



PWS_1120014_AC_20210511_Analysis Report
LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
Phone (512)730-6022
Fax (512)730-6021

May 21, 2021

MICHAEL RAWSON
PO BOX 1160
SULPHUR SPRINGS, TX 75483

RE: Final Analytical Report Q2112062

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 or environmental.lab@lcra.org. We look forward to assisting you again.

Authorized for release by:

Bhanu Acharya
Account Manager
bhanu.acharya@lcra.org



Enclosures:

Workorder: Q2112062
Workorder Description: TX1120014_PWS_05_12_2021
Client: GAFFORD CHAPEL WSC
Profile: DRINKING WATER PROGRAM
Sampled By: ANGEL MEDRANO

Report To: MICHAEL RAWSON
PO BOX 1160
SULPHUR SPRINGS, TX
75483

Sample Summary

Lab ID	Sample ID	Matrix	Method	Date Collected	Date Received	Analytes Reported
Q2112062001	2150609	DW	552.2 Haloacetic Acids by GC	05/11/2021 12:40	05/12/2021 07:18	7
Q2112062001	2150609	DW	E524.2 Volatiles by GC/MS	05/11/2021 12:40	05/12/2021 07:18	5
Q2112062002	2150610	DW	552.2 Haloacetic Acids by GC	05/11/2021 12:59	05/12/2021 07:18	7
Q2112062002	2150610	DW	E524.2 Volatiles by GC/MS	05/11/2021 12:59	05/12/2021 07:18	5

Report Definitions

MRL - Minimum Reporting Limit
LOD - Limit of Detection
ML - Maximum Limit - Client Specified
MCL - Maximum Contaminant Level
LOQ - Limit of Quantitation - Client Specified
DF - Dilution Factor
(S) - Surrogate Spike
MDL - Method Detection Limit
RPD - Relative Percent Difference

Qualifier Definitions

J - Analyte detected below quantitation limit
R - RPD outside duplicate precision limit
S - Spike recovery outside limit
B - Analyte detected in method blank
N - Not Accredited
M - Analyte Detected Above Maximum Contaminant Level
SL - Spike Recovery Low
SH - Spike Recovery High
H - Analyzed Past Hold Time
CR - Confirmed Result
CH - Result confirmed by historical data



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Workorder Summary

Analytical Results

Client ID: TX1120014 **Date Collected:** 05/11/2021 12:40 **Matrix:** Drinking Water
Lab ID: Q2112062001 **Date Received:** 05/12/2021 07:18 **Sample Type:** SAMPLE
Sample ID: 2150609 **Location:** 145 CR 4701, SULPHUR SPRINGS
Project ID: DRINKING WATER PROGRAM **Facility:** DS01
Sample Point: DBP2-01

HALOACETIC ACIDS (552.2 Haloacetic Acids by GC)

Parameter	Results	Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qualifier
Bromochloroacetic Acid	3.10	ug/L	1.00	0.500		1	05/14/2021 12:26	MO	05/17/2021 20:17	MF	N
Dibromoacetic Acid	<1.00	ug/L	1.00	0.500		1	05/14/2021 12:26	MO	05/17/2021 20:17	MF	N
Dichloroacetic Acid	11.5	ug/L	1.00	0.500		1	05/14/2021 12:26	MO	05/17/2021 20:17	MF	N
Monobromoacetic Acid	<1.00	ug/L	1.00	0.500		1	05/14/2021 12:26	MO	05/17/2021 20:17	MF	N
Monochloroacetic Acid	1.10	ug/L	1.00	0.500		1	05/14/2021 12:26	MO	05/17/2021 20:17	MF	N
Total Regulated HAA	21.0	ug/L	1.00	0.500	60		05/14/2021 12:26	MO	05/17/2021 20:17	MF	
Trichloroacetic acid	8.40	ug/L	1.00	0.500		1	05/14/2021 12:26	MO	05/17/2021 20:17	MF	N

Surrogates

Parameter	Units	%Spike Recovery	Control Limits %	Qualifier
2,3-Dibromopropionic acid (S)	%	106.0	70 - 130	

Volatiles (E524.2 Volatiles by GC/MS)

Parameter	Results	Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qualifier
Chloroform	18.3	ug/L	1.00	0.500		1	05/13/2021 05:26	MH	05/13/2021 05:26	MH	N
Bromodichloromethane	6.95	ug/L	1.00	0.500		1	05/13/2021 05:26	MH	05/13/2021 05:26	MH	N
Dibromochloromethane	1.30	ug/L	1.00	0.500		1	05/13/2021 05:26	MH	05/13/2021 05:26	MH	N
Bromoform	<1.00	ug/L	1.00	0.500		1	05/13/2021 05:26	MH	05/13/2021 05:26	MH	N
Total Trihalomethanes	26.6	ug/L	1.00	0.500	80		05/13/2021 05:26	MH	05/13/2021 05:26	MH	

Surrogates

Parameter	Units	%Spike Recovery	Control Limits %	Qualifier
1,2-Dichlorobenzene-d4 (S)	%	89.8	70 - 130	
4-Bromofluorobenzene (S)	%	78.3	70 - 130	

Quality Control Results

QC Batch: ORG/10101 **Analysis Method:** 552.2 Haloacetic Acids by GC
Preparation Method: 552.2 Haloacetic Acids by GC
Associated Lab IDs: Q2112062001, Q2112062002

Laboratory Fortified Matrix (1603704); Original: Q2112060001

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Monochloroacetic Acid	ug/L	100.	102.	102.	70 - 130	
Monobromoacetic Acid	ug/L	100.	102.	102.	70 - 130	
Dichloroacetic Acid	ug/L	100.	93.	93.	70 - 130	
Trichloroacetic acid	ug/L	100.	96.	96.	70 - 130	
Bromochloroacetic Acid	ug/L	100.	97.4	95.3	70 - 130	
Dibromoacetic Acid	ug/L	100.	101.	95.5	70 - 130	

Laboratory Fortified Blank (1603702); Lab Fortified Blank Duplicate (1603703)

Parameter	Units	Spiked Amount	Spike Result	%Spike Recovery	Control Limits %	Duplicate Result	%Duplicate Recovery	RPD	RPD Limit	Qualifier
Monochloroacetic Acid	ug/L	50.	48.5	97.	70 - 130	47.5	95.0	0.206	30	
Monobromoacetic Acid	ug/L	50.	48.7	97.4	70 - 130	47.5	95.0	0.818	30	
Dichloroacetic Acid	ug/L	50.	46.8	93.6	70 - 130	47.5	95.0	1.69	30	
Trichloroacetic acid	ug/L	50.	44.9	89.8	70 - 130	47.5	95.0	5.63	30	
Bromochloroacetic Acid	ug/L	50.	46.2	92.4	70 - 130	47.5	95.0	3.4	30	
Dibromoacetic Acid	ug/L	50.	46.2	92.4	70 - 130	47.5	95.0	4.65	30	

Laboratory Fortified Matrix (1603707); Original: Q2112069003

Parameter	Units	Spiked Amount	Spike Result	Spike Recovery%	Control Limits %	Qualifier
Monochloroacetic Acid	ug/L	100.	97.	97.	70 - 130	
Monobromoacetic Acid	ug/L	100.	104.	104.	70 - 130	
Dichloroacetic Acid	ug/L	100.	95.8	95.8	70 - 130	
Trichloroacetic acid	ug/L	100.	98.4	98.4	70 - 130	
Bromochloroacetic Acid	ug/L	100.	99.8	99.8	70 - 130	
Dibromoacetic Acid	ug/L	100.	101.	99.6	70 - 130	

QC Cross Reference

Lab ID	Sample ID	Prep Batch	Prep Method
ORG/10101 - 552.2 Haloacetic Acids by GC			
Q2112062001	2150609	OEXT/8574	552.2 Haloacetic Acids by GC
Q2112062002	2150610	OEXT/8574	552.2 Haloacetic Acids by GC
OVOL/5207 - E524.2 Volatiles by GC/MS			
Q2112062001	2150609		
Q2112062002	2150610		

End of Report