



PWS_0370031_AC_20171120_Analysis Report
LCRA Environmental Laboratory Services
3505 Montopolis Drive
Austin, TX 78744
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December 1, 2017

ACCOUNTS PAYABLE
RUSK RURAL WSC CROCKETT
PO BOX 606
Rusk, TX 75785

RE: Final Analytical Report
ELS Sample Q1759386001
RUSK RURAL WSC CROCKETT ST PLANT

Attn:

Enclosed are the analytical results for the above referenced sample 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 as received.

Thank you for selecting ELS for your analytical needs. If you have any questions regarding this report, please contact us at (512) 356-6022. We look forward to assisting you again.

Authorized for release by:

Angel Mata, Jr

angel.mata@lcra.org

Project Manager

Enclosures





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SAMPLE SUMMARY

Workorder: Q1759386

Lab ID	Sample ID	matrix	Date Collected	Date Received
Q1759386001	1758246	Drinking Water	11/20/2017 10:11	11/21/2017 09:20

Report Definitions

RL	Reporting Limit
MCL	Maximum Contaminant Level
DF	Dilution Factor
Qual	Qualifiers

ANALYTICAL RESULTS

Workorder: Q1759386

Lab ID: Q1759386001	Date Received: 11/21/2017 09:20	Matrix: Drinking Water
Sample ID: 1758246	Date Collected: 11/20/2017 10:11	Sample Type: SAMPLE
Facility: DS01	Location: 1052 MABRY RIDER RD, RUSK	
Sample: DBP2-01	Client ID: TX0370031	

Parameter	Result	Units	MRL	LOD	MCL	DF	Prepared	By	Analyzed	By	Qual
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552.2 Haloacetic Acids by GC

Analysis Desc: 552.2 Haloacetic Acids by GC

Bromochloroacetic Acid	5.50	ug/L	1.00			1	11/27/17 08:30	AFP	11/28/17 23:37	JC	N
Dibromoacetic Acid	2.90	ug/L	1.00			1	11/27/17 08:30	AFP	11/28/17 23:37	JC	N
Dichloroacetic Acid	6.20	ug/L	1.00			1	11/27/17 08:30	AFP	11/28/17 23:37	JC	N
Monobromoacetic Acid	1.00	ug/L	1.00			1	11/27/17 08:30	AFP	11/28/17 23:37	JC	N
Monochloroacetic Acid	<1.00	ug/L	1.00			1	11/27/17 08:30	AFP	11/28/17 23:37	JC	N
Total Regulated HAA	15.8	ug/L	1.00		60	1	11/27/17 08:30	AFP	11/28/17 23:37	JC	
Trichloroacetic acid	5.70	ug/L	1.00			1	11/27/17 08:30	AFP	11/28/17 23:37	JC	N
2,3-Dibromopropionic acid (S)	96.6	%				1	11/27/17 08:30	AFP	11/28/17 23:37	JC	

E524.2 Volatiles by GC/MS

Analysis Desc: E524.2 Volatiles by GC/MS

Bromodichloromethane	13.0	ug/L	1.00	0.500		1			11/28/17 01:00	MH	N
Bromoform	1.36	ug/L	1.00	0.500		1			11/28/17 01:00	MH	N
Chloroform	12.8	ug/L	1.00	0.500		1			11/28/17 01:00	MH	N
Dibromochloromethane	10.7	ug/L	1.00	0.500		1			11/28/17 01:00	MH	N
Total Trihalomethanes	37.9	ug/L	1.00	0.500	80	1			11/28/17 01:00	MH	
1,2-Dichlorobenzene-d4 (S)	103	%				1			11/28/17 01:00	MH	
4-Bromofluorobenzene (S)	94.9	%				1			11/28/17 01:00	MH	



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PARAMETER QUALIFIERS

Workorder: Q1759386

Parameter Qualifiers

J	Analyte Detected Below Quantitation Limit
N	N Not Accredited
SH	Spike Recovery High
SL	Spike Recovery Low

QUALITY CONTROL

QC Batch: 67468
QC Batch Method: 552.2 Haloacetic Acids by GC
Analytical Method: 552.2 Haloacetic Acids by GC

MATRIX SPIKE: 981547 Original Sample: Q1759386001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limit	Qual
2,3-Dibromopropionic acid	%				93.2	70-130	
Bromochloroacetic Acid	ug/L	5.5	100	107	102	70-130	
Dibromoacetic Acid	ug/L	2.9	100	108	105	70-130	
Trichloroacetic acid	ug/L	5.7	100	110	104	70-130	
Monobromoacetic Acid	ug/L	1	100	102	102	70-130	
Monochloroacetic Acid	ug/L	0	100	87.9	87.9	70-130	
Dichloroacetic Acid	ug/L	6.2	100	112	106	70-130	

MATRIX SPIKE: 981550 Original Sample: Q1759490001

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limit	Qual
2,3-Dibromopropionic acid	%				107	70-130	
Bromochloroacetic Acid	ug/L	13.1	100	111	97.7	70-130	
Dibromoacetic Acid	ug/L	7.2	100	110	103	70-130	
Trichloroacetic acid	ug/L	7.3	100	115	108	70-130	
Monobromoacetic Acid	ug/L	1.8	100	95.1	93.3	70-130	
Monochloroacetic Acid	ug/L	0	100	79.8	79.8	70-130	
Dichloroacetic Acid	ug/L	16.2	100	116	99.3	70-130	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit

QUALITY CONTROL

QC Batch: 67441
QC Batch Method: E524.2 Volatiles by GC/MS
Analytical Method: E524.2 Volatiles by GC/MS

LABORATORY CONTROL SAMPLE: 981658

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qual
1,2-Dichlorobenzene-d4	%	25			105	108	70-130	3.02		
4-Bromofluorobenzene	%	25			105	110	70-130	4.1		
Dibromochloromethane	ug/L	50	54.5	55	109	110	70-130	.913	20	
Chloroform	ug/L	50	55.6	55.2	111	110	70-130	.722	20	
Bromoform	ug/L	50	51.6	52.8	103	106	70-130	2.3	20	
Bromodichloromethane	ug/L	50	58.9	59.3	118	119	70-130	.677	20	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit

QUALITY CONTROL

QC Batch: 67468
QC Batch Method: 552.2 Haloacetic Acids by GC
Analytical Method: 552.2 Haloacetic Acids by GC

LABORATORY CONTROL SAMPLE: 981548

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qual
2,3-Dibromopropionic acid	%	50			92.2	92.8	70-130	.649		
Bromochloroacetic Acid	ug/L	50	50.3	48.9	101	97.8	70-130	2.82	30	
Dibromoacetic Acid	ug/L	50	51	50	102	100	70-130	1.98	30	
Trichloroacetic acid	ug/L	50	52.3	51.3	105	103	70-130	1.93	30	
Monobromoacetic Acid	ug/L	50	48.3	47.8	96.6	95.6	70-130	1.04	30	

LABORATORY CONTROL SAMPLE: 981545

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qual
2,3-Dibromopropionic acid	%	50			88.6	92.2	70-130	3.98		
Bromochloroacetic Acid	ug/L	50	48.8	50.3	97.6	101	70-130	3.03	30	
Dibromoacetic Acid	ug/L	50	49.5	51	99	102	70-130	2.99	30	
Trichloroacetic acid	ug/L	50	50.2	52.3	100	105	70-130	4.1	30	
Monobromoacetic Acid	ug/L	50	48.6	48.3	97.2	96.6	70-130	.619	30	
Monochloroacetic Acid	ug/L	50	51.2	49.3	102	98.6	70-130	3.78	30	
Dichloroacetic Acid	ug/L	50	50.9	51	102	102	70-130	.196	30	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit

QUALITY CONTROL

LABORATORY CONTROL SAMPLE: 981548

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qual
Monochloroacetic Acid	ug/L	50	49.3	49.4	98.6	98.8	70-130	.203	30	
Dichloroacetic Acid	ug/L	50	51	49.8	102	99.6	70-130	2.38	30	

MRL: 981561

Parameter	Units	Spike Conc.	MRL Result	MRL % Rec	% Rec Limit	Qual
Bromochloroacetic Acid	ug/L	1	1.5	150	50-150	
Dibromoacetic Acid	ug/L	1	1.3	130	50-150	
Trichloroacetic acid	ug/L	1	1.5	150	50-150	
Monobromoacetic Acid	ug/L	1	1.3	130	50-150	
Monochloroacetic Acid	ug/L	1	1.3	130	50-150	
Dichloroacetic Acid	ug/L	1	1	100	50-150	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit

QUALITY CONTROL

QC Batch: 67441
QC Batch Method: E524.2 Volatiles by GC/MS
Analytical Method: E524.2 Volatiles by GC/MS

MRL: 981656

Parameter	Units	Spike Conc.	MRL Result	MRL % Rec	% Rec Limit	Qual
Dibromochloromethane	ug/L	1	1.06	106	50-150	
Chloroform	ug/L	1	1.16	116	50-150	
Bromoform	ug/L	1	1.02	102	50-150	
Bromodichloromethane	ug/L	1	1.23	123	50-150	

METHOD BLANK: 981660

Parameter	Units	Blank Result	Reporting Limit	Qual
Bromoform	ug/L	<1.00	1.00	
Dibromochloromethane	ug/L	<1.00	1.00	
Bromodichloromethane	ug/L	<1.00	1.00	
Chloroform	ug/L	<1.00	1.00	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit

QUALITY CONTROL

QC Batch: 67468
QC Batch Method: 552.2 Haloacetic Acids by GC
Analytical Method: 552.2 Haloacetic Acids by GC

METHOD BLANK: 981535

Parameter	Units	Blank Result	Reporting Limit	Qual
Dibromoacetic Acid	ug/L	<1.00	1.00	
Bromochloroacetic Acid	ug/L	<1.00	1.00	
Trichloroacetic acid	ug/L	<1.00	1.00	
Dichloroacetic Acid	ug/L	<1.00	1.00	
Monobromoacetic Acid	ug/L	<1.00	1.00	
Monochloroacetic Acid	ug/L	<1.00	1.00	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit



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QUALITY CONTROL

QC Batch: 67441
QC Batch Method: E524.2 Volatiles by GC/MS
Analytical Method: E524.2 Volatiles by GC/MS

METHOD BLANK: 981660

Parameter	Units	Blank Result	Reporting Limit	Qual
1,2-Dichlorobenzene-d4	%	98.7	70-130	
4-Bromofluorobenzene	%	89.9	70-130	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit

QUALITY CONTROL

QC Batch: 67468
QC Batch Method: 552.2 Haloacetic Acids by GC
Analytical Method: 552.2 Haloacetic Acids by GC

METHOD BLANK: 981535

Parameter	Units	Blank Result	Reporting Limit	Qual
2,3-Dibromopropionic acid	%	92.6	70-130	

Qualifiers

SL - Spike Recovery Low

SH - Spike Recovery High

R - RPD Outside Recovery Limit