



PWS_1120014_AC_20200526_Analysis Report
LCRA Environmental Laboratory Services
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June 8, 2020

MICHAEL RAWSON
PO BOX 1160
SULPHUR SPRINGS, TX 75483

RE: Final Analytical Report Q2020631

Attn: MICHAEL RAWSON

Enclosed are the analytical results for sample(s) received by LCRA Environmental Laboratory Services. Results reported herein conform to the most current NELAP standards, where applicable, unless otherwise narrated in the body of the report. This final report provides results related only to the sample(s) as received for the above referenced work order.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 730-6022. We look forward to assisting you again.

Authorized for release by:

Bhanu Acharya
Account Manager
bhanu.acharya@lcra.org



Enclosures:



Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received
Q2020631001	2053070	DW	552.2 Haloacetic Acids by GC	5/26/2020 09:57	5/27/2020 10:17
Q2020631001	2053070	DW	E524.2 Volatiles by GC/MS	5/26/2020 09:57	5/27/2020 10:17
Q2020631002	2053071	DW	552.2 Haloacetic Acids by GC	5/26/2020 09:42	5/27/2020 10:17
Q2020631002	2053071	DW	E524.2 Volatiles by GC/MS	5/26/2020 09:42	5/27/2020 10:17
Q2020631003	2063131	DW	E524.2 Volatiles by GC/MS	5/26/2020 09:16	5/27/2020 10:17

Report Definitions

- MRL - Minimum Reporting Limit**
- LOD - Limit of Detection**
- ML - Maximum Limit - Client Specified**
- MCL - Maximum Contaminant Level**
- MDL - Method Detection Limit**
- LOQ - Limit of Quantitation - Client Specified**
- DF - Dilution Factor**
- Qual - Qualifier**
- (S) - Surrogate Spike**
- QC Qual - red font indicates Result Value outside acceptable range**
- B- Analyte detected in method blank**
- S - Spike recovery outside limit**
- R - RPD outside duplicate precision limit**
- J - Analyte detected below quantitation limit**
- RPD - Relative Percent Difference**
- SL - Spike Recovery Low**
- SH - Spike Recovery High**

Project Summary

Sample Analysis Comments

Lab ID: Q2020631001 **Sample ID:** 2053070

- Not Accredited - Bromochloroacetic Acid
- Not Accredited - Bromodichloromethane
- Not Accredited - Bromoform
- Not Accredited - Chloroform
- Not Accredited - Dibromoacetic Acid
- Not Accredited - Dibromochloromethane
- Not Accredited - Dichloroacetic Acid
- Not Accredited - Monobromoacetic Acid
- Not Accredited - Monochloroacetic Acid
- Not Accredited - Trichloroacetic acid

Lab ID: Q2020631002 **Sample ID:** 2053071

- Not Accredited - Bromochloroacetic Acid
- Not Accredited - Bromodichloromethane
- Not Accredited - Bromoform
- Not Accredited - Chloroform
- Not Accredited - Dibromoacetic Acid
- Not Accredited - Dibromochloromethane
- Not Accredited - Dichloroacetic Acid
- Not Accredited - Monobromoacetic Acid
- Not Accredited - Monochloroacetic Acid
- Not Accredited - Trichloroacetic acid

Lab ID: Q2020631003 **Sample ID:** 2063131

- Not Accredited - 1,1,1,2-Tetrachloroethane
- Not Accredited - 1,1,2,2-Tetrachloroethane
- Not Accredited - 1,1-Dichloroethane
- Not Accredited - 1,1-Dichloropropene
- Not Accredited - 1,2,3-Trichlorobenzene
- Not Accredited - 1,2,3-Trichloropropane
- Not Accredited - 1,2,4-Trimethylbenzene
- Not Accredited - 1,3,5-Trimethylbenzene
- Not Accredited - 1,3-Dichlorobenzene
- Not Accredited - 1,3-Dichloropropane
- Not Accredited - 2,2-Dichloropropane
- Not Accredited - 2-Butanone
- Not Accredited - 2-Chlorotoluene
- Not Accredited - 2-Hexanone
- Not Accredited - 4-Chlorotoluene
- Not Accredited - 4-Isopropyltoluene
- Not Accredited - 4-Methyl-2-pentanone
- Not Accredited - Acetone
- Not Accredited - Acrylonitrile
- Not Accredited - Bromobenzene
- Not Accredited - Bromochloromethane
- Not Accredited - Bromodichloromethane
- Not Accredited - Bromoform



Project Summary (cont.)

Sample Analysis Comments

Lab ID: Q2020631003

Sample ID: 2063131

- Not Accredited - Bromomethane
- Not Accredited - Carbon disulfide
- Not Accredited - Chloroethane
- Not Accredited - Chloroform
- Not Accredited - Chloromethane
- Not Accredited - Dibromochloromethane
- Not Accredited - Dibromomethane
- Not Accredited - Dichlorodifluoromethane
- Not Accredited - Ethyl methacrylate
- Not Accredited - Hexachlorobutadiene
- Not Accredited - Isopropylbenzene (Cumene)
- Not Accredited - Methyl iodide
- Not Accredited - Methyl methacrylate
- Not Accredited - Naphthalene
- Not Accredited - Tetrahydrofuran
- Not Accredited - Trichlorofluoromethane
- Not Accredited - Vinyl acetate
- Not Accredited - cis-1,3-Dichloropropene
- Not Accredited - n-Butylbenzene
- Not Accredited - n-Propylbenzene
- Not Accredited - sec-Butylbenzene
- Not Accredited - tert-Butyl methyl ether (MTBE)
- Not Accredited - tert-Butylbenzene
- Not Accredited - trans-1,3-Dichloropropene



Analytical Results

Lab ID: Q2020631001	Date Received: 5/27/2020 10:17	Matrix: Drinking Water
Sample ID: 2053070	Date Collected: 5/26/2020 09:57	Sample Type: SAMPLE
Project ID: DRINKING WATER PROGRAM	Location: 145 CR 4701, SULPHUR SPRINGS	
Facility: DS01	Client ID: TX1120014	
Sample Point: DBP2-01		

Parameter	Results Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
HALOACETIC ACIDS (552.2 Haloacetic Acids by GC)										
Bromochloroacetic Acid	4.20 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:41	MF	*
Dibromoacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:41	MF	*
Dichloroacetic Acid	9.50 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:41	MF	*
Monobromoacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:41	MF	*
Monochloroacetic Acid	1.40 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:41	MF	*
Total Regulated HAA	18.4 ug/L	1.00	0.500	60		06/01/20 15:00	MFM	06/03/20 11:41	MF	
Trichloroacetic acid	7.50 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:41	MF	*

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
2,3-Dibromopropionic acid (S)	%	103	70 - 130

Volatiles (E524.2 Volatiles by GC/MS)

Parameter	Results Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
Chloroform	19.6 ug/L	1.00	0.500		1			06/02/20 07:50	MH	*
Bromodichloromethane	7.83 ug/L	1.00	0.500		1			06/02/20 07:50	MH	*
Dibromochloromethane	1.81 ug/L	1.00	0.500		1			06/02/20 07:50	MH	*
Bromoform	<1.00 ug/L	1.00	0.500		1			06/02/20 07:50	MH	*
Total Trihalomethanes	29.3 ug/L	1.00	0.500	80				06/02/20 07:50	MH	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
1,2-Dichlorobenzene-d4 (S)	%	91.9	70 - 130
4-Bromofluorobenzene (S)	%	86.5	70 - 130



Analytical Results (cont.)

Lab ID: Q2020631002	Date Received: 5/27/2020 10:17	Matrix: Drinking Water
Sample ID: 2053071	Date Collected: 5/26/2020 09:42	Sample Type: SAMPLE
Project ID: DRINKING WATER PROGRAM	Location: 6839 HWY 11 W, SULPHUR SPRINGS	
Facility: DS01	Client ID: TX1120014	
Sample Point: DBP2-02		

Parameter	Results Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
HALOACETIC ACIDS (552.2 Haloacetic Acids by GC)										
Bromochloroacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:58	MF	*
Dibromoacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:58	MF	*
Dichloroacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:58	MF	*
Monobromoacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:58	MF	*
Monochloroacetic Acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:58	MF	*
Total Regulated HAA	<1.00 ug/L	1.00	0.500	60		06/01/20 15:00	MFM	06/03/20 11:58	MF	
Trichloroacetic acid	<1.00 ug/L	1.00	0.500		1	06/01/20 15:00	MFM	06/03/20 11:58	MF	*

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
2,3-Dibromopropionic acid (S)	%	107	70 - 130

Volatiles (E524.2 Volatiles by GC/MS)

Parameter	Results Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
Chloroform	<1.00 ug/L	1.00	0.500		1			06/02/20 08:15	MH	*
Bromodichloromethane	<1.00 ug/L	1.00	0.500		1			06/02/20 08:15	MH	*
Dibromochloromethane	1.28 ug/L	1.00	0.500		1			06/02/20 08:15	MH	*
Bromoform	2.38 ug/L	1.00	0.500		1			06/02/20 08:15	MH	*
Total Trihalomethanes	3.66 ug/L	1.00	0.500	80				06/02/20 08:15	MH	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
1,2-Dichlorobenzene-d4 (S)	%	94	70 - 130
4-Bromofluorobenzene (S)	%	87.1	70 - 130



Analytical Results (cont.)

Lab ID: Q2020631003	Date Received: 5/27/2020 10:17	Matrix: Drinking Water
Sample ID: 2063131	Date Collected: 5/26/2020 09:16	Sample Type: SAMPLE
Project ID: DRINKING WATER PROGRAM	Location: MT ZION PLANT - STANDPIPE	
Facility: EP002	Client ID: TX1120014	
Sample Point: TRT-TAP		

Parameter	Results Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
E524.2 Regulated (E524.2 Volatiles by GC/MS)										
Vinyl chloride	<0.500 ug/L	0.500	0.250	2	1			06/01/20 14:37		DD
1,1-Dichloroethene	<0.500 ug/L	0.500	0.250	7	1			06/01/20 14:37		DD
Methylene chloride	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
trans-1,2-Dichloroethene	<0.500 ug/L	0.500	0.250	100	1			06/01/20 14:37		DD
cis-1,2-Dichloroethene	<0.500 ug/L	0.500	0.250	70	1			06/01/20 14:37		DD
1,1,1-Trichloroethane	<0.500 ug/L	0.500	0.250	200	1			06/01/20 14:37		DD
Carbon tetrachloride	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
1,2-Dichloroethane	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
Benzene	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
Trichloroethene	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
1,2-Dichloropropane	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
Toluene	<0.500 ug/L	0.500	0.250	1000	1			06/01/20 14:37		DD
1,1,2-Trichloroethane	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
Tetrachloroethene	<0.500 ug/L	0.500	0.250	5	1			06/01/20 14:37		DD
Chlorobenzene	<0.500 ug/L	0.500	0.250	100	1			06/01/20 14:37		DD
Ethyl Benzene	<0.500 ug/L	0.500	0.250	700	1			06/01/20 14:37		DD
m,p-Xylene	2.29 ug/L	1.00	0.500		1			06/01/20 14:37		DD
Styrene	<0.500 ug/L	0.500	0.250	100	1			06/01/20 14:37		DD
1,4-Dichlorobenzene	<0.500 ug/L	0.500	0.250	75	1			06/01/20 14:37		DD
1,2-Dichlorobenzene	<0.500 ug/L	0.500	0.250	600	1			06/01/20 14:37		DD
1,2,4-Trichlorobenzene	<0.500 ug/L	0.500	0.250	70	1			06/01/20 14:37		DD
Xylene (total)	3.66 ug/L	0.500	0.250	10000	1			06/01/20 14:37		DD

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
1,2-Dichlorobenzene-d4 (S)	%	107	70 - 130
4-Bromofluorobenzene (S)	%	105	70 - 130

E524.2 Unregulated (E524.2 Volatiles by GC/MS)

Dichlorodifluoromethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Chloromethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Bromomethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Chloroethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
4-Chlorotoluene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Trichlorofluoromethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Acetone	<5.00 ug/L	5.00	2.50		1			06/01/20 14:37		DD	*
Methyl iodide	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Carbon disulfide	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Acrylonitrile	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
tert-Butyl methyl ether (MTBE)	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
1,1-Dichloroethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Vinyl acetate	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
2,2-Dichloropropane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
2-Butanone	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Bromochloromethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Tetrahydrofuran	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37		DD	*
Chloroform	5.77 ug/L	1.00	0.500		1			06/01/20 14:37		DD	*



Analytical Results (cont.)

Lab ID: Q2020631003	Date Received: 5/27/2020 10:17	Matrix: Drinking Water
Sample ID: 2063131	Date Collected: 5/26/2020 09:16	Sample Type: SAMPLE
Project ID: DRINKING WATER PROGRAM	Location: MT ZION PLANT - STANDPIPE	
Facility: EP002	Client ID: TX1120014	
Sample Point: TRT-TAP		

Parameter	Results Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
1,1-Dichloropropene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Methyl methacrylate	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Dibromomethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Bromodichloromethane	13.8 ug/L	1.00	0.500		1			06/01/20 14:37	DD	*
cis-1,3-Dichloropropene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
4-Methyl-2-pentanone	2.14 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
trans-1,3-Dichloropropene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Ethyl methacrylate	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,3-Dichloropropane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
2-Hexanone	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Dibromochloromethane	25.1 ug/L	1.00	0.500		1			06/01/20 14:37	DD	*
1,1,1,2-Tetrachloroethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
o-Xylene	1.37 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Bromoform	17.8 ug/L	1.00	0.500		1			06/01/20 14:37	DD	*
Isopropylbenzene (Cumene)	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,1,1,2-Tetrachloroethane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Bromobenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,2,3-Trichloropropane	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
n-Propylbenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
2-Chlorotoluene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,3,5-Trimethylbenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
tert-Butylbenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,2,4-Trimethylbenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
sec-Butylbenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,3-Dichlorobenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
4-Isopropyltoluene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
n-Butylbenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Hexachlorobutadiene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
Naphthalene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*
1,2,3-Trichlorobenzene	<0.500 ug/L	0.500	0.250		1			06/01/20 14:37	DD	*

Quality Control

Preparation Batch: OEXT / 7974

Analysis Method: 552.2 Haloacetic Acids by GC

Preparation Method: 552.2 Haloacetic Acids by GC

Associated Lab IDs: Q2020631001, Q2020631002

Laboratory Reagent Blank (1452316)

Parameter	Results	Units	MRL	LOD	Qualifier
Monochloroacetic Acid	<1.00	ug/L	1.00	0.500	
Monobromoacetic Acid	<1.00	ug/L	1.00	0.500	
Dichloroacetic Acid	<1.00	ug/L	1.00	0.500	
Trichloroacetic acid	<1.00	ug/L	1.00	0.500	
Bromochloroacetic Acid	<1.00	ug/L	1.00	0.500	
Dibromoacetic Acid	<1.00	ug/L	1.00	0.500	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
2,3-Dibromopropionic acid (S)	%	86.8	70 - 130

Method Reporting Limit Check (1452319)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Monochloroacetic Acid	ug/L	1	1.4	140	50 - 150	
Monobromoacetic Acid	ug/L	1	1.2	120	50 - 150	
Dichloroacetic Acid	ug/L	1	1.3	130	50 - 150	
Trichloroacetic acid	ug/L	1	1.2	120	50 - 150	
Bromochloroacetic Acid	ug/L	1	1.5	150	50 - 150	
Dibromoacetic Acid	ug/L	1	1.1	110	50 - 150	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
2,3-Dibromopropionic acid (S)	%	95.8	50 - 150	

Laboratory Fortified Blank (1452330); Lab Fortified Blank Duplicate (1452331)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %	Qual
Monochloroacetic Acid	ug/L	50	47	94	70 - 130	46.5	93	1.07	30	
Monobromoacetic Acid	ug/L	50	46.8	93.6	70 - 130	46.1	92.2	1.51	30	
Dichloroacetic Acid	ug/L	50	47.8	95.6	70 - 130	47.5	95	.63	30	
Trichloroacetic acid	ug/L	50	45.6	91.2	70 - 130	45.9	91.8	.656	30	
Bromochloroacetic Acid	ug/L	50	47.8	95.6	70 - 130	46.9	93.8	1.9	30	
Dibromoacetic Acid	ug/L	50	46.3	92.6	70 - 130	46.5	93	.431	30	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
2,3-Dibromopropionic acid (S)	%	89.4	70 - 130	91

Laboratory Fortified Matrix (1452332) Original: Q2020608028

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Monochloroacetic Acid	ug/L	100	94.6	91.7	70 - 130	
Monobromoacetic Acid	ug/L	100	97	97	70 - 130	
Dichloroacetic Acid	ug/L	100	124	98.5	70 - 130	
Trichloroacetic acid	ug/L	100	112	106	70 - 130	
Bromochloroacetic Acid	ug/L	100	107	101	70 - 130	
Dibromoacetic Acid	ug/L	100	104	104	70 - 130	



Quality Control (cont.)

Preparation Batch: OEXT / 7974	Analysis Method: 552.2 Haloacetic Acids by GC
Preparation Method: 552.2 Haloacetic Acids by GC	
Associated Lab IDs: Q2020631001, Q2020631002	

(continued)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
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Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery	Control Limits %
2,3-Dibromopropionic acid (S)	%	103	70 - 130		70 - 130

Laboratory Fortified Blank (1452333); Lab Fortified Blank Duplicate (1452334)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %	Qual
Monochloroacetic Acid	ug/L	50	46.5	93	70 - 130	46.8	93.6	.643	30	
Monobromoacetic Acid	ug/L	50	46.1	92.2	70 - 130	46.5	93	.864	30	
Dichloroacetic Acid	ug/L	50	47.5	95	70 - 130	48.5	97	2.08	30	
Trichloroacetic acid	ug/L	50	45.9	91.8	70 - 130	47.3	94.6	3	30	
Bromochloroacetic Acid	ug/L	50	46.9	93.8	70 - 130	48.3	96.6	2.94	30	
Dibromoacetic Acid	ug/L	50	46.5	93	70 - 130	47.7	95.4	2.55	30	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
2,3-Dibromopropionic acid (S)	%	91	70 - 130	95.2

Laboratory Fortified Matrix (1452335) Original: Q2020631002

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Monochloroacetic Acid	ug/L	100	70.5	70.5	70 - 130	
Monobromoacetic Acid	ug/L	100	73	73	70 - 130	
Dichloroacetic Acid	ug/L	100	77	77	70 - 130	
Trichloroacetic acid	ug/L	100	82.6	82.6	70 - 130	
Bromochloroacetic Acid	ug/L	100	81.2	81.2	70 - 130	
Dibromoacetic Acid	ug/L	100	81.1	81.1	70 - 130	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery	Control Limits %
2,3-Dibromopropionic acid (S)	%	85.8	70 - 130		70 - 130



Quality Control (cont.)

Preparation Batch: OVOL / 4686 **Analysis Method:** E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS
Associated Lab IDs: Q2020631003

Laboratory Fortified Blank (1452398)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Dichlorodifluoromethane	ug/L	5	5.67	113	70 - 130	
Chloromethane	ug/L	5	5.03	101	70 - 130	
Vinyl chloride	ug/L	5	5.19	104	70 - 130	
Bromomethane	ug/L	5	5.37	107	70 - 130	
Chloroethane	ug/L	5	5.41	108	70 - 130	
4-Chlorotoluene	ug/L	5	5	100	70 - 130	
Trichlorofluoromethane	ug/L	5	5.49	110	70 - 130	
1,1-Dichloroethene	ug/L	5	5.27	105	70 - 130	
Acetone	ug/L	5	5.04	101	70 - 130	
Methyl iodide	ug/L	5	5.46	109	70 - 130	
Carbon disulfide	ug/L	5	5.34	107	70 - 130	
Methylene chloride	ug/L	5	5.13	103	70 - 130	
trans-1,2-Dichloroethene	ug/L	5	5.23	105	70 - 130	
Acrylonitrile	ug/L	5	5.6	112	70 - 130	
tert-Butyl methyl ether (MTBE)	ug/L	5	5.8	116	70 - 130	
1,1-Dichloroethane	ug/L	5	4.93	98.6	70 - 130	
Vinyl acetate	ug/L	5	5.48	110	70 - 130	
2,2-Dichloropropane	ug/L	5	5.35	107	70 - 130	
2-Butanone	ug/L	5	5.44	109	70 - 130	
cis-1,2-Dichloroethene	ug/L	5	5.13	103	70 - 130	
Bromochloromethane	ug/L	5	5.15	103	70 - 130	
Tetrahydrofuran	ug/L	5	5.62	112	70 - 130	
Chloroform	ug/L	5	5.15	103	70 - 130	
1,1,1-Trichloroethane	ug/L	5	5.65	113	70 - 130	
1,1-Dichloropropene	ug/L	5	5.05	101	70 - 130	
Carbon tetrachloride	ug/L	5	5.57	111	70 - 130	
1,2-Dichloroethane	ug/L	5	5.37	107	70 - 130	
Benzene	ug/L	5	4.87	97.4	70 - 130	
Trichloroethene	ug/L	5	5	100	70 - 130	
1,2-Dichloropropane	ug/L	5	4.69	93.8	70 - 130	
Methyl methacrylate	ug/L	5	4.88	97.6	70 - 130	
Dibromomethane	ug/L	5	4.96	99.2	70 - 130	
Bromodichloromethane	ug/L	5	4.57	91.4	70 - 130	
cis-1,3-Dichloropropene	ug/L	5	4.55	91	70 - 130	
4-Methyl-2-pentanone	ug/L	5	4.99	99.8	70 - 130	
Toluene	ug/L	5	4.79	95.8	70 - 130	
trans-1,3-Dichloropropene	ug/L	5	5.22	104	70 - 130	
Ethyl methacrylate	ug/L	5	5.32	106	70 - 130	
1,1,2-Trichloroethane	ug/L	5	5	100	70 - 130	
Tetrachloroethene	ug/L	5	5.01	100	70 - 130	
1,3-Dichloropropane	ug/L	5	4.9	98	70 - 130	
2-Hexanone	ug/L	5	5.03	101	70 - 130	
Dibromochloromethane	ug/L	5	4.71	94.2	70 - 130	
Chlorobenzene	ug/L	5	4.74	94.8	70 - 130	
1,1,1,2-Tetrachloroethane	ug/L	5	5.11	102	70 - 130	
Ethyl Benzene	ug/L	5	4.84	96.8	70 - 130	
m,p-Xylene	ug/L	10	10.1	101	70 - 130	
o-Xylene	ug/L	5	4.86	97.2	70 - 130	
Styrene	ug/L	5	5.02	100	70 - 130	
Bromoform	ug/L	5	4.93	98.6	70 - 130	
Isopropylbenzene (Cumene)	ug/L	5	4.96	99.2	70 - 130	
1,1,2,2-Tetrachloroethane	ug/L	5	5.01	100	70 - 130	
Bromobenzene	ug/L	5	4.91	98.2	70 - 130	



Quality Control (cont.)

Preparation Batch: OVOL / 4686 **Analysis Method:** E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS
Associated Lab IDs: Q2020631003

(continued)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
1,2,3-Trichloropropane	ug/L	5	5.16	103	70 - 130	
n-Propylbenzene	ug/L	5	4.83	96.6	70 - 130	
2-Chlorotoluene	ug/L	5	4.84	96.8	70 - 130	
1,3,5-Trimethylbenzene	ug/L	5	5.06	101	70 - 130	
tert-Butylbenzene	ug/L	5	4.96	99.2	70 - 130	
1,2,4-Trimethylbenzene	ug/L	5	4.99	99.8	70 - 130	
sec-Butylbenzene	ug/L	5	4.93	98.6	70 - 130	
1,3-Dichlorobenzene	ug/L	5	4.94	98.8	70 - 130	
4-Isopropyltoluene	ug/L	5	4.95	99	70 - 130	
1,4-Dichlorobenzene	ug/L	5	5	100	70 - 130	
n-Butylbenzene	ug/L	5	4.78	95.6	70 - 130	
1,2-Dichlorobenzene	ug/L	5	5	100	70 - 130	
1,2,4-Trichlorobenzene	ug/L	5	4.96	99.2	70 - 130	
Hexachlorobutadiene	ug/L	5	5.29	106	70 - 130	
Naphthalene	ug/L	5	4.86	97.2	70 - 130	
1,2,3-Trichlorobenzene	ug/L	5	5.04	101	70 - 130	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
1,2-Dichlorobenzene-d4 (S)	%	110	70 - 130	
4-Bromofluorobenzene (S)	%	106	70 - 130	

Method Reporting Limit Check (1452399)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Acetone	ug/L	5	5.04	101	50 - 150	
2-Butanone	ug/L	5	5.44	109	50 - 150	
Tetrahydrofuran	ug/L	5	5.62	112	50 - 150	

Method Reporting Limit Check (1452399)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Dichlorodifluoromethane	ug/L	.5	.65	130	50 - 150	
Chloromethane	ug/L	.5	.54	108	50 - 150	
Vinyl chloride	ug/L	.5	.56	112	50 - 150	
Bromomethane	ug/L	.5	.56	112	50 - 150	
Chloroethane	ug/L	.5	.57	114	50 - 150	
4-Chlorotoluene	ug/L	.5	.53	106	50 - 150	
Trichlorofluoromethane	ug/L	.5	.64	128	50 - 150	
1,1-Dichloroethene	ug/L	.5	.55	110	50 - 150	
Methyl iodide	ug/L	.5	.58	116	50 - 150	
Carbon disulfide	ug/L	.5	.56	112	50 - 150	
Methylene chloride	ug/L	.5	.52	104	50 - 150	
trans-1,2-Dichloroethene	ug/L	.5	.56	112	50 - 150	
Acrylonitrile	ug/L	.5	.53	106	50 - 150	
tert-Butyl methyl ether (MTBE)	ug/L	.5	.64	128	50 - 150	
1,1-Dichloroethane	ug/L	.5	.55	110	50 - 150	
Vinyl acetate	ug/L	.5	.54	108	50 - 150	
2,2-Dichloropropane	ug/L	.5	.58	116	50 - 150	
cis-1,2-Dichloroethene	ug/L	.5	.56	112	50 - 150	
Bromochloromethane	ug/L	.5	.51	102	50 - 150	



Quality Control (cont.)

Preparation Batch: OVOL / 4686 **Analysis Method:** E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS
Associated Lab IDs: Q2020631003

(continued)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Chloroform	ug/L	.5	.55	110	50 - 150	
1,1,1-Trichloroethane	ug/L	.5	.57	114	50 - 150	
1,1-Dichloropropene	ug/L	.5	.52	104	50 - 150	
Carbon tetrachloride	ug/L	.5	.52	104	50 - 150	
1,2-Dichloroethane	ug/L	.5	.57	114	50 - 150	
Benzene	ug/L	.5	.52	104	50 - 150	
Trichloroethene	ug/L	.5	.54	108	50 - 150	
1,2-Dichloropropane	ug/L	.5	.5	100	50 - 150	
Methyl methacrylate	ug/L	.5	.43	86	50 - 150	
Dibromomethane	ug/L	.5	.53	106	50 - 150	
Bromodichloromethane	ug/L	.5	.41	82	50 - 150	
cis-1,3-Dichloropropene	ug/L	.5	.36	72	50 - 150	
4-Methyl-2-pentanone	ug/L	.5	.52	104	50 - 150	
Toluene	ug/L	.5	.44	88	50 - 150	
trans-1,3-Dichloropropene	ug/L	.5	.39	78	50 - 150	
Ethyl methacrylate	ug/L	.5	.44	88	50 - 150	
1,1,2-Trichloroethane	ug/L	.5	.52	104	50 - 150	
Tetrachloroethene	ug/L	.5	.53	106	50 - 150	
1,3-Dichloropropane	ug/L	.5	.52	104	50 - 150	
2-Hexanone	ug/L	.5	.5	100	50 - 150	
Dibromochloromethane	ug/L	.5	.37	74	50 - 150	
Chlorobenzene	ug/L	.5	.49	98	50 - 150	
1,1,1,2-Tetrachloroethane	ug/L	.5	.48	96	50 - 150	
Ethyl Benzene	ug/L	.5	.45	90	50 - 150	
m,p-Xylene	ug/L	1	.92	92	50 - 150	
o-Xylene	ug/L	.5	.45	90	50 - 150	
Styrene	ug/L	.5	.43	86	50 - 150	
Bromoform	ug/L	.5	.4	80	50 - 150	
Isopropylbenzene (Cumene)	ug/L	.5	.44	88	50 - 150	
1,1,2,2-Tetrachloroethane	ug/L	.5	.51	102	50 - 150	
Bromobenzene	ug/L	.5	.54	108	50 - 150	
1,2,3-Trichloropropane	ug/L	.5	.52	104	50 - 150	
n-Propylbenzene	ug/L	.5	.5	100	50 - 150	
2-Chlorotoluene	ug/L	.5	.52	104	50 - 150	
1,3,5-Trimethylbenzene	ug/L	.5	.49	98	50 - 150	
tert-Butylbenzene	ug/L	.5	.45	90	50 - 150	
1,2,4-Trimethylbenzene	ug/L	.5	.47	94	50 - 150	
sec-Butylbenzene	ug/L	.5	.49	98	50 - 150	
1,3-Dichlorobenzene	ug/L	.5	.54	108	50 - 150	
4-Isopropyltoluene	ug/L	.5	.48	96	50 - 150	
1,4-Dichlorobenzene	ug/L	.5	.56	112	50 - 150	
n-Butylbenzene	ug/L	.5	.54	108	50 - 150	
1,2-Dichlorobenzene	ug/L	.5	.55	110	50 - 150	
1,2,4-Trichlorobenzene	ug/L	.5	.55	110	50 - 150	
Hexachlorobutadiene	ug/L	.5	.67	134	50 - 150	
Naphthalene	ug/L	.5	.51	102	50 - 150	
1,2,3-Trichlorobenzene	ug/L	.5	.6	120	50 - 150	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
1,2-Dichlorobenzene-d4 (S)	%	106	50 - 150	
4-Bromofluorobenzene (S)	%	102	50 - 150	



Quality Control (cont.)

Preparation Batch: OVOL / 4686 **Analysis Method:** E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS
Associated Lab IDs: Q2020631003

Laboratory Reagent Blank (1452400)

Parameter	Results	Units	MRL	LOD	Qualifier
Dichlorodifluoromethane	<0.500	ug/L	0.500	0.250	
Chloromethane	<0.500	ug/L	0.500	0.250	
Vinyl chloride	<0.500	ug/L	0.500	0.250	
Bromomethane	<0.500	ug/L	0.500	0.250	
Chloroethane	<0.500	ug/L	0.500	0.250	
4-Chlorotoluene	<0.500	ug/L	0.500	0.250	
Trichlorofluoromethane	<0.500	ug/L	0.500	0.250	
1,1-Dichloroethene	<0.500	ug/L	0.500	0.250	
Acetone	<5.00	ug/L	5.00	2.50	
Methyl iodide	<0.500	ug/L	0.500	0.250	
Carbon disulfide	<0.500	ug/L	0.500	0.250	
Methylene chloride	<0.500	ug/L	0.500	0.250	
trans-1,2-Dichloroethene	<0.500	ug/L	0.500	0.250	
Acrylonitrile	<0.500	ug/L	0.500	0.250	
tert-Butyl methyl ether (MTBE)	<0.500	ug/L	0.500	0.250	
1,1-Dichloroethane	<0.500	ug/L	0.500	0.250	
Vinyl acetate	<0.500	ug/L	0.500	0.250	
2,2-Dichloropropane	<0.500	ug/L	0.500	0.250	
2-Butanone	<0.500	ug/L	0.500	0.250	
cis-1,2-Dichloroethene	<0.500	ug/L	0.500	0.250	
Bromochloromethane	<0.500	ug/L	0.500	0.250	
Tetrahydrofuran	<0.500	ug/L	0.500	0.250	
Chloroform	<1.00	ug/L	1.00	0.500	
1,1,1-Trichloroethane	<0.500	ug/L	0.500	0.250	
1,1-Dichloropropene	<0.500	ug/L	0.500	0.250	
Carbon tetrachloride	<0.500	ug/L	0.500	0.250	
1,2-Dichloroethane	<0.500	ug/L	0.500	0.250	
Benzene	<0.500	ug/L	0.500	0.250	
Trichloroethene	<0.500	ug/L	0.500	0.250	
1,2-Dichloropropane	<0.500	ug/L	0.500	0.250	
Methyl methacrylate	<0.500	ug/L	0.500	0.250	
Dibromomethane	<0.500	ug/L	0.500	0.250	
Bromodichloromethane	<1.00	ug/L	1.00	0.500	
cis-1,3-Dichloropropene	<0.500	ug/L	0.500	0.250	
4-Methyl-2-pentanone	<0.500	ug/L	0.500	0.250	
Toluene	<0.500	ug/L	0.500	0.250	
trans-1,3-Dichloropropene	<0.500	ug/L	0.500	0.250	
Ethyl methacrylate	<0.500	ug/L	0.500	0.250	
1,1,2-Trichloroethane	<0.500	ug/L	0.500	0.250	
Tetrachloroethene	<0.500	ug/L	0.500	0.250	
1,3-Dichloropropane	<0.500	ug/L	0.500	0.250	
2-Hexanone	<0.500	ug/L	0.500	0.250	
Dibromochloromethane	<1.00	ug/L	1.00	0.500	
Chlorobenzene	<0.500	ug/L	0.500	0.250	
1,1,1,2-Tetrachloroethane	<0.500	ug/L	0.500	0.250	
Ethyl Benzene	<0.500	ug/L	0.500	0.250	
m,p-Xylene	<0.500	ug/L	1.00	0.500	
o-Xylene	<0.500	ug/L	0.500	0.250	
Styrene	<0.500	ug/L	0.500	0.250	
Bromoform	<1.00	ug/L	1.00	0.500	
Isopropylbenzene (Cumene)	<0.500	ug/L	0.500	0.250	
1,1,2,2-Tetrachloroethane	<0.500	ug/L	0.500	0.250	
Bromobenzene	<0.500	ug/L	0.500	0.250	
1,2,3-Trichloropropane	<0.500	ug/L	0.500	0.250	



Quality Control (cont.)

Preparation Batch: OVOL / 4686 **Analysis Method:** E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS
Associated Lab IDs: Q2020631003

(continued)

Parameter	Results	Units	MRL	LOD	Qualifier
n-Propylbenzene	<0.500	ug/L	0.500	0.250	
2-Chlorotoluene	<0.500	ug/L	0.500	0.250	
1,3,5-Trimethylbenzene	<0.500	ug/L	0.500	0.250	
tert-Butylbenzene	<0.500	ug/L	0.500	0.250	
1,2,4-Trimethylbenzene	<0.500	ug/L	0.500	0.250	
sec-Butylbenzene	<0.500	ug/L	0.500	0.250	
1,3-Dichlorobenzene	<0.500	ug/L	0.500	0.250	
4-Isopropyltoluene	<0.500	ug/L	0.500	0.250	
1,4-Dichlorobenzene	<0.500	ug/L	0.500	0.250	
n-Butylbenzene	<0.500	ug/L	0.500	0.250	
1,2-Dichlorobenzene	<0.500	ug/L	0.500	0.250	
1,2,4-Trichlorobenzene	<0.500	ug/L	0.500	0.250	
Hexachlorobutadiene	<0.500	ug/L	0.500	0.250	
Naphthalene	<0.500	ug/L	0.500	0.250	
1,2,3-Trichlorobenzene	<0.500	ug/L	0.500	0.250	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
1,2-Dichlorobenzene-d4 (S)	%	104	70 - 130
4-Bromofluorobenzene (S)	%	100	70 - 130

Duplicate (1452401); Original: Q2020608013

Parameter	Original	Duplicate	Units	RPD %	Limit	Qual
Dichlorodifluoromethane	0	0	ug/L	0	20	
Chloromethane	0	0	ug/L	0	20	
Vinyl chloride	0	0	ug/L	0	20	
Bromomethane	0	0	ug/L	0	20	
Chloroethane	0	0	ug/L	0	20	
4-Chlorotoluene	0	0	ug/L	0	20	
Trichlorofluoromethane	0	0	ug/L	0	20	
1,1-Dichloroethene	0	0	ug/L	0	20	
Acetone	0	0	ug/L	0	20	
Methyl iodide	0	0	ug/L	0	20	
Carbon disulfide	0	0	ug/L	0	20	
Methylene chloride	0	0	ug/L	0	20	
trans-1,2-Dichloroethene	0	0	ug/L	0	20	
Acrylonitrile	0	0	ug/L	0	20	
tert-Butyl methyl ether (MTBE)	0	0	ug/L	0	20	
1,1-Dichloroethane	0	0	ug/L	0	20	
Vinyl acetate	0	0	ug/L	0	20	
2,2-Dichloropropane	0	0	ug/L	0	20	
2-Butanone	0	0	ug/L	0	20	
cis-1,2-Dichloroethene	0	0	ug/L	0	20	
Bromochloromethane	0	0	ug/L	0	20	
Tetrahydrofuran	0	0	ug/L	0	20	
Chloroform	15.8	15.2	ug/L	3.87	20	
1,1,1-Trichloroethane	0	0	ug/L	0	20	
1,1-Dichloropropene	0	0	ug/L	0	20	
Carbon tetrachloride	0	0	ug/L	0	20	
1,2-Dichloroethane	0	0	ug/L	0	20	
Benzene	0	0	ug/L	0	20	
Trichloroethene	0	0	ug/L	0	20	
1,2-Dichloropropane	0	0	ug/L	0	20	



Quality Control (cont.)

Preparation Batch: OVOL / 4686	Analysis Method: E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS	
Associated Lab IDs: Q2020631003	

(continued)

Parameter	Original	Duplicate	Units	RPD %	Limit	Qual
Methyl methacrylate	0	0	ug/L	0	20	
Dibromomethane	0	0	ug/L	0	20	
Bromodichloromethane	4.12	4.13	ug/L	.242	20	
cis-1,3-Dichloropropene	0	0	ug/L	0	20	
4-Methyl-2-pentanone	0	0	ug/L	0	20	
Toluene	0	0	ug/L	0	20	
trans-1,3-Dichloropropene	0	0	ug/L	0	20	
Ethyl methacrylate	0	0	ug/L	0	20	
1,1,2-Trichloroethane	0	0	ug/L	0	20	
Tetrachloroethene	0	0	ug/L	0	20	
1,3-Dichloropropane	0	0	ug/L	0	20	
2-Hexanone	0	0	ug/L	0	20	
Dibromochloromethane	.81	.82	ug/L	1.23	20	
Chlorobenzene	0	0	ug/L	0	20	
1,1,1,2-Tetrachloroethane	0	0	ug/L	0	20	
Ethyl Benzene	0	0	ug/L	0	20	
m,p-Xylene	0	0	ug/L	0	20	
o-Xylene	0	0	ug/L	0	20	
Styrene	0	0	ug/L	0	20	
Bromoform	0	0	ug/L	0	20	
Isopropylbenzene (Cumene)	0	0	ug/L	0	20	
1,1,2,2-Tetrachloroethane	0	0	ug/L	0	20	
Bromobenzene	0	0	ug/L	0	20	
1,2,3-Trichlorobenzene	0	0	ug/L	0	20	
n-Propylbenzene	0	0	ug/L	0	20	
2-Chlorotoluene	0	0	ug/L	0	20	
1,3,5-Trimethylbenzene	0	0	ug/L	0	20	
tert-Butylbenzene	0	0	ug/L	0	20	
1,2,4-Trimethylbenzene	0	0	ug/L	0	20	
sec-Butylbenzene	0	0	ug/L	0	20	
1,3-Dichlorobenzene	0	0	ug/L	0	20	
4-Isopropyltoluene	0	0	ug/L	0	20	
1,4-Dichlorobenzene	0	0	ug/L	0	20	
n-Butylbenzene	0	0	ug/L	0	20	
1,2-Dichlorobenzene	0	0	ug/L	0	20	
1,2,4-Trichlorobenzene	0	0	ug/L	0	20	
Hexachlorobutadiene	0	0	ug/L	0	20	
Naphthalene	0	0	ug/L	0	20	
1,2,3-Trichloropropane	0	0	ug/L	0	20	
Xylene (total)	0	0	ug/L	0		

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
1,2-Dichlorobenzene-d4 (S)	%			105
4-Bromofluorobenzene (S)	%			103



Quality Control (cont.)

Preparation Batch: OVOL / 4687	Analysis Method: E524.2 Volatiles by GC/MS
Preparation Method: E524.2 Volatiles by GC/MS	
Associated Lab IDs: Q2020631001, Q2020631002	

Method Reporting Limit Check (1452549)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Qual
Chloroform	ug/L	1	1.38	138	50 - 150	
Bromodichloromethane	ug/L	1	1.12	112	50 - 150	
Dibromochloromethane	ug/L	1	1.05	105	50 - 150	
Bromoform	ug/L	1	1.13	113	50 - 150	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
1,2-Dichlorobenzene-d4 (S)	%	93	50 - 150	
4-Bromofluorobenzene (S)	%	87.2	50 - 150	

Laboratory Fortified Blank (1452551); Lab Fortified Blank Duplicate (1452552)

Parameter	Units	Spiked Amount	Spike Result	% Spike Recovery	Control Limits %	Dup Result	% Dup Recovery	RPD	RPD Limit %	Qual
Chloroform	ug/L	50	53.4	107	70 - 130	53.2	106	.375	30	
Bromodichloromethane	ug/L	50	48.5	96.9	70 - 130	49.2	98.5	1.43	30	
Dibromochloromethane	ug/L	50	47.4	94.8	70 - 130	47.5	95.1	.211	30	
Bromoform	ug/L	50	48.1	96.2	70 - 130	46.6	93.1	3.17	30	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %	% Dup Recovery
1,2-Dichlorobenzene-d4 (S)	%	91.5	70 - 130	91.4
4-Bromofluorobenzene (S)	%	86.1	70 - 130	88.3

Laboratory Reagent Blank (1452553)

Parameter	Results	Units	MRL	LOD	Qualifier
Chloroform	<1.00	ug/L	1.00	0.500	
Bromodichloromethane	<1.00	ug/L	1.00	0.500	
Dibromochloromethane	<1.00	ug/L	1.00	0.500	
Bromoform	<1.00	ug/L	1.00	0.500	

Surrogate(s)

Parameter	Units	% Spike Recovery	Control Limits %
1,2-Dichlorobenzene-d4 (S)	%	88.7	70 - 130
4-Bromofluorobenzene (S)	%	84.4	70 - 130



Quality Control Cross Reference

ORG/9298 - 552.2 Haloacetic Acids by GC

Lab ID	Sample ID	Prep Batch	Prep Method
Q2020631001	2053070	OEXT/7974	552.2 Haloacetic Acids by GC
Q2020631002	2053071	OEXT/7974	552.2 Haloacetic Acids by GC

OVOL/4686 - E524.2 Volatiles by GC/MS

Lab ID	Sample ID	Prep Batch	Prep Method
Q2020631003	2063131		

OVOL/4687 - E524.2 Volatiles by GC/MS

Lab ID	Sample ID	Prep Batch	Prep Method
Q2020631001	2053070		
Q2020631002	2053071		