-138*		*11/18/2023 01:49*	WG2173211
(S) 1,2-Dichloroethane-d4	*93.0*				*70.0-130*		*11/18/2023 01:49*	WG2173211

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	188000		8450	20000	1	11/16/2023 12:43	WG2172434

Sample Narrative:

L1676892-04 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	47000		379	1000	1	11/11/2023 20:35	WG2169403
Nitrate	4020		48.0	100	1	11/11/2023 20:35	WG2169403
Sulfate	65200		594	5000	1	11/11/2023 20:35	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2570		102	1000	1	12/01/2023 16:57	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	388		28.1	100	1	11/20/2023 19:19	WG2169913
Manganese	114		0.704	5.00	1	11/20/2023 19:19	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6950		2.87	6.78	10	11/21/2023 13:48	WG2174876
Ethane	14.3		0.296	1.29	1	11/20/2023 11:54	WG2173812
Ethene	U		0.422	1.27	1	11/20/2023 11:54	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 02:08	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 02:08	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 02:08	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 02:08	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 02:08	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 02:08	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 02:08	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 02:08	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 02:08	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 02:08	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 02:08	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 02:08	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 02:08	WG2173211
Chloroethane	0.118	J	0.0432	0.200	1	11/18/2023 02:08	WG2173211
Chloroform	0.0590	J	0.0166	0.100	1	11/18/2023 02:08	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 02:08	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 02:08	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 02:08	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 02:08	WG2173211

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 02:08	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 02:08	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 02:08	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 02:08	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 02:08	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 02:08	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
cis-1,2-Dichloroethene	0.616		0.0276	0.100	1	11/18/2023 02:08	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 02:08	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 02:08	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 02:08	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 02:08	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 02:08	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 02:08	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 02:08	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 02:08	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 02:08	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 02:08	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 02:08	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 02:08	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 02:08	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 02:08	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 02:08	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 02:08	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 02:08	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 02:08	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 02:08	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 02:08	WG2173211
Tetrachloroethene	58.1		0.0280	0.100	1	11/18/2023 02:08	WG2173211
Toluene	U		0.0500	0.200	1	11/18/2023 02:08	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 02:08	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 02:08	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 02:08	WG2173211
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 02:08	WG2173211
Trichloroethene	4.32		0.0160	0.0400	1	11/18/2023 02:08	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 02:08	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 02:08	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 02:08	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 02:08	WG2173211
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 02:08	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 02:08	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 02:08	WG2173211
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 02:08	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 02:08	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 02:08	WG2173211
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 02:08	WG2173211
(S) Toluene-d8	*100*			*75.0-131*		*11/18/2023 02:08*	WG2173211
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/18/2023 02:08*	WG2173211
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*		*11/18/2023 02:08*	WG2173211

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Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	610000		8450	20000	1	11/16/2023 12:50	WG2172434

Sample Narrative:
L1676892-05 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	49900		379	1000	1	11/11/2023 20:48	WG2169403
Nitrate	78.9	J	48.0	100	1	11/11/2023 20:48	WG2169403
Sulfate	7900		594	5000	1	11/11/2023 20:48	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5350		102	1000	1	12/01/2023 17:15	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10100		28.1	100	1	11/20/2023 19:22	WG2169913
Manganese	1560		0.704	5.00	1	11/20/2023 19:22	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17900		2.87	6.78	10	11/21/2023 13:54	WG2174876
Ethane	340		0.296	1.29	1	11/20/2023 12:00	WG2173812
Ethene	194		0.422	1.27	1	11/20/2023 12:00	WG2173812

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	11/18/2023 13:53	WG2173609
Acrylonitrile	U		0.760	5.00	10	11/18/2023 13:53	WG2173609
Benzene	U		0.160	0.400	10	11/18/2023 13:53	WG2173609
Bromobenzene	U		0.420	5.00	10	11/18/2023 13:53	WG2173609
Bromodichloromethane	U		0.315	1.00	10	11/18/2023 13:53	WG2173609
Bromoform	U		2.39	10.0	10	11/18/2023 13:53	WG2173609
Bromomethane	U		1.48	5.00	10	11/18/2023 13:53	WG2173609
n-Butylbenzene	U		1.53	5.00	10	11/18/2023 13:53	WG2173609
sec-Butylbenzene	U		1.01	5.00	10	11/18/2023 13:53	WG2173609
tert-Butylbenzene	U		0.620	2.00	10	11/18/2023 13:53	WG2173609
Carbon tetrachloride	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Chlorobenzene	U		0.229	1.00	10	11/18/2023 13:53	WG2173609
Chlorodibromomethane	U		0.180	1.00	10	11/18/2023 13:53	WG2173609
Chloroethane	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Chloroform	U		0.166	1.00	10	11/18/2023 13:53	WG2173609
Chloromethane	U		0.556	5.00	10	11/18/2023 13:53	WG2173609
2-Chlorotoluene	U		0.368	1.00	10	11/18/2023 13:53	WG2173609
4-Chlorotoluene	U		0.452	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/18/2023 13:53	WG2173609
1,2-Dibromoethane	U		0.210	1.00	10	11/18/2023 13:53	WG2173609

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

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.400	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dichlorobenzene	U		0.580	2.00	10	11/18/2023 13:53	WG2173609
1,3-Dichlorobenzene	U		0.680	2.00	10	11/18/2023 13:53	WG2173609
1,4-Dichlorobenzene	U		0.788	2.00	10	11/18/2023 13:53	WG2173609
Dichlorodifluoromethane	U		0.327	1.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloroethane	U		0.230	1.00	10	11/18/2023 13:53	WG2173609
1,2-Dichloroethane	U		0.190	1.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloroethene	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
cis-1,2-Dichloroethene	19.3		0.276	1.00	10	11/18/2023 13:53	WG2173609
trans-1,2-Dichloroethene	0.770	J	0.572	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dichloropropane	U		0.508	2.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloropropene	U		0.280	1.00	10	11/18/2023 13:53	WG2173609
1,3-Dichloropropane	U		0.700	2.00	10	11/18/2023 13:53	WG2173609
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/18/2023 13:53	WG2173609
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/18/2023 13:53	WG2173609
2,2-Dichloropropane	U		0.317	1.00	10	11/18/2023 13:53	WG2173609
Di-isopropyl ether	U		0.140	0.400	10	11/18/2023 13:53	WG2173609
Ethylbenzene	U		0.212	1.00	10	11/18/2023 13:53	WG2173609
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/18/2023 13:53	WG2173609
Isopropylbenzene	U		0.345	1.00	10	11/18/2023 13:53	WG2173609
p-Isopropyltoluene	U		0.932	2.00	10	11/18/2023 13:53	WG2173609
2-Butanone (MEK)	U		5.00	10.0	10	11/18/2023 13:53	WG2173609
Methylene Chloride	U		2.65	10.0	10	11/18/2023 13:53	WG2173609
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/18/2023 13:53	WG2173609
Methyl tert-butyl ether	U		0.118	0.400	10	11/18/2023 13:53	WG2173609
Naphthalene	U	UJ C3	1.24	5.00	10	11/18/2023 13:53	WG2173609
n-Propylbenzene	U		0.472	2.00	10	11/18/2023 13:53	WG2173609
Styrene	U		1.09	5.00	10	11/18/2023 13:53	WG2173609
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/18/2023 13:53	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/18/2023 13:53	WG2173609
Tetrachloroethene	U		0.280	1.00	10	11/18/2023 13:53	WG2173609
Toluene	U		0.500	2.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trichlorobenzene	U	UJ C3	0.250	5.00	10	11/18/2023 13:53	WG2173609
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/18/2023 13:53	WG2173609
1,1,1-Trichloroethane	U		0.110	1.00	10	11/18/2023 13:53	WG2173609
1,1,2-Trichloroethane	U		0.353	1.00	10	11/18/2023 13:53	WG2173609
Trichloroethene	U		0.160	0.400	10	11/18/2023 13:53	WG2173609
Trichlorofluoromethane	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trichloropropane	U		2.04	5.00	10	11/18/2023 13:53	WG2173609
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/18/2023 13:53	WG2173609
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Vinyl chloride	120		0.273	1.00	10	11/18/2023 13:53	WG2173609
Xylenes, Total	U		1.91	2.60	10	11/18/2023 13:53	WG2173609
Ethyl Ether	U		0.170	1.00	10	11/18/2023 13:53	WG2173609
Tetrahydrofuran	2.79	J	0.900	5.00	10	11/18/2023 13:53	WG2173609
Iodomethane	U		2.42	5.00	10	11/18/2023 13:53	WG2173609
Allyl chloride	U		5.80	10.0	10	11/18/2023 13:53	WG2173609
Trans-1,4-Dichloro-2-butene	U	UJ C3 ~~J4~~	0.560	2.00	10	11/18/2023 13:53	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 13:53*	WG2173609
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/18/2023 13:53*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/18/2023 13:53*	WG2173609

Sample Narrative:

L1676892-05 WG2173609: Target compounds too high to run at a lower dilution.

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

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.60	J+ C5	0.548	1.00	1	11/18/2023 07:51	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 07:51	WG2173609
Benzene	U		0.0160	0.0400	1	11/18/2023 07:51	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 07:51	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 07:51	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 07:51	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 07:51	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 07:51	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 07:51	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 07:51	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 07:51	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 07:51	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 07:51	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 07:51	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 07:51	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 07:51	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 07:51	WG2173609
Dibromomethane	U		0.0400	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 07:51	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 07:51	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 07:51	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 07:51	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 07:51	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 07:51	WG2173609
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 07:51	WG2173609
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 07:51	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 07:51	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 07:51	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 07:51	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 07:51	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 07:51	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 07:51	WG2173609
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 07:51	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 07:51	WG2173609
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 07:51	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 07:51	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 07:51	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 07:51	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 07:51	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 07:51	WG2173609
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 07:51	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 07:51	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 07:51	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 07:51	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 07:51	WG2173609
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 07:51	WG2173609
Toluene	U		0.0500	0.200	1	11/18/2023 07:51	WG2173609
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 07:51	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 07:51	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 07:51	WG2173609

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 07:51	WG2173609
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 07:51	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 07:51	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 07:51	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 07:51	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 07:51	WG2173609
Xylenes, Total	U		0.191	0.260	1	11/18/2023 07:51	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 07:51	WG2173609
Tetrahydrofuran	0.202	J	0.0900	0.500	1	11/18/2023 07:51	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 07:51	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 07:51	WG2173609
Trans-1,4-Dichloro-2-butene	U UJ	C3 ~~J4~~	0.0560	0.200	1	11/18/2023 07:51	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 07:51*	WG2173609
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/18/2023 07:51*	WG2173609
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*		*11/18/2023 07:51*	WG2173609

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 08:10	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 08:10	WG2173609
Benzene	0.0760		0.0160	0.0400	1	11/18/2023 08:10	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 08:10	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 08:10	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 08:10	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 08:10	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 08:10	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 08:10	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 08:10	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 08:10	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 08:10	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 08:10	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 08:10	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 08:10	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 08:10	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 08:10	WG2173609
Dibromomethane	U		0.0400	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 08:10	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 08:10	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 08:10	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 08:10	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 08:10	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 08:10	WG2173609
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
cis-1,2-Dichloroethene	0.0380	J	0.0276	0.100	1	11/18/2023 08:10	WG2173609
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 08:10	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 08:10	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 08:10	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 08:10	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 08:10	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 08:10	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 08:10	WG2173609
Ethylbenzene	0.100	J	0.0212	0.100	1	11/18/2023 08:10	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 08:10	WG2173609
Isopropylbenzene	0.0480	J	0.0345	0.100	1	11/18/2023 08:10	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 08:10	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 08:10	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 08:10	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 08:10	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 08:10	WG2173609
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 08:10	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 08:10	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 08:10	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 08:10	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 08:10	WG2173609
Tetrachloroethene	0.0640	J	0.0280	0.100	1	11/18/2023 08:10	WG2173609
Toluene	0.264		0.0500	0.200	1	11/18/2023 08:10	WG2173609
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 08:10	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 08:10	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 08:10	WG2173609

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 08:10	WG2173609
Trichloroethene	0.0160	J	0.0160	0.0400	1	11/18/2023 08:10	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 08:10	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 08:10	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 08:10	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 08:10	WG2173609
Xylenes, Total	0.619		0.191	0.260	1	11/18/2023 08:10	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 08:10	WG2173609
Tetrahydrofuran	0.0920	J	0.0900	0.500	1	11/18/2023 08:10	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 08:10	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 08:10	WG2173609
Trans-1,4-Dichloro-2-butene	U UJ	C3 ~~J4~~	0.0560	0.200	1	11/18/2023 08:10	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 08:10*	WG2173609
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 08:10*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/18/2023 08:10*	WG2173609

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	287000		8450	20000	1	11/20/2023 14:26	WG2174432

Sample Narrative:
L1676892-08 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	15400		379	1000	1	11/11/2023 21:02	WG2169403
Nitrate	2550		48.0	100	1	11/11/2023 21:02	WG2169403
Sulfate	146000		594	5000	1	11/11/2023 21:02	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2210		102	1000	1	12/01/2023 17:29	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	970		28.1	100	1	11/20/2023 19:26	WG2169913
Manganese	413		0.704	5.00	1	11/20/2023 19:26	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	170		0.287	0.678	1	11/20/2023 12:06	WG2173812
Ethane	1.60		0.296	1.29	1	11/20/2023 12:06	WG2173812
Ethene	U		0.422	1.27	1	11/20/2023 12:06	WG2173812

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 08:29	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 08:29	WG2173609
Benzene	0.0220	J	0.0160	0.0400	1	11/18/2023 08:29	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 08:29	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 08:29	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 08:29	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 08:29	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 08:29	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 08:29	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 08:29	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 08:29	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 08:29	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 08:29	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 08:29	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 08:29	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 08:29	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 08:29	WG2173609

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 08:29	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 08:29	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 08:29	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 08:29	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 08:29	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 08:29	WG2173609
1,1-Dichloroethene	0.245		0.0200	0.100	1	11/18/2023 08:29	WG2173609
cis-1,2-Dichloroethene	84.3		0.0276	0.100	1	11/18/2023 08:29	WG2173609
trans-1,2-Dichloroethene	0.158	J	0.0572	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 08:29	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 08:29	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 08:29	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 08:29	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 08:29	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 08:29	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 08:29	WG2173609
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 08:29	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 08:29	WG2173609
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 08:29	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 08:29	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 08:29	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 08:29	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 08:29	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 08:29	WG2173609
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 08:29	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 08:29	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 08:29	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 08:29	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 08:29	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 08:29	WG2173609
Tetrachloroethene	36.6		0.0280	0.100	1	11/18/2023 08:29	WG2173609
Toluene	U		0.0500	0.200	1	11/18/2023 08:29	WG2173609
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 08:29	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 08:29	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 08:29	WG2173609
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 08:29	WG2173609
Trichloroethene	11.8		0.0160	0.0400	1	11/18/2023 08:29	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 08:29	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 08:29	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 08:29	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 08:29	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Vinyl chloride	1.22		0.0273	0.100	1	11/18/2023 08:29	WG2173609
Xylenes, Total	U		0.191	0.260	1	11/18/2023 08:29	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 08:29	WG2173609
Tetrahydrofuran	0.191	J	0.0900	0.500	1	11/18/2023 08:29	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 08:29	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 08:29	WG2173609
Trans-1,4-Dichloro-2-butene	U	UJ C3 J4	0.0560	0.200	1	11/18/2023 08:29	WG2173609
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 08:29*	WG2173609
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 08:29*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/18/2023 08:29*	WG2173609

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	0.860	J	0.548	1.00	1	11/18/2023 18:16	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 18:16	WG2173799
Benzene	0.0250	J	0.0160	0.0400	1	11/18/2023 18:16	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 18:16	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 18:16	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 18:16	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 18:16	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 18:16	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 18:16	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 18:16	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 18:16	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 18:16	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 18:16	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 18:16	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 18:16	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 18:16	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 18:16	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 18:16	WG2173799
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 18:16	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 18:16	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 18:16	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 18:16	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 18:16	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 18:16	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 18:16	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 18:16	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 18:16	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 18:16	WG2173799
cis-1,2-Dichloroethene	9.16		0.0276	0.100	1	11/18/2023 18:16	WG2173799
trans-1,2-Dichloroethene	0.101	J	0.0572	0.200	1	11/18/2023 18:16	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 18:16	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 18:16	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 18:16	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 18:16	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 18:16	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 18:16	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 18:16	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 18:16	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 18:16	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 18:16	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 18:16	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 18:16	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 18:16	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 18:16	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 18:16	WG2173799
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 18:16	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 18:16	WG2173799
Styrene	U	UJ C3	0.109	0.500	1	11/18/2023 18:16	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 18:16	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 18:16	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 18:16	WG2173799
Tetrachloroethene	1.09		0.0280	0.100	1	11/18/2023 18:16	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 18:16	WG2173799
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 18:16	WG2173799
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/18/2023 18:16	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 18:16	WG2173799

JC 2/15/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 18:16	WG2173799
Trichloroethene	3.59		0.0160	0.0400	1	11/18/2023 18:16	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 18:16	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 18:16	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 18:16	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 18:16	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 18:16	WG2173799
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/18/2023 18:16	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 18:16	WG2173799
Ethyl Ether	U	~~J3~~	0.0170	0.100	1	11/18/2023 18:16	WG2173799
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 18:16	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 18:16	WG2173799
Allyl chloride	U		0.580	1.00	1	11/18/2023 18:16	WG2173799
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 18:16	WG2173799
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 18:16*	WG2173799
(S) 4-Bromofluorobenzene	*89.6*			*67.0-138*		*11/18/2023 18:16*	WG2173799
(S) 1,2-Dichloroethane-d4	*106*			*70.0-130*		*11/18/2023 18:16*	WG2173799

JC 1/30/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.20 J+	C5	0.548	1.00	1	11/18/2023 18:35	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 18:35	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 18:35	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 18:35	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 18:35	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 18:35	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 18:35	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 18:35	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 18:35	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 18:35	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 18:35	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 18:35	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 18:35	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 18:35	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 18:35	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 18:35	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 18:35	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 18:35	WG2173799
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 18:35	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 18:35	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 18:35	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 18:35	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 18:35	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 18:35	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 18:35	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 18:35	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 18:35	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 18:35	WG2173799
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 18:35	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 18:35	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 18:35	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 18:35	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 18:35	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 18:35	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 18:35	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 18:35	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 18:35	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 18:35	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 18:35	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 18:35	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 18:35	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 18:35	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 18:35	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 18:35	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 18:35	WG2173799
Naphthalene	U UJ	C3	0.124	0.500	1	11/18/2023 18:35	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 18:35	WG2173799
Styrene	U UJ	C3	0.109	0.500	1	11/18/2023 18:35	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 18:35	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 18:35	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 18:35	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 18:35	WG2173799
Toluene	U		0.0500	0.200	1	11/18/2023 18:35	WG2173799
1,2,3-Trichlorobenzene	U UJ	C3	0.0250	0.500	1	11/18/2023 18:35	WG2173799
1,2,4-Trichlorobenzene	U UJ	C3	0.193	0.500	1	11/18/2023 18:35	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 18:35	WG2173799

JC 2/14/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 18:35	WG2173799
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 18:35	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 18:35	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 18:35	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 18:35	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 18:35	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 18:35	WG2173799
Vinyl chloride	U	UJ C3	0.0273	0.100	1	11/18/2023 18:35	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 18:35	WG2173799
Ethyl Ether	U	~~J3~~	0.0170	0.100	1	11/18/2023 18:35	WG2173799
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 18:35	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 18:35	WG2173799
Allyl chloride	U		0.580	1.00	1	11/18/2023 18:35	WG2173799
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 18:35	WG2173799
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 18:35*	WG2173799
(S) 4-Bromofluorobenzene	*88.1*			*67.0-138*		*11/18/2023 18:35*	WG2173799
(S) 1,2-Dichloroethane-d4	*108*			*70.0-130*		*11/18/2023 18:35*	WG2173799

JC 2/14/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 22:46	WG2173848
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 22:46	WG2173848
Benzene	12.3		0.0160	0.0400	1	11/18/2023 22:46	WG2173848
Bromobenzene	U		0.0420	0.500	1	11/18/2023 22:46	WG2173848
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 22:46	WG2173848
Bromoform	U		0.239	1.00	1	11/18/2023 22:46	WG2173848
Bromomethane	U		0.148	0.500	1	11/18/2023 22:46	WG2173848
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 22:46	WG2173848
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 22:46	WG2173848
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 22:46	WG2173848
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 22:46	WG2173848
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 22:46	WG2173848
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 22:46	WG2173848
Chloroethane	U		0.0432	0.200	1	11/18/2023 22:46	WG2173848
Chloroform	0.157	B	0.0166	0.100	1	11/18/2023 22:46	WG2173848
Chloromethane	U		0.0556	0.500	1	11/18/2023 22:46	WG2173848
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 22:46	WG2173848
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 22:46	WG2173848
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 22:46	WG2173848
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 22:46	WG2173848
Dibromomethane	U		0.0400	0.200	1	11/18/2023 22:46	WG2173848
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 22:46	WG2173848
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 22:46	WG2173848
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 22:46	WG2173848
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 22:46	WG2173848
1,1-Dichloroethane	0.0890	J	0.0230	0.100	1	11/18/2023 22:46	WG2173848
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 22:46	WG2173848
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 22:46	WG2173848
cis-1,2-Dichloroethene	0.198		0.0276	0.100	1	11/18/2023 22:46	WG2173848
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 22:46	WG2173848
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 22:46	WG2173848
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 22:46	WG2173848
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 22:46	WG2173848
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 22:46	WG2173848
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 22:46	WG2173848
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 22:46	WG2173848
Di-isopropyl ether	0.593		0.0140	0.0400	1	11/18/2023 22:46	WG2173848
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 22:46	WG2173848
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 22:46	WG2173848
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 22:46	WG2173848
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 22:46	WG2173848
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 22:46	WG2173848
Methylene Chloride	U		0.265	1.00	1	11/18/2023 22:46	WG2173848
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 22:46	WG2173848
Methyl tert-butyl ether	0.822		0.0118	0.0400	1	11/18/2023 22:46	WG2173848
Naphthalene	U		0.124	0.500	1	11/18/2023 22:46	WG2173848
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 22:46	WG2173848
Styrene	U		0.109	0.500	1	11/18/2023 22:46	WG2173848
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 22:46	WG2173848
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 22:46	WG2173848
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 22:46	WG2173848
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 22:46	WG2173848
Toluene	0.0950	J	0.0500	0.200	1	11/18/2023 22:46	WG2173848
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 22:46	WG2173848
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 22:46	WG2173848
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 22:46	WG2173848

JC 1/30/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 22:46	WG2173848
Trichloroethene	0.0900		0.0160	0.0400	1	11/18/2023 22:46	WG2173848
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 22:46	WG2173848
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 22:46	WG2173848
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 22:46	WG2173848
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 22:46	WG2173848
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 22:46	WG2173848
Vinyl chloride	19.8		0.0273	0.100	1	11/18/2023 22:46	WG2173848
Xylenes, Total	U		0.191	0.260	1	11/18/2023 22:46	WG2173848
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 22:46	WG2173848
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 22:46	WG2173848
Iodomethane	U		0.242	0.500	1	11/18/2023 22:46	WG2173848
Allyl chloride	U		0.580	1.00	1	11/18/2023 22:46	WG2173848
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 22:46	WG2173848
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 22:46*	WG2173848
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 22:46*	WG2173848
(S) 1,2-Dichloroethane-d4	*92.8*			*70.0-130*		*11/18/2023 22:46*	WG2173848

JC 1/30/24

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	174000		8450	20000	1	11/20/2023 15:19	WG2173298

Sample Narrative:
L1678545-04 WG2173298: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	17200	T8	379	1000	1	11/26/2023 02:14	WG2177339
Nitrate	150 J	B T8	48.0	100	1	11/26/2023 02:14	WG2177339
Sulfate	32500	T8	594	5000	1	11/26/2023 02:14	WG2177339

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5310		102	1000	1	12/06/2023 14:17	WG2182046

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2320		281	1000	10	11/22/2023 14:52	WG2174880
Manganese	97.0		0.704	5.00	1	11/22/2023 14:39	WG2174880

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8900		2.87	6.78	10	11/26/2023 17:01	WG2177659
Ethane	1.68		0.296	1.29	1	11/26/2023 15:38	WG2176392
Ethene	95.8		0.422	1.27	1	11/26/2023 15:38	WG2176392

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.24 J+	C5	0.548	1.00	1	11/18/2023 23:06	WG2173848
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 23:06	WG2173848
Benzene	0.0170	J	0.0160	0.0400	1	11/18/2023 23:06	WG2173848
Bromobenzene	U		0.0420	0.500	1	11/18/2023 23:06	WG2173848
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 23:06	WG2173848
Bromoform	U		0.239	1.00	1	11/18/2023 23:06	WG2173848
Bromomethane	U		0.148	0.500	1	11/18/2023 23:06	WG2173848
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 23:06	WG2173848
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 23:06	WG2173848
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 23:06	WG2173848
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 23:06	WG2173848
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 23:06	WG2173848
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 23:06	WG2173848
Chloroethane	U		0.0432	0.200	1	11/18/2023 23:06	WG2173848
Chloroform	U		0.0166	0.100	1	11/18/2023 23:06	WG2173848
Chloromethane	U		0.0556	0.500	1	11/18/2023 23:06	WG2173848
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 23:06	WG2173848
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 23:06	WG2173848
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 23:06	WG2173848
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 23:06	WG2173848

JC 2/15/24

JC 1/30/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 23:06	WG2173848
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 23:06	WG2173848
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 23:06	WG2173848
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 23:06	WG2173848
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 23:06	WG2173848
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 23:06	WG2173848
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 23:06	WG2173848
1,1-Dichloroethene	0.0660	J	0.0200	0.100	1	11/18/2023 23:06	WG2173848
cis-1,2-Dichloroethene	12.9		0.0276	0.100	1	11/18/2023 23:06	WG2173848
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 23:06	WG2173848
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 23:06	WG2173848
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 23:06	WG2173848
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 23:06	WG2173848
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 23:06	WG2173848
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 23:06	WG2173848
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 23:06	WG2173848
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 23:06	WG2173848
Ethylbenzene	0.0260	J	0.0212	0.100	1	11/18/2023 23:06	WG2173848
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 23:06	WG2173848
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 23:06	WG2173848
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 23:06	WG2173848
2-Butanone (MEK)	1.47		0.500	1.00	1	11/18/2023 23:06	WG2173848
Methylene Chloride	U		0.265	1.00	1	11/18/2023 23:06	WG2173848
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 23:06	WG2173848
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 23:06	WG2173848
Naphthalene	U		0.124	0.500	1	11/18/2023 23:06	WG2173848
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 23:06	WG2173848
Styrene	U		0.109	0.500	1	11/18/2023 23:06	WG2173848
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 23:06	WG2173848
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 23:06	WG2173848
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 23:06	WG2173848
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 23:06	WG2173848
Toluene	1.07		0.0500	0.200	1	11/18/2023 23:06	WG2173848
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 23:06	WG2173848
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 23:06	WG2173848
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 23:06	WG2173848
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 23:06	WG2173848
Trichloroethene	0.164		0.0160	0.0400	1	11/18/2023 23:06	WG2173848
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 23:06	WG2173848
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 23:06	WG2173848
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 23:06	WG2173848
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 23:06	WG2173848
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 23:06	WG2173848
Vinyl chloride	117		0.273	1.00	10	11/21/2023 11:21	WG2174930
Xylenes, Total	U		0.191	0.260	1	11/18/2023 23:06	WG2173848
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 23:06	WG2173848
Tetrahydrofuran	0.332	J	0.0900	0.500	1	11/18/2023 23:06	WG2173848
Iodomethane	U		0.242	0.500	1	11/18/2023 23:06	WG2173848
Allyl chloride	U		0.580	1.00	1	11/18/2023 23:06	WG2173848
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/18/2023 23:06	WG2173848
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 23:06*	WG2173848
(S) Toluene-d8	*100*			*75.0-131*		*11/21/2023 11:21*	WG2174930
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 23:06*	WG2173848
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/21/2023 11:21*	WG2174930
(S) 1,2-Dichloroethane-d4	*92.5*			*70.0-130*		*11/18/2023 23:06*	WG2173848
(S) 1,2-Dichloroethane-d4	*93.9*			*70.0-130*		*11/21/2023 11:21*	WG2174930

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.54	J- C3	0.548	1.00	1	12/11/2023 01:05	WG2186766
Acrylonitrile	U		0.0760	0.500	1	12/11/2023 01:05	WG2186766
Benzene	U		0.0160	0.0400	1	12/11/2023 01:05	WG2186766
Bromobenzene	U		0.0420	0.500	1	12/11/2023 01:05	WG2186766
Bromodichloromethane	U		0.0315	0.100	1	12/11/2023 01:05	WG2186766
Bromoform	U		0.239	1.00	1	12/11/2023 01:05	WG2186766
Bromomethane	U		0.148	0.500	1	12/11/2023 01:05	WG2186766
n-Butylbenzene	U		0.153	0.500	1	12/11/2023 01:05	WG2186766
sec-Butylbenzene	U		0.101	0.500	1	12/11/2023 01:05	WG2186766
tert-Butylbenzene	U		0.0620	0.200	1	12/11/2023 01:05	WG2186766
Carbon tetrachloride	U		0.0432	0.200	1	12/11/2023 01:05	WG2186766
Chlorobenzene	U		0.0229	0.100	1	12/11/2023 01:05	WG2186766
Chlorodibromomethane	U		0.0180	0.100	1	12/11/2023 01:05	WG2186766
Chloroethane	U		0.0432	0.200	1	12/11/2023 01:05	WG2186766
Chloroform	U		0.0166	0.100	1	12/11/2023 01:05	WG2186766
Chloromethane	U		0.0556	0.500	1	12/11/2023 01:05	WG2186766
2-Chlorotoluene	U		0.0368	0.100	1	12/11/2023 01:05	WG2186766
4-Chlorotoluene	U		0.0452	0.200	1	12/11/2023 01:05	WG2186766
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/11/2023 01:05	WG2186766
1,2-Dibromoethane	U		0.0210	0.100	1	12/11/2023 01:05	WG2186766
Dibromomethane	U		0.0400	0.200	1	12/11/2023 01:05	WG2186766
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/11/2023 01:05	WG2186766
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/11/2023 01:05	WG2186766
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/11/2023 01:05	WG2186766
Dichlorodifluoromethane	U		0.0327	0.100	1	12/11/2023 01:05	WG2186766
1,1-Dichloroethane	U		0.0230	0.100	1	12/11/2023 01:05	WG2186766
1,2-Dichloroethane	U		0.0190	0.100	1	12/11/2023 01:05	WG2186766
1,1-Dichloroethene	U		0.0200	0.100	1	12/11/2023 01:05	WG2186766
cis-1,2-Dichloroethene	U		0.0276	0.100	1	12/11/2023 01:05	WG2186766
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/11/2023 01:05	WG2186766
1,2-Dichloropropane	U		0.0508	0.200	1	12/11/2023 01:05	WG2186766
1,1-Dichloropropene	U		0.0280	0.100	1	12/11/2023 01:05	WG2186766
1,3-Dichloropropane	U		0.0700	0.200	1	12/11/2023 01:05	WG2186766
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/11/2023 01:05	WG2186766
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/11/2023 01:05	WG2186766
2,2-Dichloropropane	U		0.0317	0.100	1	12/11/2023 01:05	WG2186766
Di-isopropyl ether	U		0.0140	0.0400	1	12/11/2023 01:05	WG2186766
Ethylbenzene	U		0.0212	0.100	1	12/11/2023 01:05	WG2186766
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/11/2023 01:05	WG2186766
Isopropylbenzene	U		0.0345	0.100	1	12/11/2023 01:05	WG2186766
p-Isopropyltoluene	U		0.0932	0.200	1	12/11/2023 01:05	WG2186766
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	12/11/2023 01:05	WG2186766
Methylene Chloride	U		0.265	1.00	1	12/11/2023 01:05	WG2186766
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/11/2023 01:05	WG2186766
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/11/2023 01:05	WG2186766
Naphthalene	U	UJ C3	0.124	0.500	1	12/11/2023 01:05	WG2186766
n-Propylbenzene	U		0.0472	0.200	1	12/11/2023 01:05	WG2186766
Styrene	U		0.109	0.500	1	12/11/2023 01:05	WG2186766
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/11/2023 01:05	WG2186766
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/11/2023 01:05	WG2186766
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/11/2023 01:05	WG2186766
Tetrachloroethene	U		0.0280	0.100	1	12/11/2023 01:05	WG2186766
Toluene	0.197	J	0.0500	0.200	1	12/11/2023 01:05	WG2186766
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	12/11/2023 01:05	WG2186766
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	12/11/2023 01:05	WG2186766
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/11/2023 01:05	WG2186766

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/11/2023 01:05	WG2186766
Trichloroethene	U		0.0160	0.0400	1	12/11/2023 01:05	WG2186766
Trichlorofluoromethane	U		0.0200	0.100	1	12/11/2023 01:05	WG2186766
1,2,3-Trichloropropane	U		0.204	0.500	1	12/11/2023 01:05	WG2186766
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/11/2023 01:05	WG2186766
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/11/2023 01:05	WG2186766
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/11/2023 01:05	WG2186766
Vinyl chloride	U		0.0273	0.100	1	12/11/2023 01:05	WG2186766
Xylenes, Total	U		0.191	0.260	1	12/11/2023 01:05	WG2186766
Ethyl Ether	U		0.0170	0.100	1	12/11/2023 01:05	WG2186766
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	12/11/2023 01:05	WG2186766
Iodomethane	U		0.242	0.500	1	12/11/2023 01:05	WG2186766
Allyl chloride	U		0.580	1.00	1	12/11/2023 01:05	WG2186766
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	12/11/2023 01:05	WG2186766
(S) Toluene-d8	*105*			*75.0-131*		*12/11/2023 01:05*	WG2186766
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/11/2023 01:05*	WG2186766
(S) 1,2-Dichloroethane-d4	*86.3*			*70.0-130*		*12/11/2023 01:05*	WG2186766

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	UJ C3	0.548	1.00	1	12/11/2023 01:24	WG2186766
Acrylonitrile	U		0.0760	0.500	1	12/11/2023 01:24	WG2186766
Benzene	0.0910		0.0160	0.0400	1	12/11/2023 01:24	WG2186766
Bromobenzene	U		0.0420	0.500	1	12/11/2023 01:24	WG2186766
Bromodichloromethane	U		0.0315	0.100	1	12/11/2023 01:24	WG2186766
Bromoform	U		0.239	1.00	1	12/11/2023 01:24	WG2186766
Bromomethane	U		0.148	0.500	1	12/11/2023 01:24	WG2186766
n-Butylbenzene	U		0.153	0.500	1	12/11/2023 01:24	WG2186766
sec-Butylbenzene	U		0.101	0.500	1	12/11/2023 01:24	WG2186766
tert-Butylbenzene	U		0.0620	0.200	1	12/11/2023 01:24	WG2186766
Carbon tetrachloride	U		0.0432	0.200	1	12/11/2023 01:24	WG2186766
Chlorobenzene	U		0.0229	0.100	1	12/11/2023 01:24	WG2186766
Chlorodibromomethane	U		0.0180	0.100	1	12/11/2023 01:24	WG2186766
Chloroethane	U		0.0432	0.200	1	12/11/2023 01:24	WG2186766
Chloroform	U		0.0166	0.100	1	12/11/2023 01:24	WG2186766
Chloromethane	U		0.0556	0.500	1	12/11/2023 01:24	WG2186766
2-Chlorotoluene	U		0.0368	0.100	1	12/11/2023 01:24	WG2186766
4-Chlorotoluene	U		0.0452	0.200	1	12/11/2023 01:24	WG2186766
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	12/11/2023 01:24	WG2186766
1,2-Dibromoethane	U		0.0210	0.100	1	12/11/2023 01:24	WG2186766
Dibromomethane	U		0.0400	0.200	1	12/11/2023 01:24	WG2186766
1,2-Dichlorobenzene	U		0.0580	0.200	1	12/11/2023 01:24	WG2186766
1,3-Dichlorobenzene	U		0.0680	0.200	1	12/11/2023 01:24	WG2186766
1,4-Dichlorobenzene	U		0.0788	0.200	1	12/11/2023 01:24	WG2186766
Dichlorodifluoromethane	U		0.0327	0.100	1	12/11/2023 01:24	WG2186766
1,1-Dichloroethane	U		0.0230	0.100	1	12/11/2023 01:24	WG2186766
1,2-Dichloroethane	U		0.0190	0.100	1	12/11/2023 01:24	WG2186766
1,1-Dichloroethene	U		0.0200	0.100	1	12/11/2023 01:24	WG2186766
cis-1,2-Dichloroethene	2.88		0.0276	0.100	1	12/11/2023 01:24	WG2186766
trans-1,2-Dichloroethene	U		0.0572	0.200	1	12/11/2023 01:24	WG2186766
1,2-Dichloropropane	U		0.0508	0.200	1	12/11/2023 01:24	WG2186766
1,1-Dichloropropene	U		0.0280	0.100	1	12/11/2023 01:24	WG2186766
1,3-Dichloropropane	U		0.0700	0.200	1	12/11/2023 01:24	WG2186766
cis-1,3-Dichloropropene	U		0.0271	0.100	1	12/11/2023 01:24	WG2186766
trans-1,3-Dichloropropene	U		0.0612	0.200	1	12/11/2023 01:24	WG2186766
2,2-Dichloropropane	U		0.0317	0.100	1	12/11/2023 01:24	WG2186766
Di-isopropyl ether	0.0480		0.0140	0.0400	1	12/11/2023 01:24	WG2186766
Ethylbenzene	U		0.0212	0.100	1	12/11/2023 01:24	WG2186766
Hexachloro-1,3-butadiene	U		0.508	1.00	1	12/11/2023 01:24	WG2186766
Isopropylbenzene	U		0.0345	0.100	1	12/11/2023 01:24	WG2186766
p-Isopropyltoluene	U		0.0932	0.200	1	12/11/2023 01:24	WG2186766
2-Butanone (MEK)	U	UJ C3	0.500	1.00	1	12/11/2023 01:24	WG2186766
Methylene Chloride	U		0.265	1.00	1	12/11/2023 01:24	WG2186766
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	12/11/2023 01:24	WG2186766
Methyl tert-butyl ether	U		0.0118	0.0400	1	12/11/2023 01:24	WG2186766
Naphthalene	U	UJ C3	0.124	0.500	1	12/11/2023 01:24	WG2186766
n-Propylbenzene	U		0.0472	0.200	1	12/11/2023 01:24	WG2186766
Styrene	U		0.109	0.500	1	12/11/2023 01:24	WG2186766
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	12/11/2023 01:24	WG2186766
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	12/11/2023 01:24	WG2186766
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	12/11/2023 01:24	WG2186766
Tetrachloroethene	U		0.0280	0.100	1	12/11/2023 01:24	WG2186766
Toluene	U		0.0500	0.200	1	12/11/2023 01:24	WG2186766
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	12/11/2023 01:24	WG2186766
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	12/11/2023 01:24	WG2186766
1,1,1-Trichloroethane	U		0.0110	0.100	1	12/11/2023 01:24	WG2186766

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	12/11/2023 01:24	WG2186766
Trichloroethene	U		0.0160	0.0400	1	12/11/2023 01:24	WG2186766
Trichlorofluoromethane	U		0.0200	0.100	1	12/11/2023 01:24	WG2186766
1,2,3-Trichloropropane	U		0.204	0.500	1	12/11/2023 01:24	WG2186766
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	12/11/2023 01:24	WG2186766
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	12/11/2023 01:24	WG2186766
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	12/11/2023 01:24	WG2186766
Vinyl chloride	5.06		0.0273	0.100	1	12/11/2023 01:24	WG2186766
Xylenes, Total	U		0.191	0.260	1	12/11/2023 01:24	WG2186766
Ethyl Ether	U		0.0170	0.100	1	12/11/2023 01:24	WG2186766
Tetrahydrofuran	U	UJ C3	0.0900	0.500	1	12/11/2023 01:24	WG2186766
Iodomethane	U		0.242	0.500	1	12/11/2023 01:24	WG2186766
Allyl chloride	U		0.580	1.00	1	12/11/2023 01:24	WG2186766
Trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	12/11/2023 01:24	WG2186766
(S) Toluene-d8	*102*			*75.0-131*		*12/11/2023 01:24*	WG2186766
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*12/11/2023 01:24*	WG2186766
(S) 1,2-Dichloroethane-d4	*87.6*			*70.0-130*		*12/11/2023 01:24*	WG2186766

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MEMORANDUM

TO: Project File **DATE:** January 8, 2024

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 443022-1413001.10.603.04

TASK: EIM Data Validation Level EPA2A for Mercer SDOT Parcel Wells – 4th Quarter November 2023

LAB: Pace Sample Delivery Group (SDGs): L1675715, L1676892, and L1677527

Seven groundwater samples, one trip blank, and one equipment blank were collected November 2, 8, 10, and 13, 2023, from monitoring wells associated with ongoing quarterly monitoring on SDOT Mercer Parcels at American Linen in Seattle, WA. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. The samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260D;
- VOCs (dissolved gases – methane, ethane, and ethene) by EPA SOP RSK 175;
- Alkalinity by Standard Method (SM) 2320 B-2011;
- Anions (chloride, nitrate, and sulfate) by USEPA Method 9056A;
- Total Organic Carbon (TOC) by USEPA Method 9060A;
- Ferrous Iron by SM 3500 Fe B-2011; and
- Metals (iron and manganese) by USEPA Method 6020B.

Samples from American Linen and SDOT were collected during the same sampling event in the 4th Quarter. Two SDGs include one sample each from the SDOT Mercer Parcels. Refer to American Linen data validation reports for monitoring wells associated with American Linen. The quality assurance review of the laboratory data associated with three SDGs L1675715 (one sample MW-346-110823), L1676892 (one sample MW-347-111023), and L1677527 (all samples) are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA National Functional Guidelines (NFG) for Superfund Organic Methods Data Review (USEPA, 2020) and USEPA National Functional Guidelines for Inorganic

Superfund Methods Data Review (USEPA, 2020). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

The samples were collected and analyzed as requested.

Sample Collection and Preservation

Samples were collected in laboratory-supplied sample containers preserved as appropriate for the individual analyses conducted. The samples were packed on ice in coolers and delivered by courier to the analytical laboratory. The laboratory reported that the coolers were received at a cooler temperature less than the recommended temperature preservation of 6°C. The samples were received in good condition. No data are qualified based upon the sample collection and preservation information.

Holding Times

USEPA Method 8260D:
The samples were analyzed for VOCs within the EPA recommended holding time of fourteen days for preserved waters from the date of collection. All holding time criteria are met.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The samples were analyzed within the WA State recommended holding time of fourteen days for preserved waters from the date of sample collection. All holding time criteria are met.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):
The samples were analyzed within the USEPA recommended holding time for alkalinity (14 days) chloride (28 days), sulfate (28 days), nitrate (48 hours), and TOC (28 days) for the preserved water sample from the date of sample collection. All holding time criteria are met.

USEPA Method 6020B and Ferrous Iron:
All samples were analyzed within the USEPA recommended holding time for iron and manganese of 180 days for preserved waters from the date of sample collection. All holding time criteria are met.

All samples were analyzed for ferrous iron within 24 hours with the following exception:

- SDG L1675715: Sample MW-346-110823 was analyzed for ferrous iron 7 hours past the 24-hour recommended hold time and laboratory qualified (T8). **Sample MW-346-110823 ferrous iron result is qualified as estimated with low bias (J-) due to hold time exceedance.**

Initial and Continuing Calibration

USEPA Method 8260D (VOCs):
Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Pace indicated within the laboratory report that continuing calibration verification (CCV) criteria for were not met for the following:

- All SDGs: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for multiple compounds associated with analytical batches in each SDG. These compounds are qualified by the laboratory "C3" to indicate that percent difference CCVs are below laboratory acceptance criteria and showing potential low bias. **Associated sample results with laboratory qualified (C3) results are estimated with potential low bias and qualified (J-/UJ). Results reported below the RDL are estimated (J) and bias is not assigned.**

- SDGs L1676892 (sample MW-347-111023) and L1677527: *USEPA Method 8260D* - Continuing calibration verification (CCV) issues were noted by Pace for several compounds. These compounds are qualified by the laboratory "C5" to indicate that percent difference CCVs are above laboratory acceptance criteria and showing potential high bias. **Associated sample results (detects) with laboratory qualified (C5) results are estimated with potential high bias and qualified (J+).**

Method Blank Results

USEPA Method 8260D:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes are not detected in the method blanks at or above the reporting detection limits (RDLs).

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory method blanks were included with the analytical batches per method requirement. The target analytes (dissolved gases) are not detected in the method blanks at or above the RDLs.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
Laboratory method blanks were included with each analytical batch per method requirement. Several target analytes were detected in the method blanks below the RDLs. Per NFG, no action is taken for blank detections less than the RDL when associated sample detections are greater than the RDL. Metals are not detected in the associated samples and general chemistry blank detections are shown below:

SDG	Batch	Method	Analyte	Method Blank Result	Qualifier	RDL	Units	Associated Result(s) Qualified
L1675715	WG2176775	9060A	TOC	166	J	1000	µg/L	NO
L1676892	WG2179167	9060A	TOC	157	J	1000	µg/L	NO
L1677527	WG2180825	9060A	TOC	242	J	1000	µg/L	NO

The target analytes were detected in the method blanks at low levels and below the RDLs. No action is taken on this basis since associated sample results are greater than the RDLs.

Trip Blank Results

USEPA Method 8260D:
A trip blank (TB-111323) was collected and submitted for VOC analysis. Target analytes were not detected in the trip blank except for acetone. Acetone was detected at 1.16 ug/L and above the RDL (1.00 ug/L). Acetone was detected at 1.76 µg/L in the equipment blank (EQ-111323). The highest blank concentration is used to qualify associated results. Refer to the section on Equipment Blank Results for additional information.

Field, Rinsate, or Equipment Blank Results

All Analytical Methods:
One equipment blank (EQ-111323) was collected and is associated with SDG L1677527. The equipment blank (EQ-051623) samples were collected from the bladder pump and are associated with the following samples and analytical parameters:

SDG	Sample ID	Analytical Parameters
L1677527	EQ-111323	VOCs, dissolved gases, metals, alkalinity, anions, and TOC
	MW-349-111323	VOCs, dissolved gases, metals, alkalinity, anions, and TOC
	HMW-9IB-111323	VOCs, dissolved gases, metals, alkalinity, anions, and TOC
	MW-350-111323	VOCs, dissolved gases, metals, alkalinity, anions, and TOC
	MW-344-111323	VOCs
	MW-345-111323	VOCs

Low levels of anions (chloride and nitrate), TOC, methane, and four VOC target analytes (acetone, bromodichloromethane, chlorodibromomethane, and chloroform) are detected in the equipment blank. Actions are as follows:

- Per Guidance for inorganics, if the blank concentration is less than the RDL and the sample result is greater than the RDL the result may be qualified either as estimated with high bias (J+) or no qualification is applied. Actions are as follows:
    - Chloride is detected in the equipment blank at 433 µg/L and below the RDL (1000 µg/L). No action is taken since chloride is detected above the RDL in the associated samples.

- Nitrate is detected in the equipment blank at 74.3 µg/L and below the RDL (100 µg/L). No action is taken since nitrate is detected above the RDL in the associated samples except for one detection below the RDL in sample MW-350-111323. **Sample MW-350-111323 nitrate result is qualified as not detected (U) due to equipment blank contamination.**

- TOC is detected in the equipment blank at 310 µg/L and below the RDL (1000 µg/L). TOC was also detected in the method blank (242 µg/L). No action is taken since TOC is detected above the RDL in the associated samples.

- NFG for organics was used as a default to review dissolved gases. Methane is detected in the equipment blank at 6.31 µg/L and above the RDL (0.678 µg/L). No action is needed since methane detections in the associated samples are detected above the RDL and the equipment blank detection.

- Per NFG for organics, VOC common laboratory contaminant (acetone) if the blank concentration is greater than the RDL and less than twice the blank result the common lab contaminant is qualified as non-detect (U). Acetone was detected in the equipment blank at 1.76 µg/L and above the RDL (1.00 µg/L). Actions are as follows:

  - SDG L1677527 - Acetone was detected at 17.0 µg/L and below the raised RDL (25.0 µg/L) in diluted (25X) sample MW-344-111323. Using professional judgment, no action is taken in this case since the final analyte result could not be assessed against a less dilute analysis.

- Per NFG (organics) no action is needed for three VOC target compounds (bromodichloromethane, chlorodibromomethane, and chloroform) detected in the equipment blank because these targets are not detected in the associated sample results.

Field Duplicate Analyses

A field duplicate pair associated with SDOT samples was not collected. Refer to laboratory QC for additional precision data.

Laboratory Duplicate Analyses

USEPA Method 8260D:
Laboratory duplicate samples were not analyzed. Refer to laboratory control sample/sample duplicate (LCS/LCSD) results for precision data.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for dissolved gas analyses are within the laboratory control limit of 20%.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC):

Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL with the following discussion:

- SDG L1677527: The nitrate result for sample MW-349-111323 is laboratory qualified (P1) to indicate that RPD criteria is not met but the laboratory duplicate results are acceptable since absolute difference criteria of ± 1x RDL are met. No action is needed.

USEPA Method 6020B:
Laboratory duplicate samples were not analyzed. Refer to MS/MSD results for precision data.

Ferrous Iron:
Laboratory duplicate sample analyses were performed on client samples and/or on non-client samples. The primary/duplicate RPDs for general chemistry parameters are within the laboratory control RPD limits or ± 1x RDL for groundwater results <5X the RDL.

Surrogate Recoveries

USEPA Method 8260D:
The surrogate recovery results for the samples, laboratory control samples, and the method blanks are within the laboratory surrogate control limits for all the analyses.

Laboratory Control Samples

USEPA Method 8260D:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) or laboratory control sample (LCS) were analyzed by USEPA Method 8260D method. The LCS % Rs or LCS/LCSD % Rs and RPDs for all target compounds are within the laboratory control criteria for waters.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:
The LCS/LCSD % Rs and RPDs for the target compound (dissolved gases) are within the laboratory control criteria for waters.

General Chemistry (Alkalinity, Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
The LCS % Rs for general chemistry parameters are within the laboratory control criteria for waters.

Matrix Spike/Matrix Spike Duplicates

USEPA Method 8260D:
Matrix spike/matrix spike duplicate (MS/MSD) analyses were not performed. Refer to laboratory control sample results for precision and accuracy results.

Dissolved Gases (Methane, Ethane, and Ethene) by RSK 175:

MS/MSD analyses were not performed. Refer to laboratory control sample and laboratory duplicate results for precision and accuracy results.

General Chemistry (Chloride, Sulfate, Nitrate, and TOC) and Metals (Iron, Manganese, and Ferrous Iron):
MS or MS/MSD analyses were performed on client and/or on non-client samples within the analytical batches. The MS/MSD % Rs and RPDs are acceptable and within laboratory control limit criteria for water samples.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy but the associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Compound Identification and Quantitation Limits

Results of the analyses are reported based on laboratory RDLs for all compounds. RDLs for all targets or selected compounds are elevated in several samples due to method-required dilutions.

Per NV5's request the associated EDDs show result reporting limits (also known as reported detection limit (RDL) or practical quantitation limit (PQL)) and result detection limits (also referred to as method detection limit (MDL)) instead of defaulting to the RDL when reporting the MDL

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA National Functional Guidelines for Superfund Organic Methods Data Review (USEPA, 2020); and
- USEPA National Functional Guidelines for Inorganic Superfund Methods Data Review (USEPA, 2020).

Data qualifiers are assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	294000		8450	20000	1	11/14/2023 09:07	WG2170180

Sample Narrative:

L1675715-01 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Ferrous Iron	594 J-	T8	15.0	50.0	1	11/09/2023 17:21	WG2168182

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28500		379	1000	1	11/09/2023 23:46	WG2168164
Nitrate	86.7	J	48.0	100	1	11/09/2023 23:46	WG2168164
Sulfate	25100		594	5000	1	11/09/2023 23:46	WG2168164

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2420		102	1000	1	11/24/2023 10:51	WG2176775

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	510		28.1	100	1	11/13/2023 22:59	WG2168470
Manganese	315		3.52	25.0	5	11/13/2023 23:13	WG2168470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1350		0.287	0.678	1	11/17/2023 13:36	WG2172256
Ethane	4.03		0.296	1.29	1	11/17/2023 13:36	WG2172256
Ethene	U		0.422	1.27	1	11/17/2023 13:36	WG2172256

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/11/2023 23:32	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/11/2023 23:32	WG2169502
Benzene	U		0.0160	0.0400	1	11/11/2023 23:32	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/11/2023 23:32	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 23:32	WG2169502
Bromoform	U		0.239	1.00	1	11/11/2023 23:32	WG2169502
Bromomethane	U		0.148	0.500	1	11/11/2023 23:32	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 23:32	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 23:32	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 23:32	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 23:32	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 23:32	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 23:32	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/11/2023 23:32	WG2169502
Chloroform	U		0.0166	0.100	1	11/11/2023 23:32	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloromethane	U	C3	0.0556	0.500	1	11/11/2023 23:32	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/11/2023 23:32	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/11/2023 23:32	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/11/2023 23:32	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/11/2023 23:32	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/11/2023 23:32	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/11/2023 23:32	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/11/2023 23:32	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/11/2023 23:32	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/11/2023 23:32	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/11/2023 23:32	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/11/2023 23:32	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/11/2023 23:32	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/11/2023 23:32	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/11/2023 23:32	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/11/2023 23:32	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/11/2023 23:32	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/11/2023 23:32	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/11/2023 23:32	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/11/2023 23:32	WG2169502
Ethylbenzene	0.0940	J	0.0212	0.100	1	11/11/2023 23:32	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/11/2023 23:32	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/11/2023 23:32	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/11/2023 23:32	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/11/2023 23:32	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/11/2023 23:32	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/11/2023 23:32	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/11/2023 23:32	WG2169502
Naphthalene	U		0.124	0.500	1	11/11/2023 23:32	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/11/2023 23:32	WG2169502
Styrene	U		0.109	0.500	1	11/11/2023 23:32	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/11/2023 23:32	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/11/2023 23:32	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/11/2023 23:32	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/11/2023 23:32	WG2169502
Toluene	U		0.0500	0.200	1	11/11/2023 23:32	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/11/2023 23:32	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/11/2023 23:32	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/11/2023 23:32	WG2169502
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/11/2023 23:32	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/11/2023 23:32	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/11/2023 23:32	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/11/2023 23:32	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/11/2023 23:32	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/11/2023 23:32	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/11/2023 23:32	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/11/2023 23:32	WG2169502
Xylenes, Total	0.273		0.191	0.260	1	11/11/2023 23:32	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/11/2023 23:32	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/11/2023 23:32	WG2169502
Iodomethane	U		0.242	0.500	1	11/11/2023 23:32	WG2169502
Allyl chloride	U		0.580	1.00	1	11/11/2023 23:32	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/11/2023 23:32	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/11/2023 23:32*	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/11/2023 23:32*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/11/2023 23:32*	WG2169502

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	126000		8450	20000	1	11/14/2023 09:24	WG2170180

Sample Narrative:
L1675715-02 WG2170180: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 3500Fe B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Ferrous Iron	1080 J-	T8	15.0	50.0	1	11/09/2023 17:21	WG2168182

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15700		379	1000	1	11/10/2023 03:57	WG2168191
Nitrate	310		48.0	100	1	11/10/2023 03:57	WG2168191
Sulfate	43800		594	5000	1	11/10/2023 03:57	WG2168191

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1470	B	102	1000	1	11/24/2023 11:09	WG2176775

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	1720		28.1	100	1	11/13/2023 23:02	WG2168470
Manganese	107		0.704	5.00	1	11/13/2023 23:02	WG2168470

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	40.2		0.287	0.678	1	11/17/2023 13:40	WG2172256
Ethane	U		0.296	1.29	1	11/17/2023 13:40	WG2172256
Ethene	1.25	J	0.422	1.27	1	11/17/2023 13:40	WG2172256

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	U		0.548	1.00	1	11/11/2023 23:52	WG2169502	
Acrylonitrile	U UJ	C3	0.0760	0.500	1	11/11/2023 23:52	WG2169502	
Benzene	0.0480		0.0160	0.0400	1	11/11/2023 23:52	WG2169502	
Bromobenzene	U		0.0420	0.500	1	11/11/2023 23:52	WG2169502	
Bromodichloromethane	U		0.0315	0.100	1	11/11/2023 23:52	WG2169502	
Bromoform	U		0.239	1.00	1	11/11/2023 23:52	WG2169502	
Bromomethane	U		0.148	0.500	1	11/11/2023 23:52	WG2169502	
n-Butylbenzene	U		0.153	0.500	1	11/11/2023 23:52	WG2169502	
sec-Butylbenzene	U		0.101	0.500	1	11/11/2023 23:52	WG2169502	
tert-Butylbenzene	U		0.0620	0.200	1	11/11/2023 23:52	WG2169502	
Carbon tetrachloride	U		0.0432	0.200	1	11/11/2023 23:52	WG2169502	
Chlorobenzene	U		0.0229	0.100	1	11/11/2023 23:52	WG2169502	
Chlorodibromomethane	U		0.0180	0.100	1	11/11/2023 23:52	WG2169502	
Chloroethane	U UJ	C3	0.0432	0.200	1	11/11/2023 23:52	WG2169502	JC 1/4/24
Chloroform	U		0.0166	0.100	1	11/11/2023 23:52	WG2169502	

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Chloromethane	U	UJ	C3	0.0556	0.500	1	11/11/2023 23:52	WG2169502
2-Chlorotoluene	U			0.0368	0.100	1	11/11/2023 23:52	WG2169502
4-Chlorotoluene	U			0.0452	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/11/2023 23:52	WG2169502
1,2-Dibromoethane	U			0.0210	0.100	1	11/11/2023 23:52	WG2169502
Dibromomethane	U			0.0400	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/11/2023 23:52	WG2169502
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/11/2023 23:52	WG2169502
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/11/2023 23:52	WG2169502
Dichlorodifluoromethane	U			0.0327	0.100	1	11/11/2023 23:52	WG2169502
1,1-Dichloroethane	U			0.0230	0.100	1	11/11/2023 23:52	WG2169502
1,2-Dichloroethane	U			0.0190	0.100	1	11/11/2023 23:52	WG2169502
1,1-Dichloroethene	U			0.0200	0.100	1	11/11/2023 23:52	WG2169502
cis-1,2-Dichloroethene	1.82			0.0276	0.100	1	11/11/2023 23:52	WG2169502
trans-1,2-Dichloroethene	U			0.0572	0.200	1	11/11/2023 23:52	WG2169502
1,2-Dichloropropane	U			0.0508	0.200	1	11/11/2023 23:52	WG2169502
1,1-Dichloropropene	U			0.0280	0.100	1	11/11/2023 23:52	WG2169502
1,3-Dichloropropane	U			0.0700	0.200	1	11/11/2023 23:52	WG2169502
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/11/2023 23:52	WG2169502
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/11/2023 23:52	WG2169502
2,2-Dichloropropane	U			0.0317	0.100	1	11/11/2023 23:52	WG2169502
Di-isopropyl ether	U	UJ	C3	0.0140	0.0400	1	11/11/2023 23:52	WG2169502
Ethylbenzene	U			0.0212	0.100	1	11/11/2023 23:52	WG2169502
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/11/2023 23:52	WG2169502
Isopropylbenzene	U			0.0345	0.100	1	11/11/2023 23:52	WG2169502
p-Isopropyltoluene	U			0.0932	0.200	1	11/11/2023 23:52	WG2169502
2-Butanone (MEK)	U			0.500	1.00	1	11/11/2023 23:52	WG2169502
Methylene Chloride	U			0.265	1.00	1	11/11/2023 23:52	WG2169502
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/11/2023 23:52	WG2169502
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/11/2023 23:52	WG2169502
Naphthalene	U			0.124	0.500	1	11/11/2023 23:52	WG2169502
n-Propylbenzene	U			0.0472	0.200	1	11/11/2023 23:52	WG2169502
Styrene	U			0.109	0.500	1	11/11/2023 23:52	WG2169502
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/11/2023 23:52	WG2169502
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/11/2023 23:52	WG2169502
1,1,2-Trichlorotrifluoroethane	U			0.0270	0.100	1	11/11/2023 23:52	WG2169502
Tetrachloroethene	0.0710		J	0.0280	0.100	1	11/11/2023 23:52	WG2169502
Toluene	0.140		J	0.0500	0.200	1	11/11/2023 23:52	WG2169502
1,2,3-Trichlorobenzene	U			0.0250	0.500	1	11/11/2023 23:52	WG2169502
1,2,4-Trichlorobenzene	U			0.193	0.500	1	11/11/2023 23:52	WG2169502
1,1,1-Trichloroethane	U			0.0110	0.100	1	11/11/2023 23:52	WG2169502
1,1,2-Trichloroethane	U			0.0353	0.100	1	11/11/2023 23:52	WG2169502
Trichloroethene	0.319			0.0160	0.0400	1	11/11/2023 23:52	WG2169502
Trichlorofluoromethane	U			0.0200	0.100	1	11/11/2023 23:52	WG2169502
1,2,3-Trichloropropane	U			0.204	0.500	1	11/11/2023 23:52	WG2169502
1,2,4-Trimethylbenzene	U			0.0464	0.200	1	11/11/2023 23:52	WG2169502
1,2,3-Trimethylbenzene	U			0.0460	0.200	1	11/11/2023 23:52	WG2169502
1,3,5-Trimethylbenzene	U			0.0432	0.200	1	11/11/2023 23:52	WG2169502
Vinyl chloride	0.423			0.0273	0.100	1	11/11/2023 23:52	WG2169502
Xylenes, Total	U			0.191	0.260	1	11/11/2023 23:52	WG2169502
Ethyl Ether	U			0.0170	0.100	1	11/11/2023 23:52	WG2169502
Tetrahydrofuran	0.505			0.0900	0.500	1	11/11/2023 23:52	WG2169502
Iodomethane	U			0.242	0.500	1	11/11/2023 23:52	WG2169502
Allyl chloride	U			0.580	1.00	1	11/11/2023 23:52	WG2169502
Trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/11/2023 23:52	WG2169502
(S) Toluene-d8	*104*				*75.0-131*		*11/11/2023 23:52*	WG2169502

JC 1/4/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/11/2023 23:52*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.8*			*70.0-130*		*11/11/2023 23:52*	WG2169502

JC 1/4/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.74		0.548	1.00	1	11/12/2023 00:11	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 00:11	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:11	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:11	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:11	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:11	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:11	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:11	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:11	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:11	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:11	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:11	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:11	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 00:11	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:11	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 00:11	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:11	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:11	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:11	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:11	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:11	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:11	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:11	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:11	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:11	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:11	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:11	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
cis-1,2-Dichloroethene	0.0340	J	0.0276	0.100	1	11/12/2023 00:11	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:11	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:11	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:11	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:11	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:11	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:11	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:11	WG2169502
Di-isopropyl ether	0.0830	C3	0.0140	0.0400	1	11/12/2023 00:11	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:11	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:11	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:11	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:11	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:11	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:11	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:11	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:11	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:11	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:11	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:11	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:11	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:11	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:11	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:11	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:11	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:11	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:11	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:11	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:11	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:11	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:11	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:11	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:11	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:11	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:11	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:11	WG2169502
Ethyl Ether	0.267		0.0170	0.100	1	11/12/2023 00:11	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:11	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:11	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:11	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 00:11	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 00:11*	WG2169502
(S) 4-Bromofluorobenzene	*106*			*67.0-138*		*11/12/2023 00:11*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.3*			*70.0-130*		*11/12/2023 00:11*	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.67		0.548	1.00	1	11/12/2023 00:29	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 00:29	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:29	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:29	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:29	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:29	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:29	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:29	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:29	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:29	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:29	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:29	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:29	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 00:29	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:29	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 00:29	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:29	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:29	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:29	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:29	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:29	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:29	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:29	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:29	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:29	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:29	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:29	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:29	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:29	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:29	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:29	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:29	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:29	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 00:29	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:29	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:29	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:29	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:29	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:29	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:29	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:29	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:29	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:29	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:29	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:29	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:29	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:29	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:29	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:29	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:29	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:29	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:29	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:29	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:29	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:29	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:29	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:29	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:29	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:29	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:29	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:29	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:29	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:29	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:29	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:29	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 00:29	WG2169502
(S) Toluene-d8	*105*			*75.0-131*		*11/12/2023 00:29*	WG2169502
(S) 4-Bromofluorobenzene	*110*			*67.0-138*		*11/12/2023 00:29*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.0*			*70.0-130*		*11/12/2023 00:29*	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.01		0.548	1.00	1	11/12/2023 00:48	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 00:48	WG2169502
Benzene	U		0.0160	0.0400	1	11/12/2023 00:48	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 00:48	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 00:48	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 00:48	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 00:48	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 00:48	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 00:48	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 00:48	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 00:48	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 00:48	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 00:48	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 00:48	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 00:48	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 00:48	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 00:48	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 00:48	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 00:48	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 00:48	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 00:48	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 00:48	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 00:48	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 00:48	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 00:48	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 00:48	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 00:48	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 00:48	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 00:48	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 00:48	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 00:48	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 00:48	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 00:48	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 00:48	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 00:48	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 00:48	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 00:48	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 00:48	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 00:48	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 00:48	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 00:48	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 00:48	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 00:48	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 00:48	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 00:48	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 00:48	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 00:48	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 00:48	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 00:48	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 00:48	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 00:48	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 00:48	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 00:48	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 00:48	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 00:48	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 00:48	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 00:48	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 00:48	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 00:48	WG2169502
Vinyl chloride	U		0.0273	0.100	1	11/12/2023 00:48	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 00:48	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 00:48	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 00:48	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 00:48	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 00:48	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 00:48	WG2169502
(S) Toluene-d8	*102*			*75.0-131*		*11/12/2023 00:48*	WG2169502
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/12/2023 00:48*	WG2169502
(S) 1,2-Dichloroethane-d4	*101*			*70.0-130*		*11/12/2023 00:48*	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91		0.548	1.00	1	11/12/2023 01:06	WG2169502
Acrylonitrile	U	C3	0.0760	0.500	1	11/12/2023 01:06	WG2169502
Benzene	0.0210	J	0.0160	0.0400	1	11/12/2023 01:06	WG2169502
Bromobenzene	U		0.0420	0.500	1	11/12/2023 01:06	WG2169502
Bromodichloromethane	U		0.0315	0.100	1	11/12/2023 01:06	WG2169502
Bromoform	U		0.239	1.00	1	11/12/2023 01:06	WG2169502
Bromomethane	U		0.148	0.500	1	11/12/2023 01:06	WG2169502
n-Butylbenzene	U		0.153	0.500	1	11/12/2023 01:06	WG2169502
sec-Butylbenzene	U		0.101	0.500	1	11/12/2023 01:06	WG2169502
tert-Butylbenzene	U		0.0620	0.200	1	11/12/2023 01:06	WG2169502
Carbon tetrachloride	U		0.0432	0.200	1	11/12/2023 01:06	WG2169502
Chlorobenzene	U		0.0229	0.100	1	11/12/2023 01:06	WG2169502
Chlorodibromomethane	U		0.0180	0.100	1	11/12/2023 01:06	WG2169502
Chloroethane	U	C3	0.0432	0.200	1	11/12/2023 01:06	WG2169502
Chloroform	U		0.0166	0.100	1	11/12/2023 01:06	WG2169502
Chloromethane	U	C3	0.0556	0.500	1	11/12/2023 01:06	WG2169502
2-Chlorotoluene	U		0.0368	0.100	1	11/12/2023 01:06	WG2169502
4-Chlorotoluene	U		0.0452	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/12/2023 01:06	WG2169502
1,2-Dibromoethane	U		0.0210	0.100	1	11/12/2023 01:06	WG2169502
Dibromomethane	U		0.0400	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/12/2023 01:06	WG2169502
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/12/2023 01:06	WG2169502
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/12/2023 01:06	WG2169502
Dichlorodifluoromethane	U		0.0327	0.100	1	11/12/2023 01:06	WG2169502
1,1-Dichloroethane	U		0.0230	0.100	1	11/12/2023 01:06	WG2169502
1,2-Dichloroethane	U		0.0190	0.100	1	11/12/2023 01:06	WG2169502
1,1-Dichloroethene	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/12/2023 01:06	WG2169502
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/12/2023 01:06	WG2169502
1,2-Dichloropropane	U		0.0508	0.200	1	11/12/2023 01:06	WG2169502
1,1-Dichloropropene	U		0.0280	0.100	1	11/12/2023 01:06	WG2169502
1,3-Dichloropropane	U		0.0700	0.200	1	11/12/2023 01:06	WG2169502
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/12/2023 01:06	WG2169502
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/12/2023 01:06	WG2169502
2,2-Dichloropropane	U		0.0317	0.100	1	11/12/2023 01:06	WG2169502
Di-isopropyl ether	U	C3	0.0140	0.0400	1	11/12/2023 01:06	WG2169502
Ethylbenzene	U		0.0212	0.100	1	11/12/2023 01:06	WG2169502
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/12/2023 01:06	WG2169502
Isopropylbenzene	U		0.0345	0.100	1	11/12/2023 01:06	WG2169502
p-Isopropyltoluene	U		0.0932	0.200	1	11/12/2023 01:06	WG2169502
2-Butanone (MEK)	U		0.500	1.00	1	11/12/2023 01:06	WG2169502
Methylene Chloride	U		0.265	1.00	1	11/12/2023 01:06	WG2169502
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/12/2023 01:06	WG2169502
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/12/2023 01:06	WG2169502
Naphthalene	U		0.124	0.500	1	11/12/2023 01:06	WG2169502
n-Propylbenzene	U		0.0472	0.200	1	11/12/2023 01:06	WG2169502
Styrene	U		0.109	0.500	1	11/12/2023 01:06	WG2169502
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/12/2023 01:06	WG2169502
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/12/2023 01:06	WG2169502
Tetrachloroethene	U		0.0280	0.100	1	11/12/2023 01:06	WG2169502
Toluene	U		0.0500	0.200	1	11/12/2023 01:06	WG2169502
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/12/2023 01:06	WG2169502
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/12/2023 01:06	WG2169502
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/12/2023 01:06	WG2169502

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/12/2023 01:06	WG2169502
Trichloroethene	U		0.0160	0.0400	1	11/12/2023 01:06	WG2169502
Trichlorofluoromethane	U		0.0200	0.100	1	11/12/2023 01:06	WG2169502
1,2,3-Trichloropropane	U		0.204	0.500	1	11/12/2023 01:06	WG2169502
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/12/2023 01:06	WG2169502
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/12/2023 01:06	WG2169502
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/12/2023 01:06	WG2169502
Vinyl chloride	0.0840	J	0.0273	0.100	1	11/12/2023 01:06	WG2169502
Xylenes, Total	U		0.191	0.260	1	11/12/2023 01:06	WG2169502
Ethyl Ether	U		0.0170	0.100	1	11/12/2023 01:06	WG2169502
Tetrahydrofuran	U		0.0900	0.500	1	11/12/2023 01:06	WG2169502
Iodomethane	U		0.242	0.500	1	11/12/2023 01:06	WG2169502
Allyl chloride	U		0.580	1.00	1	11/12/2023 01:06	WG2169502
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/12/2023 01:06	WG2169502
(S) Toluene-d8	*103*			*75.0-131*		*11/12/2023 01:06*	WG2169502
(S) 4-Bromofluorobenzene	*108*			*67.0-138*		*11/12/2023 01:06*	WG2169502
(S) 1,2-Dichloroethane-d4	*98.6*			*70.0-130*		*11/12/2023 01:06*	WG2169502

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	264000		8450	20000	1	11/16/2023 12:18	WG2172434

Sample Narrative:
L1676892-01 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	71300		379	1000	1	11/11/2023 19:41	WG2169403
Nitrate	72.2	J	48.0	100	1	11/11/2023 19:41	WG2169403
Sulfate	25200		594	5000	1	11/11/2023 19:41	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7020		102	1000	1	12/01/2023 14:47	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	4690		28.1	100	1	11/20/2023 19:04	WG2169913
Manganese	354		0.704	5.00	1	11/20/2023 19:04	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1660		0.287	0.678	1	11/20/2023 11:39	WG2173812
Ethane	17.5		0.296	1.29	1	11/20/2023 11:39	WG2173812
Ethene	93.6		0.422	1.27	1	11/20/2023 11:39	WG2173812

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	C3	0.548	1.00	1	11/21/2023 10:04	WG2174693
Acrylonitrile	U		0.0760	0.500	1	11/21/2023 10:04	WG2174693
Benzene	0.0200	J	0.0160	0.0400	1	11/21/2023 10:04	WG2174693
Bromobenzene	U		0.0420	0.500	1	11/21/2023 10:04	WG2174693
Bromodichloromethane	U		0.0315	0.100	1	11/21/2023 10:04	WG2174693
Bromoform	U		0.239	1.00	1	11/21/2023 10:04	WG2174693
Bromomethane	U		0.148	0.500	1	11/21/2023 10:04	WG2174693
n-Butylbenzene	U		0.153	0.500	1	11/21/2023 10:04	WG2174693
sec-Butylbenzene	U		0.101	0.500	1	11/21/2023 10:04	WG2174693
tert-Butylbenzene	U		0.0620	0.200	1	11/21/2023 10:04	WG2174693
Carbon tetrachloride	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Chlorobenzene	U		0.0229	0.100	1	11/21/2023 10:04	WG2174693
Chlorodibromomethane	U		0.0180	0.100	1	11/21/2023 10:04	WG2174693
Chloroethane	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Chloroform	U		0.0166	0.100	1	11/21/2023 10:04	WG2174693
Chloromethane	U	C3	0.0556	0.500	1	11/21/2023 10:04	WG2174693
2-Chlorotoluene	U		0.0368	0.100	1	11/21/2023 10:04	WG2174693
4-Chlorotoluene	U		0.0452	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dibromo-3-Chloropropane	U	C3	0.204	1.00	1	11/21/2023 10:04	WG2174693
1,2-Dibromoethane	U		0.0210	0.100	1	11/21/2023 10:04	WG2174693

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/21/2023 10:04	WG2174693
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/21/2023 10:04	WG2174693
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/21/2023 10:04	WG2174693
Dichlorodifluoromethane	U		0.0327	0.100	1	11/21/2023 10:04	WG2174693
1,1-Dichloroethane	U		0.0230	0.100	1	11/21/2023 10:04	WG2174693
1,2-Dichloroethane	U		0.0190	0.100	1	11/21/2023 10:04	WG2174693
1,1-Dichloroethene	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
cis-1,2-Dichloroethene	0.921		0.0276	0.100	1	11/21/2023 10:04	WG2174693
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/21/2023 10:04	WG2174693
1,2-Dichloropropane	U		0.0508	0.200	1	11/21/2023 10:04	WG2174693
1,1-Dichloropropene	U		0.0280	0.100	1	11/21/2023 10:04	WG2174693
1,3-Dichloropropane	U		0.0700	0.200	1	11/21/2023 10:04	WG2174693
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/21/2023 10:04	WG2174693
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/21/2023 10:04	WG2174693
2,2-Dichloropropane	U		0.0317	0.100	1	11/21/2023 10:04	WG2174693
Di-isopropyl ether	U		0.0140	0.0400	1	11/21/2023 10:04	WG2174693
Ethylbenzene	U		0.0212	0.100	1	11/21/2023 10:04	WG2174693
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/21/2023 10:04	WG2174693
Isopropylbenzene	U		0.0345	0.100	1	11/21/2023 10:04	WG2174693
p-Isopropyltoluene	U		0.0932	0.200	1	11/21/2023 10:04	WG2174693
2-Butanone (MEK)	U		0.500	1.00	1	11/21/2023 10:04	WG2174693
Methylene Chloride	U		0.265	1.00	1	11/21/2023 10:04	WG2174693
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/21/2023 10:04	WG2174693
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/21/2023 10:04	WG2174693
Naphthalene	U	C3	0.124	0.500	1	11/21/2023 10:04	WG2174693
n-Propylbenzene	U		0.0472	0.200	1	11/21/2023 10:04	WG2174693
Styrene	U		0.109	0.500	1	11/21/2023 10:04	WG2174693
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/21/2023 10:04	WG2174693
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/21/2023 10:04	WG2174693
Tetrachloroethene	U		0.0280	0.100	1	11/21/2023 10:04	WG2174693
Toluene	0.0720	J	0.0500	0.200	1	11/21/2023 10:04	WG2174693
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/21/2023 10:04	WG2174693
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/21/2023 10:04	WG2174693
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/21/2023 10:04	WG2174693
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/21/2023 10:04	WG2174693
Trichloroethene	U		0.0160	0.0400	1	11/21/2023 10:04	WG2174693
Trichlorofluoromethane	U		0.0200	0.100	1	11/21/2023 10:04	WG2174693
1,2,3-Trichloropropane	U		0.204	0.500	1	11/21/2023 10:04	WG2174693
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/21/2023 10:04	WG2174693
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/21/2023 10:04	WG2174693
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/21/2023 10:04	WG2174693
Vinyl chloride	6.62		0.0273	0.100	1	11/21/2023 10:04	WG2174693
Xylenes, Total	U		0.191	0.260	1	11/21/2023 10:04	WG2174693
Ethyl Ether	U		0.0170	0.100	1	11/21/2023 10:04	WG2174693
Tetrahydrofuran	0.183	C3 J	0.0900	0.500	1	11/21/2023 10:04	WG2174693
Iodomethane	U		0.242	0.500	1	11/21/2023 10:04	WG2174693
Allyl chloride	U		0.580	1.00	1	11/21/2023 10:04	WG2174693
Trans-1,4-Dichloro-2-butene	U	J3	0.0560	0.200	1	11/21/2023 10:04	WG2174693
(S) Toluene-d8	*100*			*75.0-131*		*11/21/2023 10:04*	WG2174693
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/21/2023 10:04*	WG2174693
(S) 1,2-Dichloroethane-d4	*94.5*			*70.0-130*		*11/21/2023 10:04*	WG2174693

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	210000		8450	20000	1	11/16/2023 12:33	WG2172434

Sample Narrative:
L1676892-02 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	31400		379	1000	1	11/11/2023 19:54	WG2169403
Nitrate	78.0	J	48.0	100	1	11/11/2023 19:54	WG2169403
Sulfate	33400		594	5000	1	11/11/2023 19:54	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1680		102	1000	1	12/01/2023 16:28	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	634		28.1	100	1	11/20/2023 19:07	WG2169913
Manganese	116		0.704	5.00	1	11/20/2023 19:07	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	1420		0.287	0.678	1	11/20/2023 11:46	WG2173812
Ethane	3.66		0.296	1.29	1	11/20/2023 11:46	WG2173812
Ethene	11.4		0.422	1.27	1	11/20/2023 11:46	WG2173812

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	60.9 J+	C5	0.548	1.00	1	11/18/2023 01:30	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 01:30	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 01:30	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 01:30	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 01:30	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 01:30	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 01:30	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 01:30	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 01:30	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 01:30	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 01:30	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 01:30	WG2173211
Chloroethane	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Chloroform	U		0.0166	0.100	1	11/18/2023 01:30	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 01:30	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 01:30	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 01:30	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 01:30	WG2173211

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 01:30	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 01:30	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 01:30	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 01:30	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 01:30	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 01:30	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
cis-1,2-Dichloroethene	0.889		0.0276	0.100	1	11/18/2023 01:30	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 01:30	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 01:30	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 01:30	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 01:30	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 01:30	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 01:30	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 01:30	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 01:30	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 01:30	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 01:30	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 01:30	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 01:30	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 01:30	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 01:30	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 01:30	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 01:30	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 01:30	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 01:30	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 01:30	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 01:30	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 01:30	WG2173211
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 01:30	WG2173211
Toluene	0.0530	J	0.0500	0.200	1	11/18/2023 01:30	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 01:30	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 01:30	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 01:30	WG2173211
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 01:30	WG2173211
Trichloroethene	0.124		0.0160	0.0400	1	11/18/2023 01:30	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 01:30	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 01:30	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 01:30	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 01:30	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 01:30	WG2173211
Vinyl chloride	8.19		0.0273	0.100	1	11/18/2023 01:30	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 01:30	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 01:30	WG2173211
Tetrahydrofuran	6.48		0.0900	0.500	1	11/18/2023 01:30	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 01:30	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 01:30	WG2173211
Trans-1,4-Dichloro-2-butene	U UJ	C3	0.0560	0.200	1	11/18/2023 01:30	WG2173211
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 01:30*	WG2173211
(S) 4-Bromofluorobenzene	*103*			*67.0-138*		*11/18/2023 01:30*	WG2173211
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/18/2023 01:30*	WG2173211

JC 1/4/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.25	C5	0.548	1.00	1	11/18/2023 01:49	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 01:49	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 01:49	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 01:49	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 01:49	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 01:49	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 01:49	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 01:49	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 01:49	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 01:49	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 01:49	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 01:49	WG2173211
Chloroethane	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Chloroform	U		0.0166	0.100	1	11/18/2023 01:49	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 01:49	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 01:49	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 01:49	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 01:49	WG2173211
Dibromomethane	U		0.0400	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 01:49	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 01:49	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 01:49	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 01:49	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 01:49	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 01:49	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
cis-1,2-Dichloroethene	0.303		0.0276	0.100	1	11/18/2023 01:49	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 01:49	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 01:49	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 01:49	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 01:49	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 01:49	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 01:49	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 01:49	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 01:49	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 01:49	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 01:49	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 01:49	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 01:49	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 01:49	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 01:49	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 01:49	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 01:49	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 01:49	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 01:49	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 01:49	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 01:49	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 01:49	WG2173211
Tetrachloroethene	0.0700	J	0.0280	0.100	1	11/18/2023 01:49	WG2173211
Toluene	U		0.0500	0.200	1	11/18/2023 01:49	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 01:49	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 01:49	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 01:49	WG2173211

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 01:49	WG2173211
Trichloroethene	0.0330	J	0.0160	0.0400	1	11/18/2023 01:49	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 01:49	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 01:49	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 01:49	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 01:49	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 01:49	WG2173211
Vinyl chloride	0.231		0.0273	0.100	1	11/18/2023 01:49	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 01:49	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 01:49	WG2173211
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 01:49	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 01:49	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 01:49	WG2173211
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 01:49	WG2173211
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 01:49*	WG2173211
(S) 4-Bromofluorobenzene	*105*			*67.0-138*		*11/18/2023 01:49*	WG2173211
(S) 1,2-Dichloroethane-d4	*93.0*			*70.0-130*		*11/18/2023 01:49*	WG2173211

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	188000		8450	20000	1	11/16/2023 12:43	WG2172434

Sample Narrative:
L1676892-04 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	47000		379	1000	1	11/11/2023 20:35	WG2169403
Nitrate	4020		48.0	100	1	11/11/2023 20:35	WG2169403
Sulfate	65200		594	5000	1	11/11/2023 20:35	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2570		102	1000	1	12/01/2023 16:57	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	388		28.1	100	1	11/20/2023 19:19	WG2169913
Manganese	114		0.704	5.00	1	11/20/2023 19:19	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	6950		2.87	6.78	10	11/21/2023 13:48	WG2174876
Ethane	14.3		0.296	1.29	1	11/20/2023 11:54	WG2173812
Ethene	U		0.422	1.27	1	11/20/2023 11:54	WG2173812

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 02:08	WG2173211
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 02:08	WG2173211
Benzene	U		0.0160	0.0400	1	11/18/2023 02:08	WG2173211
Bromobenzene	U		0.0420	0.500	1	11/18/2023 02:08	WG2173211
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 02:08	WG2173211
Bromoform	U		0.239	1.00	1	11/18/2023 02:08	WG2173211
Bromomethane	U		0.148	0.500	1	11/18/2023 02:08	WG2173211
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 02:08	WG2173211
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 02:08	WG2173211
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 02:08	WG2173211
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 02:08	WG2173211
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 02:08	WG2173211
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 02:08	WG2173211
Chloroethane	0.118	J	0.0432	0.200	1	11/18/2023 02:08	WG2173211
Chloroform	0.0590	J	0.0166	0.100	1	11/18/2023 02:08	WG2173211
Chloromethane	U		0.0556	0.500	1	11/18/2023 02:08	WG2173211
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 02:08	WG2173211
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 02:08	WG2173211
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 02:08	WG2173211

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 02:08	WG2173211
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 02:08	WG2173211
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 02:08	WG2173211
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 02:08	WG2173211
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 02:08	WG2173211
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 02:08	WG2173211
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
cis-1,2-Dichloroethene	0.616		0.0276	0.100	1	11/18/2023 02:08	WG2173211
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 02:08	WG2173211
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 02:08	WG2173211
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 02:08	WG2173211
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 02:08	WG2173211
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 02:08	WG2173211
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 02:08	WG2173211
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 02:08	WG2173211
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 02:08	WG2173211
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 02:08	WG2173211
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 02:08	WG2173211
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 02:08	WG2173211
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 02:08	WG2173211
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 02:08	WG2173211
Methylene Chloride	U		0.265	1.00	1	11/18/2023 02:08	WG2173211
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 02:08	WG2173211
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 02:08	WG2173211
Naphthalene	U		0.124	0.500	1	11/18/2023 02:08	WG2173211
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 02:08	WG2173211
Styrene	U		0.109	0.500	1	11/18/2023 02:08	WG2173211
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 02:08	WG2173211
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 02:08	WG2173211
Tetrachloroethene	58.1		0.0280	0.100	1	11/18/2023 02:08	WG2173211
Toluene	U		0.0500	0.200	1	11/18/2023 02:08	WG2173211
1,2,3-Trichlorobenzene	U		0.0250	0.500	1	11/18/2023 02:08	WG2173211
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 02:08	WG2173211
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 02:08	WG2173211
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 02:08	WG2173211
Trichloroethene	4.32		0.0160	0.0400	1	11/18/2023 02:08	WG2173211
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 02:08	WG2173211
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 02:08	WG2173211
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 02:08	WG2173211
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 02:08	WG2173211
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 02:08	WG2173211
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 02:08	WG2173211
Xylenes, Total	U		0.191	0.260	1	11/18/2023 02:08	WG2173211
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 02:08	WG2173211
Tetrahydrofuran	U		0.0900	0.500	1	11/18/2023 02:08	WG2173211
Iodomethane	U		0.242	0.500	1	11/18/2023 02:08	WG2173211
Allyl chloride	U		0.580	1.00	1	11/18/2023 02:08	WG2173211
Trans-1,4-Dichloro-2-butene	U	C3	0.0560	0.200	1	11/18/2023 02:08	WG2173211
(S) Toluene-d8	*100*			*75.0-131*		*11/18/2023 02:08*	WG2173211
(S) 4-Bromofluorobenzene	*101*			*67.0-138*		*11/18/2023 02:08*	WG2173211
(S) 1,2-Dichloroethane-d4	*93.7*			*70.0-130*		*11/18/2023 02:08*	WG2173211

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	610000		8450	20000	1	11/16/2023 12:50	WG2172434

Sample Narrative:
L1676892-05 WG2172434: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	49900		379	1000	1	11/11/2023 20:48	WG2169403
Nitrate	78.9	J	48.0	100	1	11/11/2023 20:48	WG2169403
Sulfate	7900		594	5000	1	11/11/2023 20:48	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5350		102	1000	1	12/01/2023 17:15	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	10100		28.1	100	1	11/20/2023 19:22	WG2169913
Manganese	1560		0.704	5.00	1	11/20/2023 19:22	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	17900		2.87	6.78	10	11/21/2023 13:54	WG2174876
Ethane	340		0.296	1.29	1	11/20/2023 12:00	WG2173812
Ethene	194		0.422	1.27	1	11/20/2023 12:00	WG2173812

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		5.48	10.0	10	11/18/2023 13:53	WG2173609
Acrylonitrile	U		0.760	5.00	10	11/18/2023 13:53	WG2173609
Benzene	U		0.160	0.400	10	11/18/2023 13:53	WG2173609
Bromobenzene	U		0.420	5.00	10	11/18/2023 13:53	WG2173609
Bromodichloromethane	U		0.315	1.00	10	11/18/2023 13:53	WG2173609
Bromoform	U		2.39	10.0	10	11/18/2023 13:53	WG2173609
Bromomethane	U		1.48	5.00	10	11/18/2023 13:53	WG2173609
n-Butylbenzene	U		1.53	5.00	10	11/18/2023 13:53	WG2173609
sec-Butylbenzene	U		1.01	5.00	10	11/18/2023 13:53	WG2173609
tert-Butylbenzene	U		0.620	2.00	10	11/18/2023 13:53	WG2173609
Carbon tetrachloride	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Chlorobenzene	U		0.229	1.00	10	11/18/2023 13:53	WG2173609
Chlorodibromomethane	U		0.180	1.00	10	11/18/2023 13:53	WG2173609
Chloroethane	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Chloroform	U		0.166	1.00	10	11/18/2023 13:53	WG2173609
Chloromethane	U		0.556	5.00	10	11/18/2023 13:53	WG2173609
2-Chlorotoluene	U		0.368	1.00	10	11/18/2023 13:53	WG2173609
4-Chlorotoluene	U		0.452	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dibromo-3-Chloropropane	U		2.04	10.0	10	11/18/2023 13:53	WG2173609
1,2-Dibromoethane	U		0.210	1.00	10	11/18/2023 13:53	WG2173609

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.400	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dichlorobenzene	U		0.580	2.00	10	11/18/2023 13:53	WG2173609
1,3-Dichlorobenzene	U		0.680	2.00	10	11/18/2023 13:53	WG2173609
1,4-Dichlorobenzene	U		0.788	2.00	10	11/18/2023 13:53	WG2173609
Dichlorodifluoromethane	U		0.327	1.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloroethane	U		0.230	1.00	10	11/18/2023 13:53	WG2173609
1,2-Dichloroethane	U		0.190	1.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloroethene	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
cis-1,2-Dichloroethene	19.3		0.276	1.00	10	11/18/2023 13:53	WG2173609
trans-1,2-Dichloroethene	0.770	J	0.572	2.00	10	11/18/2023 13:53	WG2173609
1,2-Dichloropropane	U		0.508	2.00	10	11/18/2023 13:53	WG2173609
1,1-Dichloropropene	U		0.280	1.00	10	11/18/2023 13:53	WG2173609
1,3-Dichloropropane	U		0.700	2.00	10	11/18/2023 13:53	WG2173609
cis-1,3-Dichloropropene	U		0.271	1.00	10	11/18/2023 13:53	WG2173609
trans-1,3-Dichloropropene	U		0.612	2.00	10	11/18/2023 13:53	WG2173609
2,2-Dichloropropane	U		0.317	1.00	10	11/18/2023 13:53	WG2173609
Di-isopropyl ether	U		0.140	0.400	10	11/18/2023 13:53	WG2173609
Ethylbenzene	U		0.212	1.00	10	11/18/2023 13:53	WG2173609
Hexachloro-1,3-butadiene	U		5.08	10.0	10	11/18/2023 13:53	WG2173609
Isopropylbenzene	U		0.345	1.00	10	11/18/2023 13:53	WG2173609
p-Isopropyltoluene	U		0.932	2.00	10	11/18/2023 13:53	WG2173609
2-Butanone (MEK)	U		5.00	10.0	10	11/18/2023 13:53	WG2173609
Methylene Chloride	U		2.65	10.0	10	11/18/2023 13:53	WG2173609
4-Methyl-2-pentanone (MIBK)	U		4.00	10.0	10	11/18/2023 13:53	WG2173609
Methyl tert-butyl ether	U		0.118	0.400	10	11/18/2023 13:53	WG2173609
Naphthalene	U	C3	1.24	5.00	10	11/18/2023 13:53	WG2173609
n-Propylbenzene	U		0.472	2.00	10	11/18/2023 13:53	WG2173609
Styrene	U		1.09	5.00	10	11/18/2023 13:53	WG2173609
1,1,1,2-Tetrachloroethane	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
1,1,2,2-Tetrachloroethane	U		0.156	1.00	10	11/18/2023 13:53	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.270	1.00	10	11/18/2023 13:53	WG2173609
Tetrachloroethene	U		0.280	1.00	10	11/18/2023 13:53	WG2173609
Toluene	U		0.500	2.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.250	5.00	10	11/18/2023 13:53	WG2173609
1,2,4-Trichlorobenzene	U		1.93	5.00	10	11/18/2023 13:53	WG2173609
1,1,1-Trichloroethane	U		0.110	1.00	10	11/18/2023 13:53	WG2173609
1,1,2-Trichloroethane	U		0.353	1.00	10	11/18/2023 13:53	WG2173609
Trichloroethene	U		0.160	0.400	10	11/18/2023 13:53	WG2173609
Trichlorofluoromethane	U		0.200	1.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trichloropropane	U		2.04	5.00	10	11/18/2023 13:53	WG2173609
1,2,4-Trimethylbenzene	U		0.464	2.00	10	11/18/2023 13:53	WG2173609
1,2,3-Trimethylbenzene	U		0.460	2.00	10	11/18/2023 13:53	WG2173609
1,3,5-Trimethylbenzene	U		0.432	2.00	10	11/18/2023 13:53	WG2173609
Vinyl chloride	120		0.273	1.00	10	11/18/2023 13:53	WG2173609
Xylenes, Total	U		1.91	2.60	10	11/18/2023 13:53	WG2173609
Ethyl Ether	U		0.170	1.00	10	11/18/2023 13:53	WG2173609
Tetrahydrofuran	2.79	J	0.900	5.00	10	11/18/2023 13:53	WG2173609
Iodomethane	U		2.42	5.00	10	11/18/2023 13:53	WG2173609
Allyl chloride	U		5.80	10.0	10	11/18/2023 13:53	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.560	2.00	10	11/18/2023 13:53	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 13:53*	WG2173609
(S) 4-Bromofluorobenzene	*104*			*67.0-138*		*11/18/2023 13:53*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.3*			*70.0-130*		*11/18/2023 13:53*	WG2173609

Sample Narrative:

L1676892-05 WG2173609: Target compounds too high to run at a lower dilution.

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.60	C5	0.548	1.00	1	11/18/2023 07:51	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 07:51	WG2173609
Benzene	U		0.0160	0.0400	1	11/18/2023 07:51	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 07:51	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 07:51	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 07:51	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 07:51	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 07:51	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 07:51	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 07:51	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 07:51	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 07:51	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 07:51	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 07:51	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 07:51	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 07:51	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 07:51	WG2173609
Dibromomethane	U		0.0400	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 07:51	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 07:51	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 07:51	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 07:51	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 07:51	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 07:51	WG2173609
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 07:51	WG2173609
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 07:51	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 07:51	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 07:51	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 07:51	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 07:51	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 07:51	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 07:51	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 07:51	WG2173609
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 07:51	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 07:51	WG2173609
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 07:51	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 07:51	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 07:51	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 07:51	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 07:51	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 07:51	WG2173609
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 07:51	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 07:51	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 07:51	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 07:51	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 07:51	WG2173609
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 07:51	WG2173609
Toluene	U		0.0500	0.200	1	11/18/2023 07:51	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 07:51	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 07:51	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 07:51	WG2173609

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 07:51	WG2173609
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 07:51	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 07:51	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 07:51	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 07:51	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 07:51	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 07:51	WG2173609
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 07:51	WG2173609
Xylenes, Total	U		0.191	0.260	1	11/18/2023 07:51	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 07:51	WG2173609
Tetrahydrofuran	0.202	J	0.0900	0.500	1	11/18/2023 07:51	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 07:51	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 07:51	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/18/2023 07:51	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 07:51*	WG2173609
(S) 4-Bromofluorobenzene	*100*			*67.0-138*		*11/18/2023 07:51*	WG2173609
(S) 1,2-Dichloroethane-d4	*90.9*			*70.0-130*		*11/18/2023 07:51*	WG2173609

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		0.548	1.00	1	11/18/2023 08:10	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 08:10	WG2173609
Benzene	0.0760		0.0160	0.0400	1	11/18/2023 08:10	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 08:10	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 08:10	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 08:10	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 08:10	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 08:10	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 08:10	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 08:10	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 08:10	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 08:10	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 08:10	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 08:10	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 08:10	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 08:10	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 08:10	WG2173609
Dibromomethane	U		0.0400	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 08:10	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 08:10	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 08:10	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 08:10	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 08:10	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 08:10	WG2173609
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
cis-1,2-Dichloroethene	0.0380	J	0.0276	0.100	1	11/18/2023 08:10	WG2173609
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 08:10	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 08:10	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 08:10	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 08:10	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 08:10	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 08:10	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 08:10	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 08:10	WG2173609
Ethylbenzene	0.100	J	0.0212	0.100	1	11/18/2023 08:10	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 08:10	WG2173609
Isopropylbenzene	0.0480	J	0.0345	0.100	1	11/18/2023 08:10	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 08:10	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 08:10	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 08:10	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 08:10	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 08:10	WG2173609
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 08:10	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 08:10	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 08:10	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 08:10	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 08:10	WG2173609
Tetrachloroethene	0.0640	J	0.0280	0.100	1	11/18/2023 08:10	WG2173609
Toluene	0.264		0.0500	0.200	1	11/18/2023 08:10	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 08:10	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 08:10	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 08:10	WG2173609

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 08:10	WG2173609
Trichloroethene	0.0160	J	0.0160	0.0400	1	11/18/2023 08:10	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 08:10	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 08:10	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 08:10	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 08:10	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 08:10	WG2173609
Vinyl chloride	U		0.0273	0.100	1	11/18/2023 08:10	WG2173609
Xylenes, Total	0.619		0.191	0.260	1	11/18/2023 08:10	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 08:10	WG2173609
Tetrahydrofuran	0.0920	J	0.0900	0.500	1	11/18/2023 08:10	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 08:10	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 08:10	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/18/2023 08:10	WG2173609
(S) Toluene-d8	*102*			*75.0-131*		*11/18/2023 08:10*	WG2173609
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 08:10*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/18/2023 08:10*	WG2173609

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	287000		8450	20000	1	11/20/2023 14:26	WG2174432

Sample Narrative:
L1676892-08 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15400		379	1000	1	11/11/2023 21:02	WG2169403
Nitrate	2550		48.0	100	1	11/11/2023 21:02	WG2169403
Sulfate	146000		594	5000	1	11/11/2023 21:02	WG2169403

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2210		102	1000	1	12/01/2023 17:29	WG2179167

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	970		28.1	100	1	11/20/2023 19:26	WG2169913
Manganese	413		0.704	5.00	1	11/20/2023 19:26	WG2169913

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	170		0.287	0.678	1	11/20/2023 12:06	WG2173812
Ethane	1.60		0.296	1.29	1	11/20/2023 12:06	WG2173812
Ethene	U		0.422	1.27	1	11/20/2023 12:06	WG2173812

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 08:29	WG2173609
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 08:29	WG2173609
Benzene	0.0220	J	0.0160	0.0400	1	11/18/2023 08:29	WG2173609
Bromobenzene	U		0.0420	0.500	1	11/18/2023 08:29	WG2173609
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 08:29	WG2173609
Bromoform	U		0.239	1.00	1	11/18/2023 08:29	WG2173609
Bromomethane	U		0.148	0.500	1	11/18/2023 08:29	WG2173609
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 08:29	WG2173609
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 08:29	WG2173609
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 08:29	WG2173609
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 08:29	WG2173609
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 08:29	WG2173609
Chloroethane	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Chloroform	U		0.0166	0.100	1	11/18/2023 08:29	WG2173609
Chloromethane	U		0.0556	0.500	1	11/18/2023 08:29	WG2173609
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 08:29	WG2173609
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 08:29	WG2173609
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 08:29	WG2173609

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 08:29	WG2173609
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 08:29	WG2173609
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 08:29	WG2173609
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 08:29	WG2173609
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 08:29	WG2173609
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 08:29	WG2173609
1,1-Dichloroethene	0.245		0.0200	0.100	1	11/18/2023 08:29	WG2173609
cis-1,2-Dichloroethene	84.3		0.0276	0.100	1	11/18/2023 08:29	WG2173609
trans-1,2-Dichloroethene	0.158	J	0.0572	0.200	1	11/18/2023 08:29	WG2173609
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 08:29	WG2173609
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 08:29	WG2173609
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 08:29	WG2173609
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 08:29	WG2173609
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 08:29	WG2173609
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 08:29	WG2173609
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 08:29	WG2173609
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 08:29	WG2173609
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 08:29	WG2173609
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 08:29	WG2173609
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 08:29	WG2173609
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 08:29	WG2173609
Methylene Chloride	U		0.265	1.00	1	11/18/2023 08:29	WG2173609
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 08:29	WG2173609
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 08:29	WG2173609
Naphthalene	U	C3	0.124	0.500	1	11/18/2023 08:29	WG2173609
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 08:29	WG2173609
Styrene	U		0.109	0.500	1	11/18/2023 08:29	WG2173609
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 08:29	WG2173609
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 08:29	WG2173609
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 08:29	WG2173609
Tetrachloroethene	36.6		0.0280	0.100	1	11/18/2023 08:29	WG2173609
Toluene	U		0.0500	0.200	1	11/18/2023 08:29	WG2173609
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 08:29	WG2173609
1,2,4-Trichlorobenzene	U		0.193	0.500	1	11/18/2023 08:29	WG2173609
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 08:29	WG2173609
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 08:29	WG2173609
Trichloroethene	11.8		0.0160	0.0400	1	11/18/2023 08:29	WG2173609
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 08:29	WG2173609
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 08:29	WG2173609
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 08:29	WG2173609
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 08:29	WG2173609
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 08:29	WG2173609
Vinyl chloride	1.22		0.0273	0.100	1	11/18/2023 08:29	WG2173609
Xylenes, Total	U		0.191	0.260	1	11/18/2023 08:29	WG2173609
Ethyl Ether	U		0.0170	0.100	1	11/18/2023 08:29	WG2173609
Tetrahydrofuran	0.191	J	0.0900	0.500	1	11/18/2023 08:29	WG2173609
Iodomethane	U		0.242	0.500	1	11/18/2023 08:29	WG2173609
Allyl chloride	U		0.580	1.00	1	11/18/2023 08:29	WG2173609
Trans-1,4-Dichloro-2-butene	U	C3 J4	0.0560	0.200	1	11/18/2023 08:29	WG2173609
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 08:29*	WG2173609
(S) 4-Bromofluorobenzene	*102*			*67.0-138*		*11/18/2023 08:29*	WG2173609
(S) 1,2-Dichloroethane-d4	*92.6*			*70.0-130*		*11/18/2023 08:29*	WG2173609

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	478000		8450	20000	1	11/20/2023 14:31	WG2174432

Sample Narrative:
L1677527-01 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	35800		379	1000	1	11/27/2023 01:02	WG2175651
Nitrate	126	~~P1~~	48.0	100	1	11/15/2023 00:32	WG2171026
Sulfate	10100		594	5000	1	11/27/2023 01:02	WG2175651

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3640		102	1000	1	12/02/2023 09:31	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	2550		140	500	5	11/21/2023 15:52	WG2174222
Manganese	392		3.52	25.0	5	11/21/2023 15:52	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	20800		2.87	6.78	10	11/21/2023 18:07	WG2175722
Ethane	1.42		0.296	1.29	1	11/21/2023 14:18	WG2174876
Ethene	5.15		0.422	1.27	1	11/21/2023 14:18	WG2174876

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	70.0 J+	C5	0.548	1.00	1	11/18/2023 16:59	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 16:59	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 16:59	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 16:59	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 16:59	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 16:59	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 16:59	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 16:59	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 16:59	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 16:59	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 16:59	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 16:59	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 16:59	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 16:59	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 16:59	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 16:59	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 16:59	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 16:59	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 16:59	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 16:59	WG2173799

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 16:59	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 16:59	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 16:59	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 16:59	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 16:59	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 16:59	WG2173799
trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 16:59	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 16:59	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 16:59	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 16:59	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 16:59	WG2173799
cis-1,2-Dichloroethene	0.993		0.0276	0.100	1	11/18/2023 16:59	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 16:59	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 16:59	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 16:59	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 16:59	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 16:59	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 16:59	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 16:59	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 16:59	WG2173799
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 16:59	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 16:59	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 16:59	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 16:59	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 16:59	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 16:59	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 16:59	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 16:59	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 16:59	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 16:59	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 16:59	WG2173799
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 16:59	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 16:59	WG2173799
Styrene	U	UJ C3	0.109	0.500	1	11/18/2023 16:59	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 16:59	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 16:59	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 16:59	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 16:59	WG2173799
Toluene	0.412		0.0500	0.200	1	11/18/2023 16:59	WG2173799
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 16:59	WG2173799
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/18/2023 16:59	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 16:59	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 16:59	WG2173799
Trichloroethene	0.0440		0.0160	0.0400	1	11/18/2023 16:59	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 16:59	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 16:59	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 16:59	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 16:59	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 16:59	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 16:59	WG2173799
Vinyl chloride	2.50	J- C3	0.0273	0.100	1	11/18/2023 16:59	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 16:59	WG2173799
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2023 16:59*	WG2173799
(S) 4-Bromofluorobenzene	*88.6*			*67.0-138*		*11/18/2023 16:59*	WG2173799
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/18/2023 16:59*	WG2173799

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Cp Tc Ss Cn Sr Qc Gl Al Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	774000		8450	20000	1	11/20/2023 14:37	WG2174432

Sample Narrative:
L1677527-02 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	54500		379	1000	1	11/27/2023 01:18	WG2175651
Nitrate	125		48.0	100	1	11/15/2023 00:45	WG2171026
Sulfate	1560	J	594	5000	1	11/27/2023 01:18	WG2175651

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2310	B	102	1000	1	12/02/2023 09:47	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	11100		281	1000	10	11/21/2023 15:56	WG2174222
Manganese	1920		7.04	50.0	10	11/21/2023 15:56	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	25400		2.87	6.78	10	11/21/2023 18:14	WG2175722
Ethane	136		0.296	1.29	1	11/21/2023 14:30	WG2174876
Ethene	2.30		0.422	1.27	1	11/21/2023 14:30	WG2174876

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	19.8 J+	C5	0.548	1.00	1	11/18/2023 17:18	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 17:18	WG2173799
Benzene	U		0.0160	0.0400	1	11/18/2023 17:18	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 17:18	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 17:18	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 17:18	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 17:18	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 17:18	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 17:18	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 17:18	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 17:18	WG2173799
Carbon disulfide	0.257	J	0.162	0.500	1	11/18/2023 17:18	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 17:18	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 17:18	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 17:18	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 17:18	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 17:18	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 17:18	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 17:18	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 17:18	WG2173799

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 17:18	WG2173799	
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 17:18	WG2173799	
Dibromomethane	U		0.0400	0.200	1	11/18/2023 17:18	WG2173799	
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 17:18	WG2173799	
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 17:18	WG2173799	
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 17:18	WG2173799	
trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 17:18	WG2173799	
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 17:18	WG2173799	
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 17:18	WG2173799	
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 17:18	WG2173799	
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 17:18	WG2173799	
cis-1,2-Dichloroethene	2.88		0.0276	0.100	1	11/18/2023 17:18	WG2173799	
trans-1,2-Dichloroethene	0.437		0.0572	0.200	1	11/18/2023 17:18	WG2173799	
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 17:18	WG2173799	
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 17:18	WG2173799	
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 17:18	WG2173799	
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 17:18	WG2173799	
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 17:18	WG2173799	
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 17:18	WG2173799	
Di-isopropyl ether	0.0890		0.0140	0.0400	1	11/18/2023 17:18	WG2173799	
Ethylbenzene	U		0.0212	0.100	1	11/18/2023 17:18	WG2173799	
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 17:18	WG2173799	
2-Hexanone	U		0.400	1.00	1	11/18/2023 17:18	WG2173799	
n-Hexane	U		0.0424	0.200	1	11/18/2023 17:18	WG2173799	
Iodomethane	U		0.242	0.500	1	11/18/2023 17:18	WG2173799	
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 17:18	WG2173799	
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 17:18	WG2173799	
2-Butanone (MEK)	13.5		0.500	1.00	1	11/18/2023 17:18	WG2173799	
Methylene Chloride	U		0.265	1.00	1	11/18/2023 17:18	WG2173799	
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 17:18	WG2173799	
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 17:18	WG2173799	
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 17:18	WG2173799	
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 17:18	WG2173799	
Styrene	U	UJ C3	0.109	0.500	1	11/18/2023 17:18	WG2173799	
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 17:18	WG2173799	
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 17:18	WG2173799	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 17:18	WG2173799	
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 17:18	WG2173799	
Toluene	U		0.0500	0.200	1	11/18/2023 17:18	WG2173799	
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 17:18	WG2173799	
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/18/2023 17:18	WG2173799	
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 17:18	WG2173799	
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 17:18	WG2173799	
Trichloroethene	0.422		0.0160	0.0400	1	11/18/2023 17:18	WG2173799	
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 17:18	WG2173799	
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 17:18	WG2173799	
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 17:18	WG2173799	
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 17:18	WG2173799	
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 17:18	WG2173799	
Vinyl acetate	U		0.141	0.500	1	11/18/2023 17:18	WG2173799	
Vinyl chloride	0.989	J- C3	0.0273	0.100	1	11/18/2023 17:18	WG2173799	
Xylenes, Total	U		0.191	0.260	1	11/18/2023 17:18	WG2173799	
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2023 17:18*	WG2173799	
(S) 4-Bromofluorobenzene	*87.4*			*67.0-138*		*11/18/2023 17:18*	WG2173799	
(S) 1,2-Dichloroethane-d4	*104*			*70.0-130*		*11/18/2023 17:18*	WG2173799	JC 1/4/24

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Wet Chemistry by Method 2320 B-2011

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Alkalinity	317000		8450	20000	1	11/20/2023 14:42	WG2174432

Sample Narrative:
L1677527-03 WG2174432: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chloride	15600		379	1000	1	11/27/2023 02:06	WG2175651
Nitrate	79.1	U ~~J~~	48.0	100	1	11/15/2023 00:59	WG2171026
Sulfate	34500		594	5000	1	11/27/2023 02:06	WG2175651

Wet Chemistry by Method 9060A

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1740	~~B~~	102	1000	1	12/02/2023 10:00	WG2180825

Metals (ICPMS) by Method 6020B

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Iron	5380		140	500	5	11/21/2023 15:59	WG2174222
Manganese	658		3.52	25.0	5	11/21/2023 15:59	WG2174222

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methane	2500		0.287	0.678	1	11/21/2023 14:41	WG2174876
Ethane	14.7		0.296	1.29	1	11/21/2023 14:41	WG2174876
Ethene	22.4		0.422	1.27	1	11/21/2023 14:41	WG2174876

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		0.548	1.00	1	11/18/2023 17:37	WG2173799
Acrylonitrile	U		0.0760	0.500	1	11/18/2023 17:37	WG2173799
Benzene	0.0300	J	0.0160	0.0400	1	11/18/2023 17:37	WG2173799
Bromobenzene	U		0.0420	0.500	1	11/18/2023 17:37	WG2173799
Bromochloromethane	U		0.0452	0.200	1	11/18/2023 17:37	WG2173799
Bromodichloromethane	U		0.0315	0.100	1	11/18/2023 17:37	WG2173799
Bromoform	U		0.239	1.00	1	11/18/2023 17:37	WG2173799
Bromomethane	U		0.148	0.500	1	11/18/2023 17:37	WG2173799
n-Butylbenzene	U		0.153	0.500	1	11/18/2023 17:37	WG2173799
sec-Butylbenzene	U		0.101	0.500	1	11/18/2023 17:37	WG2173799
tert-Butylbenzene	U		0.0620	0.200	1	11/18/2023 17:37	WG2173799
Carbon disulfide	U		0.162	0.500	1	11/18/2023 17:37	WG2173799
Carbon tetrachloride	U		0.0432	0.200	1	11/18/2023 17:37	WG2173799
Chlorobenzene	U		0.0229	0.100	1	11/18/2023 17:37	WG2173799
Chlorodibromomethane	U		0.0180	0.100	1	11/18/2023 17:37	WG2173799
Chloroethane	U		0.0432	0.200	1	11/18/2023 17:37	WG2173799
Chloroform	U		0.0166	0.100	1	11/18/2023 17:37	WG2173799
Chloromethane	U		0.0556	0.500	1	11/18/2023 17:37	WG2173799
2-Chlorotoluene	U		0.0368	0.100	1	11/18/2023 17:37	WG2173799
4-Chlorotoluene	U		0.0452	0.200	1	11/18/2023 17:37	WG2173799

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.204	1.00	1	11/18/2023 17:37	WG2173799
1,2-Dibromoethane	U		0.0210	0.100	1	11/18/2023 17:37	WG2173799
Dibromomethane	U		0.0400	0.200	1	11/18/2023 17:37	WG2173799
1,2-Dichlorobenzene	U		0.0580	0.200	1	11/18/2023 17:37	WG2173799
1,3-Dichlorobenzene	U		0.0680	0.200	1	11/18/2023 17:37	WG2173799
1,4-Dichlorobenzene	U		0.0788	0.200	1	11/18/2023 17:37	WG2173799
trans-1,4-Dichloro-2-butene	U	UJ C3	0.0560	0.200	1	11/18/2023 17:37	WG2173799
Dichlorodifluoromethane	U		0.0327	0.100	1	11/18/2023 17:37	WG2173799
1,1-Dichloroethane	U		0.0230	0.100	1	11/18/2023 17:37	WG2173799
1,2-Dichloroethane	U		0.0190	0.100	1	11/18/2023 17:37	WG2173799
1,1-Dichloroethene	U		0.0200	0.100	1	11/18/2023 17:37	WG2173799
cis-1,2-Dichloroethene	U		0.0276	0.100	1	11/18/2023 17:37	WG2173799
trans-1,2-Dichloroethene	U		0.0572	0.200	1	11/18/2023 17:37	WG2173799
1,2-Dichloropropane	U		0.0508	0.200	1	11/18/2023 17:37	WG2173799
1,1-Dichloropropene	U		0.0280	0.100	1	11/18/2023 17:37	WG2173799
1,3-Dichloropropane	U		0.0700	0.200	1	11/18/2023 17:37	WG2173799
cis-1,3-Dichloropropene	U		0.0271	0.100	1	11/18/2023 17:37	WG2173799
trans-1,3-Dichloropropene	U		0.0612	0.200	1	11/18/2023 17:37	WG2173799
2,2-Dichloropropane	U		0.0317	0.100	1	11/18/2023 17:37	WG2173799
Di-isopropyl ether	U		0.0140	0.0400	1	11/18/2023 17:37	WG2173799
Ethylbenzene	0.0550	J	0.0212	0.100	1	11/18/2023 17:37	WG2173799
Hexachloro-1,3-butadiene	U		0.508	1.00	1	11/18/2023 17:37	WG2173799
2-Hexanone	U		0.400	1.00	1	11/18/2023 17:37	WG2173799
n-Hexane	U		0.0424	0.200	1	11/18/2023 17:37	WG2173799
Iodomethane	U		0.242	0.500	1	11/18/2023 17:37	WG2173799
Isopropylbenzene	U		0.0345	0.100	1	11/18/2023 17:37	WG2173799
p-Isopropyltoluene	U		0.0932	0.200	1	11/18/2023 17:37	WG2173799
2-Butanone (MEK)	U		0.500	1.00	1	11/18/2023 17:37	WG2173799
Methylene Chloride	U		0.265	1.00	1	11/18/2023 17:37	WG2173799
4-Methyl-2-pentanone (MIBK)	U		0.400	1.00	1	11/18/2023 17:37	WG2173799
Methyl tert-butyl ether	U		0.0118	0.0400	1	11/18/2023 17:37	WG2173799
Naphthalene	U	UJ C3	0.124	0.500	1	11/18/2023 17:37	WG2173799
n-Propylbenzene	U		0.0472	0.200	1	11/18/2023 17:37	WG2173799
Styrene	U	UJ C3	0.109	0.500	1	11/18/2023 17:37	WG2173799
1,1,1,2-Tetrachloroethane	U		0.0200	0.100	1	11/18/2023 17:37	WG2173799
1,1,2,2-Tetrachloroethane	U		0.0156	0.100	1	11/18/2023 17:37	WG2173799
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 17:37	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 17:37	WG2173799
Toluene	0.116	J	0.0500	0.200	1	11/18/2023 17:37	WG2173799
1,2,3-Trichlorobenzene	U	UJ C3	0.0250	0.500	1	11/18/2023 17:37	WG2173799
1,2,4-Trichlorobenzene	U	UJ C3	0.193	0.500	1	11/18/2023 17:37	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 17:37	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 17:37	WG2173799
Trichloroethene	U		0.0160	0.0400	1	11/18/2023 17:37	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 17:37	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 17:37	WG2173799
1,2,4-Trimethylbenzene	0.0760	J	0.0464	0.200	1	11/18/2023 17:37	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 17:37	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 17:37	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 17:37	WG2173799
Vinyl chloride	3.50	J- C3	0.0273	0.100	1	11/18/2023 17:37	WG2173799
Xylenes, Total	0.200	J	0.191	0.260	1	11/18/2023 17:37	WG2173799
(S) Toluene-d8	*104*			*75.0-131*		*11/18/2023 17:37*	WG2173799
(S) 4-Bromofluorobenzene	*87.1*			*67.0-138*		*11/18/2023 17:37*	WG2173799
(S) 1,2-Dichloroethane-d4	*102*			*70.0-130*		*11/18/2023 17:37*	WG2173799

JC 1/4/24

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier		MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	17.0		J	13.7	25.0	25	11/18/2023 21:28	WG2173799
Acrylonitrile	U			1.90	12.5	25	11/18/2023 21:28	WG2173799
Benzene	U			0.400	1.00	25	11/18/2023 21:28	WG2173799
Bromobenzene	U			1.05	12.5	25	11/18/2023 21:28	WG2173799
Bromochloromethane	U			1.13	5.00	25	11/18/2023 21:28	WG2173799
Bromodichloromethane	U			0.788	2.50	25	11/18/2023 21:28	WG2173799
Bromoform	U			5.98	25.0	25	11/18/2023 21:28	WG2173799
Bromomethane	U			3.70	12.5	25	11/18/2023 21:28	WG2173799
n-Butylbenzene	U			3.83	12.5	25	11/18/2023 21:28	WG2173799
sec-Butylbenzene	U			2.53	12.5	25	11/18/2023 21:28	WG2173799
tert-Butylbenzene	U			1.55	5.00	25	11/18/2023 21:28	WG2173799
Carbon disulfide	U			4.05	12.5	25	11/18/2023 21:28	WG2173799
Carbon tetrachloride	U			1.08	5.00	25	11/18/2023 21:28	WG2173799
Chlorobenzene	U			0.573	2.50	25	11/18/2023 21:28	WG2173799
Chlorodibromomethane	U			0.450	2.50	25	11/18/2023 21:28	WG2173799
Chloroethane	U			1.08	5.00	25	11/18/2023 21:28	WG2173799
Chloroform	U			0.415	2.50	25	11/18/2023 21:28	WG2173799
Chloromethane	U			1.39	12.5	25	11/18/2023 21:28	WG2173799
2-Chlorotoluene	U			0.920	2.50	25	11/18/2023 21:28	WG2173799
4-Chlorotoluene	U			1.13	5.00	25	11/18/2023 21:28	WG2173799
1,2-Dibromo-3-Chloropropane	U			5.10	25.0	25	11/18/2023 21:28	WG2173799
1,2-Dibromoethane	U			0.525	2.50	25	11/18/2023 21:28	WG2173799
Dibromomethane	U			1.00	5.00	25	11/18/2023 21:28	WG2173799
1,2-Dichlorobenzene	U			1.45	5.00	25	11/18/2023 21:28	WG2173799
1,3-Dichlorobenzene	U			1.70	5.00	25	11/18/2023 21:28	WG2173799
1,4-Dichlorobenzene	U			1.97	5.00	25	11/18/2023 21:28	WG2173799
trans-1,4-Dichloro-2-butene	U	UJ	C3	1.40	5.00	25	11/18/2023 21:28	WG2173799
Dichlorodifluoromethane	U			0.818	2.50	25	11/18/2023 21:28	WG2173799
1,1-Dichloroethane	U			0.575	2.50	25	11/18/2023 21:28	WG2173799
1,2-Dichloroethane	U			0.475	2.50	25	11/18/2023 21:28	WG2173799
1,1-Dichloroethene	U			0.500	2.50	25	11/18/2023 21:28	WG2173799
cis-1,2-Dichloroethene	383			0.690	2.50	25	11/18/2023 21:28	WG2173799
trans-1,2-Dichloroethene	5.32			1.43	5.00	25	11/18/2023 21:28	WG2173799
1,2-Dichloropropane	U			1.27	5.00	25	11/18/2023 21:28	WG2173799
1,1-Dichloropropene	U			0.700	2.50	25	11/18/2023 21:28	WG2173799
1,3-Dichloropropane	U			1.75	5.00	25	11/18/2023 21:28	WG2173799
cis-1,3-Dichloropropene	U			0.678	2.50	25	11/18/2023 21:28	WG2173799
trans-1,3-Dichloropropene	U			1.53	5.00	25	11/18/2023 21:28	WG2173799
2,2-Dichloropropane	U			0.793	2.50	25	11/18/2023 21:28	WG2173799
Di-isopropyl ether	U			0.350	1.00	25	11/18/2023 21:28	WG2173799
Ethylbenzene	U			0.530	2.50	25	11/18/2023 21:28	WG2173799
Hexachloro-1,3-butadiene	U			12.7	25.0	25	11/18/2023 21:28	WG2173799
2-Hexanone	U			10.0	25.0	25	11/18/2023 21:28	WG2173799
n-Hexane	U			1.06	5.00	25	11/18/2023 21:28	WG2173799
Iodomethane	U			6.05	12.5	25	11/18/2023 21:28	WG2173799
Isopropylbenzene	U			0.863	2.50	25	11/18/2023 21:28	WG2173799
p-Isopropyltoluene	U			2.33	5.00	25	11/18/2023 21:28	WG2173799
2-Butanone (MEK)	U			12.5	25.0	25	11/18/2023 21:28	WG2173799
Methylene Chloride	U			6.63	25.0	25	11/18/2023 21:28	WG2173799
4-Methyl-2-pentanone (MIBK)	U			10.0	25.0	25	11/18/2023 21:28	WG2173799
Methyl tert-butyl ether	U			0.295	1.00	25	11/18/2023 21:28	WG2173799
Naphthalene	U	UJ	C3	3.10	12.5	25	11/18/2023 21:28	WG2173799
n-Propylbenzene	U			1.18	5.00	25	11/18/2023 21:28	WG2173799
Styrene	U	UJ	C3	2.73	12.5	25	11/18/2023 21:28	WG2173799
1,1,1,2-Tetrachloroethane	U			0.500	2.50	25	11/18/2023 21:28	WG2173799
1,1,2,2-Tetrachloroethane	U			0.390	2.50	25	11/18/2023 21:28	WG2173799

JC 1/4/24

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result		Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U			0.675	2.50	25	11/18/2023 21:28	WG2173799
Tetrachloroethene	U			0.700	2.50	25	11/18/2023 21:28	WG2173799
Toluene	U			1.25	5.00	25	11/18/2023 21:28	WG2173799
1,2,3-Trichlorobenzene	U	UJ	C3	0.625	12.5	25	11/18/2023 21:28	WG2173799
1,2,4-Trichlorobenzene	U	UJ	C3	4.83	12.5	25	11/18/2023 21:28	WG2173799
1,1,1-Trichloroethane	U			0.275	2.50	25	11/18/2023 21:28	WG2173799
1,1,2-Trichloroethane	U			0.883	2.50	25	11/18/2023 21:28	WG2173799
Trichloroethene	0.900		J	0.400	1.00	25	11/18/2023 21:28	WG2173799
Trichlorofluoromethane	U			0.500	2.50	25	11/18/2023 21:28	WG2173799
1,2,3-Trichloropropane	U			5.10	12.5	25	11/18/2023 21:28	WG2173799
1,2,4-Trimethylbenzene	U			1.16	5.00	25	11/18/2023 21:28	WG2173799
1,2,3-Trimethylbenzene	U			1.15	5.00	25	11/18/2023 21:28	WG2173799
1,3,5-Trimethylbenzene	U			1.08	5.00	25	11/18/2023 21:28	WG2173799
Vinyl acetate	U			3.53	12.5	25	11/18/2023 21:28	WG2173799
Vinyl chloride	241	J-	C3	0.682	2.50	25	11/18/2023 21:28	WG2173799
Xylenes, Total	U			4.78	6.50	25	11/18/2023 21:28	WG2173799
(S) Toluene-d8	*104*				*75.0-131*		*11/18/2023 21:28*	WG2173799
(S) 4-Bromofluorobenzene	*85.6*				*67.0-138*		*11/18/2023 21:28*	WG2173799
(S) 1,2-Dichloroethane-d4	*110*				*70.0-130*		*11/18/2023 21:28*	WG2173799

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier		MDL	RDL	Dilution	Analysis	Batch
	ug/l			ug/l	ug/l		date / time	
Acetone	U			0.548	1.00	1	11/18/2023 17:56	WG2173799
Acrylonitrile	U			0.0760	0.500	1	11/18/2023 17:56	WG2173799
Benzene	U			0.0160	0.0400	1	11/18/2023 17:56	WG2173799
Bromobenzene	U			0.0420	0.500	1	11/18/2023 17:56	WG2173799
Bromochloromethane	U			0.0452	0.200	1	11/18/2023 17:56	WG2173799
Bromodichloromethane	U			0.0315	0.100	1	11/18/2023 17:56	WG2173799
Bromoform	U			0.239	1.00	1	11/18/2023 17:56	WG2173799
Bromomethane	U			0.148	0.500	1	11/18/2023 17:56	WG2173799
n-Butylbenzene	U			0.153	0.500	1	11/18/2023 17:56	WG2173799
sec-Butylbenzene	U			0.101	0.500	1	11/18/2023 17:56	WG2173799
tert-Butylbenzene	U			0.0620	0.200	1	11/18/2023 17:56	WG2173799
Carbon disulfide	U			0.162	0.500	1	11/18/2023 17:56	WG2173799
Carbon tetrachloride	U			0.0432	0.200	1	11/18/2023 17:56	WG2173799
Chlorobenzene	U			0.0229	0.100	1	11/18/2023 17:56	WG2173799
Chlorodibromomethane	U			0.0180	0.100	1	11/18/2023 17:56	WG2173799
Chloroethane	U			0.0432	0.200	1	11/18/2023 17:56	WG2173799
Chloroform	U			0.0166	0.100	1	11/18/2023 17:56	WG2173799
Chloromethane	U			0.0556	0.500	1	11/18/2023 17:56	WG2173799
2-Chlorotoluene	U			0.0368	0.100	1	11/18/2023 17:56	WG2173799
4-Chlorotoluene	U			0.0452	0.200	1	11/18/2023 17:56	WG2173799
1,2-Dibromo-3-Chloropropane	U			0.204	1.00	1	11/18/2023 17:56	WG2173799
1,2-Dibromoethane	U			0.0210	0.100	1	11/18/2023 17:56	WG2173799
Dibromomethane	U			0.0400	0.200	1	11/18/2023 17:56	WG2173799
1,2-Dichlorobenzene	U			0.0580	0.200	1	11/18/2023 17:56	WG2173799
1,3-Dichlorobenzene	U			0.0680	0.200	1	11/18/2023 17:56	WG2173799
1,4-Dichlorobenzene	U			0.0788	0.200	1	11/18/2023 17:56	WG2173799
trans-1,4-Dichloro-2-butene	U	UJ	C3	0.0560	0.200	1	11/18/2023 17:56	WG2173799
Dichlorodifluoromethane	U			0.0327	0.100	1	11/18/2023 17:56	WG2173799
1,1-Dichloroethane	U			0.0230	0.100	1	11/18/2023 17:56	WG2173799
1,2-Dichloroethane	U			0.0190	0.100	1	11/18/2023 17:56	WG2173799
1,1-Dichloroethene	U			0.0200	0.100	1	11/18/2023 17:56	WG2173799
cis-1,2-Dichloroethene	5.93			0.0276	0.100	1	11/18/2023 17:56	WG2173799
trans-1,2-Dichloroethene	0.132		J	0.0572	0.200	1	11/18/2023 17:56	WG2173799
1,2-Dichloropropane	U			0.0508	0.200	1	11/18/2023 17:56	WG2173799
1,1-Dichloropropene	U			0.0280	0.100	1	11/18/2023 17:56	WG2173799
1,3-Dichloropropane	U			0.0700	0.200	1	11/18/2023 17:56	WG2173799
cis-1,3-Dichloropropene	U			0.0271	0.100	1	11/18/2023 17:56	WG2173799
trans-1,3-Dichloropropene	U			0.0612	0.200	1	11/18/2023 17:56	WG2173799
2,2-Dichloropropane	U			0.0317	0.100	1	11/18/2023 17:56	WG2173799
Di-isopropyl ether	U			0.0140	0.0400	1	11/18/2023 17:56	WG2173799
Ethylbenzene	U			0.0212	0.100	1	11/18/2023 17:56	WG2173799
Hexachloro-1,3-butadiene	U			0.508	1.00	1	11/18/2023 17:56	WG2173799
2-Hexanone	U			0.400	1.00	1	11/18/2023 17:56	WG2173799
n-Hexane	U			0.0424	0.200	1	11/18/2023 17:56	WG2173799
Iodomethane	U			0.242	0.500	1	11/18/2023 17:56	WG2173799
Isopropylbenzene	U			0.0345	0.100	1	11/18/2023 17:56	WG2173799
p-Isopropyltoluene	U			0.0932	0.200	1	11/18/2023 17:56	WG2173799
2-Butanone (MEK)	U			0.500	1.00	1	11/18/2023 17:56	WG2173799
Methylene Chloride	U			0.265	1.00	1	11/18/2023 17:56	WG2173799
4-Methyl-2-pentanone (MIBK)	U			0.400	1.00	1	11/18/2023 17:56	WG2173799
Methyl tert-butyl ether	U			0.0118	0.0400	1	11/18/2023 17:56	WG2173799
Naphthalene	U	UJ	C3	0.124	0.500	1	11/18/2023 17:56	WG2173799
n-Propylbenzene	U			0.0472	0.200	1	11/18/2023 17:56	WG2173799
Styrene	U	UJ	C3	0.109	0.500	1	11/18/2023 17:56	WG2173799
1,1,1,2-Tetrachloroethane	U			0.0200	0.100	1	11/18/2023 17:56	WG2173799
1,1,2,2-Tetrachloroethane	U			0.0156	0.100	1	11/18/2023 17:56	WG2173799

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Volatile Organic Compounds (GC/MS) by Method 8260D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.0270	0.100	1	11/18/2023 17:56	WG2173799
Tetrachloroethene	U		0.0280	0.100	1	11/18/2023 17:56	WG2173799
Toluene	0.0580	J	0.0500	0.200	1	11/18/2023 17:56	WG2173799
1,2,3-Trichlorobenzene	U	C3	0.0250	0.500	1	11/18/2023 17:56	WG2173799
1,2,4-Trichlorobenzene	U	C3	0.193	0.500	1	11/18/2023 17:56	WG2173799
1,1,1-Trichloroethane	U		0.0110	0.100	1	11/18/2023 17:56	WG2173799
1,1,2-Trichloroethane	U		0.0353	0.100	1	11/18/2023 17:56	WG2173799
Trichloroethene	0.0480		0.0160	0.0400	1	11/18/2023 17:56	WG2173799
Trichlorofluoromethane	U		0.0200	0.100	1	11/18/2023 17:56	WG2173799
1,2,3-Trichloropropane	U		0.204	0.500	1	11/18/2023 17:56	WG2173799
1,2,4-Trimethylbenzene	U		0.0464	0.200	1	11/18/2023 17:56	WG2173799
1,2,3-Trimethylbenzene	U		0.0460	0.200	1	11/18/2023 17:56	WG2173799
1,3,5-Trimethylbenzene	U		0.0432	0.200	1	11/18/2023 17:56	WG2173799
Vinyl acetate	U		0.141	0.500	1	11/18/2023 17:56	WG2173799
Vinyl chloride	54.7 J-	C3	0.0273	0.100	1	11/18/2023 17:56	WG2173799
Xylenes, Total	U		0.191	0.260	1	11/18/2023 17:56	WG2173799
(S) Toluene-d8	*103*			*75.0-131*		*11/18/2023 17:56*	WG2173799
(S) 4-Bromofluorobenzene	*87.8*			*67.0-138*		*11/18/2023 17:56*	WG2173799
(S) 1,2-Dichloroethane-d4	*103*			*70.0-130*		*11/18/2023 17:56*	WG2173799

UJ
UJ

JC 1/4/24

MEMORANDUM

TO: Project File **DATE:** January 3, 2024

FROM: Jessie Compeau

SUBJECT: Laboratory Data Validation Review

PROJECT: American Linen Data Validation

PROJECT #: 443022-1413001.10.701.03

TASK: EIM Data Validation Level EPA2A for Q4 2023 – Soil Vapor Samples

LAB: Pace Sample Delivery Groups (SDGs): L1679290, L1679329, and L1679682

Five soil vapor samples (including one field duplicate) and an ambient air sample were collected as part of the 2023 quarterly (Q4) monitoring event at the Former American Linen Supply Site, in Seattle, Washington on November 16-17, 2023. The samples were shipped and delivered to Pace Lab Sciences (Pace) of Mount Juliet, TN for laboratory analysis. Samples were analyzed for the following:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method TO-15.

The fourth quarter of RI sampling was conducted in November 2023. Results for groundwater are reported in several Sample Delivery Groups (SDGs) by Pace. The quality assurance review of the soil vapor extraction sample data associated with SDGs L1679290, L1679329 and L1679682 are summarized below.

DATA QUALIFICATIONS

Guidelines established by USEPA for a limited data validation review of analytical data along with Pace control limit criteria were used to validate the data. The comments presented in this memorandum refer to the laboratory's performance in meeting the quality control criteria outlined in the USEPA National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020). Following Guidelines, non-project-specific laboratory duplicates and matrix spike results were not evaluated as part of this data validation.

DATA VALIDATION

Completeness

All samples were collected and analyzed as requested with the following discussion:

- SDG L1679682: This SDG consists of one sample identified as a trip blank (TB-111723) however the trip blank sample was identified incorrectly and is considered an ambient air

sample because the evacuated canister valve was opened in the field for collection of a grab sample. PES indicates that collection of a trip blank is stipulated in the Statement of Work however trip blanks are not recommended because they do not provide information on sample handling procedures nor do they provide information on the condition of associated field sample canisters. Nineteen target analytes were detected in the ambient air grab sample (TB-111723) however no action is taken on this basis since historical and/or current ambient air sampling (e.g. upwind or downwind) data and associated impact on the associated soil vapor sample results are not available to support findings. SDG L1679682 was not validated for these reasons.

Sample Collection and Preservation

The laboratory supplied Summa Canister ™ (1 Liter) for the air samples. The samples were shipped, delivered by FedEx, and received in good condition by the laboratory. The samples were collected, handled, and delivered in an appropriate manner. No data qualifications were warranted based upon sampling techniques or preservation.

Holding Times

USEPA Method TO-15:
The analyses for VOCs by Method TO-15 were performed within the 30-day recommended holding time limit for the air samples collected in Summa canisters. All holding time criteria are met.

Initial and Continuing Calibration

Initial and continuing calibration data for this project are retained by the laboratory and available for review if necessary. Case narrative and laboratory notes do not indicate that there are any issues with calibration. Refer to the section on Quantitation Limits for additional information.

Method Blank Results

USEPA Method TO-15:
A laboratory method blank is included with the analytical batch per method requirement. The target analytes were not detected in the method blank at or above the reporting detection limits (RDLs) with the following discussions:

- SDG L1679290 - Analytical Batch WG2175324: A low level of ethanol is detected below the RDL in the method blank. No action is needed since ethanol is detected above the RDL in the associated sample.

- SDG L1679329 - Analytical Batch WG2175526: Low levels of carbon disulfide, ethanol, and methylene chloride are detected below the RDL in the method blank. No action is needed since these compounds are either not detected or detected above the RDL in the associated samples.

- SDG L1679682 - Analytical Batch WG2175367: Low levels of 1,4-dichlorobenzene and ethanol are detected below the RDL in the method blank. No action is needed since these compounds are either not detected or detected above the RDL in the associated sample.

Trip Blank Results

A trip blank is not required for the VOCs by TO-15 analyses. Refer to the section on Completeness for further discussion.

Field Duplicate Analyses

Field duplicates (SV-18-111623 and SV-910-111623) associated with SDG L1679329 were submitted and analyzed. VOC target analyte results are comparable and within 30 relative percent difference (RPD) or (±1x RDL for detections <5x RDL) with the following exceptions:

- SDG L1679329: Field duplicate samples SV-18-111623 and SV-910-111623 – Acetone, ethanol, ethylbenzene, isopropanol (2-propanol), m,p-xylene, methyl ethyl ketone (2-butanone), methylene chloride, o-xylene, p-ethyltoluene (4-ethyltoluene), tetrahydrofuran, toluene, and total xylene RPDs or absolute differences exceed criteria for field duplicate pair. **Acetone, ethanol, ethylbenzene, isopropanol (2-propanol), m,p-xylene, methyl ethyl ketone (2-butanone), methylene chloride, o-xylene, p-ethyltoluene (4-ethyltoluene), tetrahydrofuran, toluene, and total xylene results for samples SV-18-111623 and SV-910-111623 are estimated and qualified (UJ/J).**

Laboratory Duplicate/Replicate Analyses

USEPA Method TO-15:
A laboratory replicate was not performed. Refer to the Laboratory Control Sample section for additional information.

Surrogate Recoveries

USEPA Method TO-15
The surrogate percent recovery (% R) results for the VOCs by TO-15 air samples, method blanks, and laboratory control sample are within the laboratory surrogate control limits of 60 - 140% R with the following exception:

- SDG L1679290: Sample SV-24-111623 surrogate (1,4-bromofluorobenzene) % R is above criteria and laboratory qualified (J1). **All sample SV-24-111623 detections above the RDL are qualified as estimated (J) due to the elevated surrogate recovery.**

Laboratory Control Samples

USEPA Method TO-15:
Laboratory control sample/laboratory control sample duplicate (LCS/LCSD) samples were analyzed for the VOCs by TO-15 along with each analytical batch. The LCS/LCSD recoveries and relative percent differences (RPDs) for all control compounds met laboratory control limit criteria.

Matrix Spike/Matrix Spike Duplicates

A matrix spike/matrix spike duplicate (MS/MSD) is not required for the VOCs by TO-15.

Other Quality Control Issues

No laboratory quality control issues were identified in the laboratory report with the following discussion:

- Electronic data deliverables (EDDs) for these SDGs were provided by the laboratory and data validator qualifiers were entered. In some cases, different chemical synonyms are used between the EDD and the hardcopy. However, associated Chemical Abstracts Service (CAS) numbers are provided in the EDD to confirm chemical identifications.

Quantitation Limits

Results of the VOCs by TO-15 analysis are reported based on laboratory RDLs (assuming standard temperature and pressure is equal to 24.45) and reported in units of parts per million volume (ppbv) and micrograms per cubic meter ($\mu g/m^3$). Quality control results are reported in ppbv units only.

The RDLs indicate the minimum quantity of a target analyte that can be confidently determined by the reference method. The RDLs were acceptable for the project; therefore, no data qualifications were warranted with the following discussion:

- SDG L1679329: Sample SV01-111623 ethanol result is laboratory qualified (E) to indicate that the compound is off-scale and exceeds the upper limit of the initial calibration range. **Sample SV01-111623 ethanol result is estimated and qualified (J).**

Data Assessment

The laboratory data reported for this project were reviewed based on the criteria outlined in:

- USEPA National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020).

Data qualifiers were assigned and laboratory report pages with qualifiers are attached. All data, including qualified data, are judged to be acceptable for their intended use.

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv		Result ug/m3		Qualifier	Dilution	Batch	
Acetone	67-64-1	58.10	1.25	2.97	7.13	J	16.9	J		1	WG2175324	
Allyl chloride	107-05-1	76.53	0.200	0.626	ND		ND			1	WG2175324	
Benzene	71-43-2	78.10	0.200	0.639	ND		ND			1	WG2175324	
Benzyl Chloride	100-44-7	127	0.200	1.04	ND		ND			1	WG2175324	
Bromodichloromethane	75-27-4	164	0.200	1.34	ND		ND			1	WG2175324	
Bromoform	75-25-2	253	0.600	6.21	ND		ND			1	WG2175324	
Bromomethane	74-83-9	94.90	0.200	0.776	ND		ND			1	WG2175324	
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND		ND			1	WG2175324	
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND		ND			1	WG2175324	
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND		ND			1	WG2175324	
Chlorobenzene	108-90-7	113	0.200	0.924	ND		ND			1	WG2175324	
Chloroethane	75-00-3	64.50	0.200	0.528	ND		ND			1	WG2175324	
Chloroform	67-66-3	119	0.200	0.973	ND		ND			1	WG2175324	
Chloromethane	74-87-3	50.50	0.200	0.413	ND		ND			1	WG2175324	
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND		ND			1	WG2175324	
Cyclohexane	110-82-7	84.20	0.200	0.689	ND		ND			1	WG2175324	
Dibromochloromethane	124-48-1	208	0.200	1.70	ND		ND			1	WG2175324	
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND		ND			1	WG2175324	
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND		ND			1	WG2175324	
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND		ND			1	WG2175324	
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND		ND			1	WG2175324	
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND		ND			1	WG2175324	
1,1-Dichloroethane	75-34-3	98	0.200	0.802	ND		ND			1	WG2175324	
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND		ND			1	WG2175324	
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND		ND			1	WG2175324	
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND		ND			1	WG2175324	
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND		ND			1	WG2175324	
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND		ND			1	WG2175324	
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND		ND			1	WG2175324	
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND		ND			1	WG2175324	
Ethanol	64-17-5	46.10	2.50	4.71	10.5	J	19.8	J		1	WG2175324	
Ethylbenzene	100-41-4	106	0.200	0.867	ND		ND			1	WG2175324	
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND		ND			1	WG2175324	
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND		ND			1	WG2175324	
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND		ND			1	WG2175324	
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND		ND			1	WG2175324	
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND		ND			1	WG2175324	
Heptane	142-82-5	100	0.200	0.818	ND		ND			1	WG2175324	
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND		ND			1	WG2175324	
n-Hexane	110-54-3	86.20	0.630	2.22	6.84	J	24.1	J		1	WG2175324	
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND		ND			1	WG2175324	
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND		ND			1	WG2175324	
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND		ND			1	WG2175324	
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	6.05	J	17.8	J		1	WG2175324	
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND		ND			1	WG2175324	
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND		ND			1	WG2175324	
MTBE	1634-04-4	88.10	0.200	0.721	ND		ND			1	WG2175324	
Naphthalene	91-20-3	128	0.630	3.30	ND		ND			1	WG2175324	
2-Propanol	67-63-0	60.10	1.25	3.07	9.95	J	24.5	J		1	WG2175324	
Propene	115-07-1	42.10	1.25	2.15	ND		ND			1	WG2175324	
Styrene	100-42-5	104	0.200	0.851	ND		ND			1	WG2175324	
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND		ND			1	WG2175324	
Tetrachloroethylene	127-18-4	166	0.200	1.36	1.32	J	8.96	J		1	WG2175324	
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND		ND			1	WG2175324	
Toluene	108-88-3	92.10	0.500	1.88	ND		ND			1	WG2175324	
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND		ND			1	WG2175324	JC 1/3/2024

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv		Result ug/m3		Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND		ND			1	WG2175324
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND		ND			1	WG2175324
Trichloroethylene	79-01-6	131	0.200	1.07	ND		ND			1	WG2175324
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND		ND			1	WG2175324
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND		ND			1	WG2175324
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND		ND			1	WG2175324
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND		ND			1	WG2175324
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND		ND			1	WG2175324
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND		ND			1	WG2175324
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND		ND			1	WG2175324
m&p-Xylene	1330-20-7	106	0.400	1.73	0.541	J	2.35	J		1	WG2175324
o-Xylene	95-47-6	106	0.200	0.867	ND		ND			1	WG2175324
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*192*				J1		WG2175324

Sample Narrative:

L1679290-01 WG2175324: Surrogate failure due to matrix interference

JC 1/3/2024

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	11.1	26.4		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	ND	ND		1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	0.935	4.55		1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	0.899	3.60		1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	86.9 J	164 J	E	1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.275	1.36		1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	1.04	3.67		1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	11.1	38.5		1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.53	7.46		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	12.8	31.5		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.611	4.15		1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	0.806	3.04		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	2.72	14.8		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	ND		1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	0.402	1.74		1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*95.3*				WG2175526

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv		Result ug/m3		Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	ND	UJ	ND	UJ		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND		ND			1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	0.376		1.20			1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND		ND			1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND		ND			1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND		ND			1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND		ND			1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND		ND			1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.554		1.72		B	1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND		ND			1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND		ND			1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND		ND			1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	ND		ND			1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND		ND			1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND		ND			1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND		ND			1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND		ND			1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND		ND			1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND		ND			1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND		ND			1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND		ND			1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND		ND			1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	13.7		54.9			1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND		ND			1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND		ND			1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND		ND			1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND		ND			1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND		ND			1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND		ND			1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND		ND			1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	3.83	J	7.22	J	B	1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	ND	UJ	ND	UJ		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	UJ	ND	UJ		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND		ND			1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND		ND			1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND		ND			1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND		ND			1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND		ND			1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND		ND			1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	ND		ND			1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND		ND			1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	0.597	J	2.07	J	B	1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND		ND			1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	UJ	ND	UJ		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND		ND			1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND		ND			1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND		ND			1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND		ND			1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	ND	UJ	ND	UJ		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND		ND			1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND		ND			1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND		ND			1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND		ND			1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	UJ	ND	UJ		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	ND	UJ	ND	UJ		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND		ND			1	WG2175526

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv		Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	3.77		20.5		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND		ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND		ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND		ND		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND		ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	5.55		25.9		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	30.4		77.7		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND		ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND		ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	UJ	ND	UJ	1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	UJ	ND	UJ	1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	ND	UJ	ND	UJ	1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*98.5*					WG2175526

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
Acetone	67-64-1	58.10	1.25	2.97	85.9 J	204 J		1	WG2175526
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526
Benzene	71-43-2	78.10	0.200	0.639	0.493	1.57		1	WG2175526
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.445	1.39	B	1	WG2175526
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175526
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526
1,1-Dichloroethane	75-34-3	98	0.200	0.802	13.1	52.5		1	WG2175526
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526
Ethanol	64-17-5	46.10	2.50	4.71	21.0 J	39.6 J		1	WG2175526
Ethylbenzene	100-41-4	106	0.200	0.867	0.723 J	3.13 J		1	WG2175526
4-Ethyltoluene	622-96-8	120	0.200	0.982	0.406 J	1.99 J		1	WG2175526
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	ND	ND		1	WG2175526
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	ND	ND		1	WG2175526
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526
n-Hexane	110-54-3	86.20	0.630	2.22	0.633	2.23		1	WG2175526
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526
Methylene Chloride	75-09-2	84.90	0.200	0.694	ND UJ	ND UJ		1	WG2175526
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	2.88 J	8.49 J		1	WG2175526
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526
2-Propanol	67-63-0	60.10	1.25	3.07	10.0 J	24.6 J		1	WG2175526
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526
Tetrachloroethylene	127-18-4	166	0.200	1.36	ND	ND		1	WG2175526
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	63.1 J	186 J		1	WG2175526
Toluene	108-88-3	92.10	0.500	1.88	2.65 J	9.98 J		1	WG2175526
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	3.67	20.0		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	0.400	1.96		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	5.04	23.5		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	29.6	75.7		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	3.86	16.8	J J	1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	2.90	12.6	J J	1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	0.957	4.15	J J	1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*106*				WG2175526

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Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch	
Acetone	67-64-1	58.10	1.25	2.97	3.73	8.86		1	WG2175526	
Allyl chloride	107-05-1	76.53	0.200	0.626	ND	ND		1	WG2175526	
Benzene	71-43-2	78.10	0.200	0.639	ND	ND		1	WG2175526	
Benzyl Chloride	100-44-7	127	0.200	1.04	ND	ND		1	WG2175526	
Bromodichloromethane	75-27-4	164	0.200	1.34	ND	ND		1	WG2175526	
Bromoform	75-25-2	253	0.600	6.21	ND	ND		1	WG2175526	
Bromomethane	74-83-9	94.90	0.200	0.776	ND	ND		1	WG2175526	
1,3-Butadiene	106-99-0	54.10	2.00	4.43	ND	ND		1	WG2175526	
Carbon disulfide	75-15-0	76.10	0.200	0.622	0.685	2.13	B	1	WG2175526	
Carbon tetrachloride	56-23-5	154	0.200	1.26	ND	ND		1	WG2175526	
Chlorobenzene	108-90-7	113	0.200	0.924	ND	ND		1	WG2175526	
Chloroethane	75-00-3	64.50	0.200	0.528	ND	ND		1	WG2175526	
Chloroform	67-66-3	119	0.200	0.973	ND	ND		1	WG2175526	
Chloromethane	74-87-3	50.50	0.200	0.413	ND	ND		1	WG2175526	
2-Chlorotoluene	95-49-8	126	0.200	1.03	ND	ND		1	WG2175526	
Cyclohexane	110-82-7	84.20	0.200	0.689	ND	ND		1	WG2175526	
Dibromochloromethane	124-48-1	208	0.200	1.70	ND	ND		1	WG2175526	
1,2-Dibromoethane	106-93-4	188	0.200	1.54	ND	ND		1	WG2175526	
1,2-Dichlorobenzene	95-50-1	147	0.200	1.20	ND	ND		1	WG2175526	
1,3-Dichlorobenzene	541-73-1	147	0.200	1.20	ND	ND		1	WG2175526	
1,4-Dichlorobenzene	106-46-7	147	0.200	1.20	ND	ND		1	WG2175526	
1,2-Dichloroethane	107-06-2	99	0.200	0.810	ND	ND		1	WG2175526	
1,1-Dichloroethane	75-34-3	98	0.200	0.802	1.39	5.57		1	WG2175526	
1,1-Dichloroethene	75-35-4	96.90	0.200	0.793	ND	ND		1	WG2175526	
cis-1,2-Dichloroethene	156-59-2	96.90	0.200	0.793	ND	ND		1	WG2175526	
trans-1,2-Dichloroethene	156-60-5	96.90	0.200	0.793	ND	ND		1	WG2175526	
1,2-Dichloropropane	78-87-5	113	0.200	0.924	ND	ND		1	WG2175526	
cis-1,3-Dichloropropene	10061-01-5	111	0.200	0.908	ND	ND		1	WG2175526	
trans-1,3-Dichloropropene	10061-02-6	111	0.200	0.908	ND	ND		1	WG2175526	
1,4-Dioxane	123-91-1	88.10	0.630	2.27	ND	ND		1	WG2175526	
Ethanol	64-17-5	46.10	2.50	4.71	14.6	27.5		1	WG2175526	
Ethylbenzene	100-41-4	106	0.200	0.867	ND	ND		1	WG2175526	
4-Ethyltoluene	622-96-8	120	0.200	0.982	ND	ND		1	WG2175526	
Trichlorofluoromethane	75-69-4	137.40	0.200	1.12	0.257	1.44		1	WG2175526	
Dichlorodifluoromethane	75-71-8	120.92	0.200	0.989	0.356	1.76		1	WG2175526	
1,1,2-Trichlorotrifluoroethane	76-13-1	187.40	0.200	1.53	ND	ND		1	WG2175526	
1,2-Dichlorotetrafluoroethane	76-14-2	171	0.200	1.40	ND	ND		1	WG2175526	
Heptane	142-82-5	100	0.200	0.818	ND	ND		1	WG2175526	
Hexachloro-1,3-butadiene	87-68-3	261	0.630	6.73	ND	ND		1	WG2175526	
n-Hexane	110-54-3	86.20	0.630	2.22	ND	ND		1	WG2175526	
Isopropylbenzene	98-82-8	120.20	0.200	0.983	ND	ND		1	WG2175526	
Methylene Chloride	75-09-2	84.90	0.200	0.694	4.25	14.8		1	WG2175526	
Methyl Butyl Ketone	591-78-6	100	1.25	5.11	ND	ND		1	WG2175526	
2-Butanone (MEK)	78-93-3	72.10	1.25	3.69	ND	ND		1	WG2175526	
4-Methyl-2-pentanone (MIBK)	108-10-1	100.10	1.25	5.12	ND	ND		1	WG2175526	
Methyl methacrylate	80-62-6	100.12	0.200	0.819	ND	ND		1	WG2175526	
MTBE	1634-04-4	88.10	0.200	0.721	ND	ND		1	WG2175526	
Naphthalene	91-20-3	128	0.630	3.30	ND	ND		1	WG2175526	
2-Propanol	67-63-0	60.10	1.25	3.07	3.84	9.44		1	WG2175526	
Propene	115-07-1	42.10	1.25	2.15	ND	ND		1	WG2175526	
Styrene	100-42-5	104	0.200	0.851	ND	ND		1	WG2175526	
1,1,2,2-Tetrachloroethane	79-34-5	168	0.200	1.37	ND	ND		1	WG2175526	
Tetrachloroethylene	127-18-4	166	0.200	1.36	0.748	5.08		1	WG2175526	
Tetrahydrofuran	109-99-9	72.10	0.200	0.590	ND	ND		1	WG2175526	JC 1/3/24
Toluene	108-88-3	92.10	0.500	1.88	ND	ND		1	WG2175526	
1,2,4-Trichlorobenzene	120-82-1	181	0.630	4.66	ND	ND		1	WG2175526	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (MS) by Method TO-15

Analyte	CAS #	Mol. Wt.	RDL1 ppbv	RDL2 ug/m3	Result ppbv	Result ug/m3	Qualifier	Dilution	Batch
1,1,1-Trichloroethane	71-55-6	133	0.200	1.09	ND	ND		1	WG2175526
1,1,2-Trichloroethane	79-00-5	133	0.200	1.09	ND	ND		1	WG2175526
Trichloroethylene	79-01-6	131	0.200	1.07	ND	ND		1	WG2175526
1,2,4-Trimethylbenzene	95-63-6	120	0.200	0.982	ND	ND		1	WG2175526
1,3,5-Trimethylbenzene	108-67-8	120	0.200	0.982	ND	ND		1	WG2175526
2,2,4-Trimethylpentane	540-84-1	114.22	0.200	0.934	ND	ND		1	WG2175526
Vinyl chloride	75-01-4	62.50	0.200	0.511	ND	ND		1	WG2175526
Vinyl Bromide	593-60-2	106.95	0.200	0.875	ND	ND		1	WG2175526
Vinyl acetate	108-05-4	86.10	0.630	2.22	ND	ND		1	WG2175526
Xylenes, Total	1330-20-7	106.16	0.600	2.61	ND	ND		1	WG2175526
m&p-Xylene	1330-20-7	106	0.400	1.73	ND	ND		1	WG2175526
o-Xylene	95-47-6	106	0.200	0.867	ND	ND		1	WG2175526
(S) 1,4-Bromofluorobenzene	*460-00-4*	*175*	*60.0-140*		*94.1*				WG2175526

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