August 29, 2016

Brenna McDonald
Missouri Geological Survey
111 Fairgrounds Road
Rolla, MO 65401
TEL: (573) 368-2163
FAX:

RE: Appendix I **WorkOrder:** 16081431

Dear Brenna McDonald:

TEKLAB, INC received 1 sample on 8/23/2016 4:15:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Emily Pohlman
Project Manager
(618)344-1004 ex 44
epohlman@teklabinc.com

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
E -	Value above quantitation range	H -	Holding times exceeded
I -	Associated internal standard was outside method criteria	J -	Analyte detected below quantitation limits
M -	Manual Integration used to determine area response	ND -	Not Detected at the Reporting Limit
R -	RPD outside accepted recovery limits	S -	Spike Recovery outside recovery limits
T -	TIC(Tentatively identified compound)	X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Missouri Geological Survey
Client Project: Appendix I

Work Order: 16081431
Report Date: 29-Aug-16

Cooler Receipt Temp: 3.22 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2017	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2017	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2017	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2017	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2017	Collinsville
Arkansas	ADEQ	88-0966		3/14/2017	Collinsville
Illinois	IDPH	17584		5/31/2017	Collinsville
Kentucky	KDEP	98006		12/31/2016	Collinsville
Kentucky	UST	0073		1/31/2017	Collinsville
Missouri	MDNR	00930		5/31/2017	Collinsville
Missouri	MDNR	930		1/31/2017	Collinsville
Oklahoma	ODEQ	9978		8/31/2017	Collinsville

Client: Missouri Geological Survey
Work Order: 16081431
Client Project: Appendix I
Report Date: 29-Aug-16
Lab ID: 16081431-001
Client Sample ID: 822-2316
Matrix: GROUNDWATER
Collection Date: 08/23/2016 8:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,1,2,2-Tetrachloroethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,1,2-Trichloroethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,1-Dichloroethene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,2,3-Trichloropropane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,2-Dibromo-3-chloropropane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,2-Dichloropropane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
2-Butanone	NELAP	25.0		ND	µg/L	1	08/25/2016 18:10	121800
2-Hexanone	NELAP	25.0		ND	µg/L	1	08/25/2016 18:10	121800
4-Methyl-2-pentanone	NELAP	25.0		ND	µg/L	1	08/25/2016 18:10	121800
Acetone	NELAP	25.0		ND	µg/L	1	08/25/2016 18:10	121800
Acrylonitrile	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Benzene	NELAP	2.0		ND	µg/L	1	08/25/2016 18:10	121800
Bromochloromethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Bromodichloromethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Bromoform	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Bromomethane	NELAP	10.0		ND	µg/L	1	08/25/2016 18:10	121800
Carbon disulfide	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Carbon tetrachloride	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Chlorobenzene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Chloroethane	NELAP	10.0		ND	µg/L	1	08/25/2016 18:10	121800
Chloroform	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Chloromethane	NELAP	10.0		ND	µg/L	1	08/25/2016 18:10	121800
cis-1,2-Dichloroethene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
cis-1,3-Dichloropropene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Dibromochloromethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Dibromomethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Ethylbenzene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Iodomethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Methylene chloride	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Styrene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Toluene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
trans-1,2-Dichloroethene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
trans-1,3-Dichloropropene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
trans-1,4-Dichloro-2-butene	NELAP	10.0		ND	µg/L	1	08/25/2016 18:10	121800
Trichloroethene	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800
Vinyl acetate	NELAP	10.0		ND	µg/L	1	08/25/2016 18:10	121800
Vinyl chloride	NELAP	2.0		ND	µg/L	1	08/25/2016 18:10	121800
Xylenes, Total	NELAP	5.0		ND	µg/L	1	08/25/2016 18:10	121800

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

Lab ID: 16081431-001 **Client Sample ID:** 822-2316

Matrix: GROUNDWATER **Collection Date:** 08/23/2016 8:00

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 1,2-Dichloroethane-d4		74.7-129		**97.8**	%REC	1	08/25/2016 18:10	121800
Surr: 4-Bromofluorobenzene		86-119		**104.1**	%REC	1	08/25/2016 18:10	121800
Surr: Dibromofluoromethane		81.7-123		**98.9**	%REC	1	08/25/2016 18:10	121800
Surr: Toluene-d8		84.3-114		**101.8**	%REC	1	08/25/2016 18:10	121800

Autosampler error, did not run MS/MSD. Insufficient sample to reanalyze.

Sample Summary

Client: Missouri Geological Survey
Client Project: Appendix I

Work Order: 16081431
Report Date: 29-Aug-16

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
16081431-001	822-2316	Groundwater	1	08/23/2016 8:00

Client: Missouri Geological Survey
Work Order: 16081431
Client Project: Appendix I
Report Date: 29-Aug-16

Sample ID	Client Sample ID	Collection Date	Received Date		
	Test Name			Prep Date/Time	Analysis Date/Time
16081431-001A	822-2316	08/23/2016 8:00	08/23/2016 16:15		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				08/25/2016 18:10

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 121800 **SampType:** MBLK Units µg/L

SampID: MBLK-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		ND						08/25/2016
1,1,1-Trichloroethane	5.0		ND						08/25/2016
1,1,2,2-Tetrachloroethane	5.0		ND						08/25/2016
1,1,2-Trichloroethane	5.0		ND						08/25/2016
1,1-Dichloroethane	5.0		ND						08/25/2016
1,1-Dichloroethene	5.0		ND						08/25/2016
1,2,3-Trichloropropane	5.0		ND						08/25/2016
1,2-Dibromo-3-chloropropane	5.0		ND						08/25/2016
1,2-Dibromoethane	5.0		ND						08/25/2016
1,2-Dichlorobenzene	5.0		ND						08/25/2016
1,2-Dichloroethane	5.0		ND						08/25/2016
1,2-Dichloropropane	5.0		ND						08/25/2016
1,4-Dichlorobenzene	5.0		ND						08/25/2016
2-Butanone	25.0		ND						08/25/2016
2-Hexanone	25.0		ND						08/25/2016
4-Methyl-2-pentanone	25.0		ND						08/25/2016
Acetone	25.0		ND						08/25/2016
Acrylonitrile	5.0		ND						08/25/2016
Benzene	2.0		ND						08/25/2016
Bromochloromethane	5.0		ND						08/25/2016
Bromodichloromethane	5.0		ND						08/25/2016
Bromoform	5.0		ND						08/25/2016
Bromomethane	10.0		ND						08/25/2016
Carbon disulfide	5.0		ND						08/25/2016
Carbon tetrachloride	5.0		ND						08/25/2016
Chlorobenzene	5.0		ND						08/25/2016
Chloroethane	10.0		ND						08/25/2016
Chloroform	5.0		ND						08/25/2016
Chloromethane	10.0		ND						08/25/2016
cis-1,2-Dichloroethene	5.0		ND						08/25/2016
cis-1,3-Dichloropropene	5.0		ND						08/25/2016
Dibromochloromethane	5.0		ND						08/25/2016
Dibromomethane	5.0		ND						08/25/2016
Ethylbenzene	5.0		ND						08/25/2016
Iodomethane	5.0		ND						08/25/2016
Methylene chloride	5.0		ND						08/25/2016
Styrene	5.0		ND						08/25/2016
Tetrachloroethene	5.0		ND						08/25/2016
Toluene	5.0		ND						08/25/2016
trans-1,2-Dichloroethene	5.0		ND						08/25/2016
trans-1,3-Dichloropropene	5.0		ND						08/25/2016
trans-1,4-Dichloro-2-butene	10.0		ND						08/25/2016
Trichloroethene	5.0		ND						08/25/2016
Trichlorofluoromethane	5.0		ND						08/25/2016
Vinyl acetate	10.0		ND						08/25/2016
Vinyl chloride	2.0		ND						08/25/2016
Xylenes, Total	5.0		ND						08/25/2016

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 121800 **SampType:** MBLK Units **µg/L**

SampID: MBLK-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**50.5**	50.00		101.0	74.7	129	08/25/2016
Surr: 4-Bromofluorobenzene			**50.4**	50.00		100.7	86	119	08/25/2016
Surr: Dibromofluoromethane			**50.7**	50.00		101.3	81.7	123	08/25/2016
Surr: Toluene-d8			**52.4**	50.00		104.9	84.3	114	08/25/2016

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 121800 **SampType:** LCSD Units µg/L RPD Limit 40

SampID: LCSD-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		**48.8**	50.00	0	97.5	50.88	4.28	08/25/2016
1,1,1-Trichloroethane	5.0		**47.6**	50.00	0	95.3	47.60	0.08	08/25/2016
1,1,2,2-Tetrachloroethane	5.0		**55.6**	50.00	0	111.2	57.34	3.10	08/25/2016
1,1,2-Trichloroethane	5.0		**52.0**	50.00	0	104.0	53.26	2.39	08/25/2016
1,1-Dichloroethane	5.0		**47.8**	50.00	0	95.7	48.45	1.25	08/25/2016
1,1-Dichloroethene	5.0		**48.4**	50.00	0	96.7	48.47	0.23	08/25/2016
1,2,3-Trichloropropane	5.0		**50.1**	50.00	0	100.2	51.23	2.19	08/25/2016
1,2-Dibromo-3-chloropropane	5.0		**54.0**	50.00	0	108.0	55.35	2.51	08/25/2016
1,2-Dibromoethane	5.0		**49.6**	50.00	0	99.3	50.35	1.40	08/25/2016
1,2-Dichlorobenzene	5.0		**51.1**	50.00	0	102.2	52.41	2.51	08/25/2016
1,2-Dichloroethane	5.0		**47.1**	50.00	0	94.3	47.00	0.28	08/25/2016
1,2-Dichloropropane	5.0		**47.7**	50.00	0	95.5	48.30	1.17	08/25/2016
1,4-Dichlorobenzene	5.0		**52.7**	50.00	0	105.3	53.46	1.51	08/25/2016
2-Butanone	25.0		**128**	125.0	0	102.1	125.5	1.71	08/25/2016
2-Hexanone	25.0		**138**	125.0	0	110.3	140.4	1.77	08/25/2016
4-Methyl-2-pentanone	25.0		**142**	125.0	0	113.4	142.5	0.52	08/25/2016
Acetone	25.0		**95.0**	125.0	0	76.0	93.18	1.99	08/25/2016
Acrylonitrile	5.0		**51.4**	50.00	0	102.9	51.28	0.31	08/25/2016
Benzene	2.0		**48.6**	50.00	0	97.1	48.27	0.58	08/25/2016
Bromochloromethane	5.0		**44.4**	50.00	0	88.9	43.93	1.13	08/25/2016
Bromodichloromethane	5.0		**48.1**	50.00	0	96.2	47.89	0.48	08/25/2016
Bromoform	5.0		**50.9**	50.00	0	101.8	51.98	2.06	08/25/2016
Bromomethane	10.0		**45.5**	50.00	0	91.1	42.26	7.47	08/25/2016
Carbon disulfide	5.0		**44.5**	50.00	0	89.0	44.21	0.61	08/25/2016
Carbon tetrachloride	5.0		**45.1**	50.00	0	90.1	45.74	1.48	08/25/2016
Chlorobenzene	5.0		**50.1**	50.00	0	100.3	51.98	3.60	08/25/2016
Chloroethane	10.0		**45.2**	50.00	0	90.4	44.75	1.00	08/25/2016
Chloroform	5.0		**44.8**	50.00	0	89.5	44.91	0.31	08/25/2016
Chloromethane	10.0		**37.5**	50.00	0	74.9	36.23	3.36	08/25/2016
cis-1,2-Dichloroethene	5.0		**47.9**	50.00	0	95.9	47.78	0.31	08/25/2016
cis-1,3-Dichloropropene	5.0		**48.7**	50.00	0	97.4	48.47	0.49	08/25/2016
Dibromochloromethane	5.0		**48.1**	50.00	0	96.3	50.18	4.17	08/25/2016
Dibromomethane	5.0		**47.6**	50.00	0	95.1	48.02	0.94	08/25/2016
Ethylbenzene	5.0		**50.1**	50.00	0	100.2	52.10	3.93	08/25/2016
Iodomethane	5.0		**37.1**	50.00	0	74.1	37.71	1.71	08/25/2016
Methylene chloride	5.0		**45.9**	50.00	0	91.8	45.58	0.68	08/25/2016
Styrene	5.0		**51.1**	50.00	0	102.2	53.81	5.15	08/25/2016
Tetrachloroethene	5.0		**50.6**	50.00	0	101.3	51.54	1.76	08/25/2016
Toluene	5.0		**50.3**	50.00	0	100.7	50.92	1.15	08/25/2016
trans-1,2-Dichloroethene	5.0		**45.9**	50.00	0	91.8	45.63	0.61	08/25/2016
trans-1,3-Dichloropropene	5.0		**50.6**	50.00	0	101.2	51.45	1.63	08/25/2016
trans-1,4-Dichloro-2-butene	10.0		**48.6**	50.00	0	97.1	52.35	7.51	08/25/2016
Trichloroethene	5.0		**48.7**	50.00	0	97.3	48.37	0.62	08/25/2016
Trichlorofluoromethane	5.0		**48.0**	50.00	0	96.0	48.71	1.49	08/25/2016
Vinyl acetate	10.0		**49.4**	50.00	0	98.8	51.66	4.47	08/25/2016
Vinyl chloride	2.0		**44.7**	50.00	0	89.4	44.23	1.03	08/25/2016
Xylenes, Total	5.0		**153**	150.0	0	102.2	157.9	2.90	08/25/2016

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch **121800** **SampType:** **LCSD** Units **µg/L** RPD Limit **40**

SampID: LCSD-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**51.0**	50.00		101.9			08/25/2016
Surr: 4-Bromofluorobenzene			**48.8**	50.00		97.6			08/25/2016
Surr: Dibromofluoromethane			**50.7**	50.00		101.4			08/25/2016
Surr: Toluene-d8			**51.4**	50.00		102.8			08/25/2016

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 121800 **SampType:** LCS Units µg/L

SampID: LCS-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		**50.9**	50.00	0	101.8	81.9	115	08/25/2016
1,1,1-Trichloroethane	5.0		**47.6**	50.00	0	95.2	79.4	124	08/25/2016
1,1,2,2-Tetrachloroethane	5.0		**57.3**	50.00	0	114.7	74.7	116	08/25/2016
1,1,2-Trichloroethane	5.0		**53.3**	50.00	0	106.5	80.8	111	08/25/2016
1,1-Dichloroethane	5.0		**48.4**	50.00	0	96.9	79.4	114	08/25/2016
1,1-Dichloroethene	5.0		**48.5**	50.00	0	96.9	74.1	117	08/25/2016
1,2,3-Trichloropropane	5.0		**51.2**	50.00	0	102.5	77.3	112	08/25/2016
1,2-Dibromo-3-chloropropane	5.0		**55.4**	50.00	0	110.7	76	122	08/25/2016
1,2-Dibromoethane	5.0		**50.4**	50.00	0	100.7	80.8	114	08/25/2016
1,2-Dichlorobenzene	5.0		**52.4**	50.00	0	104.8	78.3	112	08/25/2016
1,2-Dichloroethane	5.0		**47.0**	50.00	0	94.0	70.6	118	08/25/2016
1,2-Dichloropropane	5.0		**48.3**	50.00	0	96.6	79.6	113	08/25/2016
1,4-Dichlorobenzene	5.0		**53.5**	50.00	0	106.9	77.8	114	08/25/2016
2-Butanone	25.0		**126**	125.0	0	100.4	70.7	136	08/25/2016
2-Hexanone	25.0		**140**	125.0	0	112.3	73.3	125	08/25/2016
4-Methyl-2-pentanone	25.0		**143**	125.0	0	114.0	76.3	122	08/25/2016
Acetone	25.0		**93.2**	125.0	0	74.5	56.4	147	08/25/2016
Acrylonitrile	5.0		**51.3**	50.00	0	102.6	74.1	128	08/25/2016
Benzene	2.0		**48.3**	50.00	0	96.5	80	114	08/25/2016
Bromochloromethane	5.0		**43.9**	50.00	0	87.9	73.3	121	08/25/2016
Bromodichloromethane	5.0		**47.9**	50.00	0	95.8	81.6	121	08/25/2016
Bromoform	5.0		**52.0**	50.00	0	104.0	83.1	127	08/25/2016
Bromomethane	10.0		**42.3**	50.00	0	84.5	44.4	154	08/25/2016
Carbon disulfide	5.0		**44.2**	50.00	0	88.4	73.2	118	08/25/2016
Carbon tetrachloride	5.0		**45.7**	50.00	0	91.5	79.4	130	08/25/2016
Chlorobenzene	5.0		**52.0**	50.00	0	104.0	81.4	110	08/25/2016
Chloroethane	10.0		**44.8**	50.00	0	89.5	52.1	137	08/25/2016
Chloroform	5.0		**44.9**	50.00	0	89.8	82.7	116	08/25/2016
Chloromethane	10.0		**36.2**	50.00	0	72.5	48.2	144	08/25/2016
cis-1,2-Dichloroethene	5.0		**47.8**	50.00	0	95.6	78.2	116	08/25/2016
cis-1,3-Dichloropropene	5.0		**48.5**	50.00	0	96.9	83	119	08/25/2016
Dibromochloromethane	5.0		**50.2**	50.00	0	100.4	81.2	121	08/25/2016
Dibromomethane	5.0		**48.0**	50.00	0	96.0	78.3	118	08/25/2016
Ethylbenzene	5.0		**52.1**	50.00	0	104.2	77.2	113	08/25/2016
Iodomethane	5.0		**37.7**	50.00	0	75.4	61.3	140	08/25/2016
Methylene chloride	5.0		**45.6**	50.00	0	91.2	74.1	114	08/25/2016
Styrene	5.0		**53.8**	50.00	0	107.6	83.4	113	08/25/2016
Tetrachloroethene	5.0		**51.5**	50.00	0	103.1	72.5	125	08/25/2016
Toluene	5.0		**50.9**	50.00	0	101.8	77.5	113	08/25/2016
trans-1,2-Dichloroethene	5.0		**45.6**	50.00	0	91.3	79	114	08/25/2016
trans-1,3-Dichloropropene	5.0		**51.4**	50.00	0	102.9	78	115	08/25/2016
trans-1,4-Dichloro-2-butene	10.0		**52.4**	50.00	0	104.7	63.3	128	08/25/2016
Trichloroethene	5.0		**48.4**	50.00	0	96.7	84.4	114	08/25/2016
Trichlorofluoromethane	5.0		**48.7**	50.00	0	97.4	75.2	132	08/25/2016
Vinyl acetate	10.0		**51.7**	50.00	0	103.3	64.5	127	08/25/2016
Vinyl chloride	2.0		**44.2**	50.00	0	88.5	58	134	08/25/2016
Xylenes, Total	5.0		**158**	150.0	0	105.2	80.1	111	08/25/2016

Client: Missouri Geological Survey **Work Order:** 16081431

Client Project: Appendix I **Report Date:** 29-Aug-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 121800 **SampType:** LCS Units **µg/L**

SampID: LCS-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**50.6**	50.00		101.1	74.7	129	08/25/2016
Surr: 4-Bromofluorobenzene			**48.8**	50.00		97.5	86	119	08/25/2016
Surr: Dibromofluoromethane			**50.2**	50.00		100.4	81.7	123	08/25/2016
Surr: Toluene-d8			**51.8**	50.00		103.5	84.1	114	08/25/2016

Batch 121800 **SampType:** LCSGD Units **%REC** RPD Limit **0**

SampID: LCSGD-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**49.9**	50.00		99.8			08/25/2016
Surr: 4-Bromofluorobenzene			**49.8**	50.00		99.6			08/25/2016
Surr: Dibromofluoromethane			**49.8**	50.00		99.6			08/25/2016
Surr: Toluene-d8			**52.1**	50.00		104.2			08/25/2016

Batch 121800 **SampType:** LCSG Units **%REC**

SampID: LCSG-N160825A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**50.1**	50.00		100.2	74.7	129	08/25/2016
Surr: 4-Bromofluorobenzene			**50.6**	50.00		101.3	86	119	08/25/2016
Surr: Dibromofluoromethane			**49.6**	50.00		99.2	81.7	123	08/25/2016
Surr: Toluene-d8			**52.6**	50.00		105.1	84.3	114	08/25/2016

Receiving Check List

http://www.teklabinc.com/

Client: Missouri Geological Survey
Client Project: Appendix I

Work Order: 16081431
Report Date: 29-Aug-16

Carrier: Nick Reed

Received By: EEP

Completed by: Emily Pohlman
On: 23-Aug-16

Reviewed by: Elizabeth A. Hurley
On: 23-Aug-16

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C	3.22
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice	☐
Chain of custody present?	Yes ☑	No ☐			
Chain of custody signed when relinquished and received?	Yes ☑	No ☐			
Chain of custody agrees with sample labels?	Yes ☑	No ☐			
Samples in proper container/bottle?	Yes ☑	No ☐			
Sample containers intact?	Yes ☑	No ☐			
Sufficient sample volume for indicated test?	Yes ☑	No ☐			
All samples received within holding time?	Yes ☑	No ☐			
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑		
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐			

When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.

Water – at least one vial per sample has zero headspace?	Yes ☑	No ☐	No VOA vials ☐
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	NA ☐
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑

Any No responses must be detailed below or on the COC.

CHAIN OF CUSTODY

pg. 1 of 1 Work order # 16081431

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client: Missouri Geological Survey
Address: 111 Fairgrounds Road
City / State / Zip Rolla, MO 65401
Contact: Brenna McDonald **Phone:** (573) 368-2163
E-Mail: brenna.mcdonald@dnr.mo.gov **Fax:**

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 3.22 °C
Preserved in: [ ] LAB [ ] FIELD **FOR LAB USE ONLY**
Lab Notes OK headspace amo 8/23/16

Client Comments:
Metals: Sb As Ba Be B Cd Ca Cr Co Cu Pb Mg Mn Hg Ni Se Ag Na Tl V Zn
Courier

Are these samples known to be involved in litigation? If yes, a surcharge will apply [X] Yes [ ] No
Are these samples known to be hazardous? [ ] Yes [X] No
Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [ ] Yes [X] No

Project Name/Number: Appendix I
Sample Collector's Name: Jessie Hahn

Results Requested: [ ] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions

Lab Use Only	Sample Identification	Date/Time Sampled	UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	Ammonia	Fluoride	Hardness	Metals	N3N2	Phosphorus	Sulfate	TOC	VOCs
16081431-001	822-2316	8-23-2016 8:00					2									X									X

Relinquished By	Date/Time	Received By	Date/Time
Jessie Hahn [signature]	8/23/16 1240	[signature]	8/23/16 12:43
[signature]	8/23/16 2:12 pm	[signature]	8/23/16 1412
[signature]	8/23/16 1615	[signature]	8/23/16 1615

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client.

BottleOrder: 32830

amo 8/23/16

September 20, 2016

Brenna McDonald
Missouri Geological Survey
111 Fairgrounds Road
Rolla, MO 65401
TEL: (573) 368-2163
FAX:

RE: Appendix I Bridgeton Landfill **WorkOrder:** 16090293

Dear Brenna McDonald:

TEKLAB, INC received 2 samples on 9/6/2016 3:40:00 PM for the analysis presented in the following report.

Samples are analyzed on an as received basis unless otherwise requested and documented. The sample results contained in this report relate only to the requested analytes of interest as directed on the chain of custody. NELAP accredited fields of testing are indicated by the letters NELAP under the Certification column. Unless otherwise documented within this report, Teklab Inc. analyzes samples utilizing the most current methods in compliance with 40CFR. All tests are performed in the Collinsville, IL laboratory unless otherwise noted in the Case Narrative.

All quality control criteria applicable to the test methods employed for this project have been satisfactorily met and are in accordance with NELAP except where noted. The following report shall not be reproduced, except in full, without the written approval of Teklab, Inc.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Emily Pohlman
Project Manager
(618)344-1004 ex 44
epohlman@teklabinc.com

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

Abbr Definition

CCV	Continuing calibration verification is a check of a standard to determine the state of calibration of an instrument between recalibration.
DF	Dilution factor is the dilution performed during analysis only and does not take into account any dilutions made during sample preparation. The reported result is final and includes all dilutions factors.
DNI	Did not ignite
DUP	Laboratory duplicate is an aliquot of a sample taken from the same container under laboratory conditions for independent processing and analysis independently of the original aliquot.
ICV	Initial calibration verification is a check of a standard to determine the state of calibration of an instrument before sample analysis is initiated.
IDPH	IL Dept. of Public Health
LCS	Laboratory control sample, spiked with verified known amounts of analytes, is analyzed exactly like a sample to establish intra-laboratory or analyst specific precision and bias or to assess the performance of all or a portion of the measurement system. The acceptable recovery range is in the QC Package (provided upon request).
LCSD	Laboratory control sample duplicate is a replicate laboratory control sample that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MBLK	Method blank is a sample of a matrix similar to the batch of associated sample (when available) that is free from the analytes of interest and is processed simultaneously with and under the same conditions as samples through all steps of the analytical procedures, and in which no target analytes or interferences should present at concentrations that impact the analytical results for sample analyses.
MDL	Method detection limit means the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero.
MS	Matrix spike is an aliquot of matrix fortified (spiked) with known quantities of specific analytes that is subjected to the entire analytical procedures in order to determine the effect of the matrix on an approved test method's recovery system. The acceptable recovery range is listed in the QC Package (provided upon request).
MSD	Matrix spike duplicate means a replicate matrix spike that is prepared and analyzed in order to determine the precision of the approved test method. The acceptable recovery range is listed in the QC Package (provided upon request).
MW	Molecular weight
ND	Not Detected at the Reporting Limit
NELAP	NELAP Accredited
PQL	Practical quantitation limit means the lowest level that can be reliably achieved within specified limits of precision and accuracy during routine laboratory operation conditions. The acceptable recovery range is listed in the QC Package (provided upon request).
RL	The reporting limit the lowest level that the data is displayed in the final report. The reporting limit may vary according to customer request or sample dilution. The reporting limit may not be less than the MDL.
RPD	Relative percent difference is a calculated difference between two recoveries (ie. MS/MSD). The acceptable recovery limit is listed in the QC Package (provided upon request).
SPK	The spike is a known mass of target analyte added to a blank sample or sub-sample; used to determine recovery deficiency or for other quality control purposes.
Surr	Surrogates are compounds which are similar to the analytes of interest in chemical composition and behavior in the analytical process, but which are not normally found in environmental samples.
TIC	Tentatively identified compound: Analytes tentatively identified in the sample by using a library search. Only results not in the calibration standard will be reported as tentatively identified compounds. Results for tentatively identified compounds that are not present in the calibration standard, but are assigned a specific chemical name based upon the library search, are calculated using total peak areas from reconstructed ion chromatograms and a response factor of one. The nearest Internal Standard is used for the calculation. The results of any TICs must be considered estimated, and are flagged with a "T". If the estimated result is above the calibration range it is flagged "ET"
TNTC	Too numerous to count (> 200 CFU)

Qualifiers

# -	Unknown hydrocarbon	B -	Analyte detected in associated Method Blank
E -	Value above quantitation range	H -	Holding times exceeded
I -	Associated internal standard was outside method criteria	J -	Analyte detected below quantitation limits
M -	Manual Integration used to determine area response	ND -	Not Detected at the Reporting Limit
R -	RPD outside accepted recovery limits	S -	Spike Recovery outside recovery limits
T -	TIC(Tentatively identified compound)	X -	Value exceeds Maximum Contaminant Level

Case Narrative

http://www.teklabinc.com/

Client: Missouri Geological Survey
Client Project: Appendix I Bridgeton Landfill

Work Order: 16090293
Report Date: 20-Sep-16

Cooler Receipt Temp: 3.62 °C

Locations and Accreditations

	Collinsville	Springfield	Kansas City	Collinsville Air
Address	5445 Horseshoe Lake Road	3920 Pintail Dr	8421 Nieman Road	5445 Horseshoe Lake Road
	Collinsville, IL 62234-7425	Springfield, IL 62711-9415	Lenexa, KS 66214	Collinsville, IL 62234-7425
Phone	(618) 344-1004	(217) 698-1004	(913) 541-1998	(618) 344-1004
Fax	(618) 344-1005	(217) 698-1005	(913) 541-1998	(618) 344-1005
Email	jhriley@teklabinc.com	KKlostermann@teklabinc.com	dthompson@teklabinc.com	EHurley@teklabinc.com

State	Dept	Cert #	NELAP	Exp Date	Lab
Illinois	IEPA	100226	NELAP	1/31/2017	Collinsville
Kansas	KDHE	E-10374	NELAP	4/30/2017	Collinsville
Louisiana	LDEQ	166493	NELAP	6/30/2017	Collinsville
Louisiana	LDEQ	166578	NELAP	6/30/2017	Collinsville
Texas	TCEQ	T104704515-12-1	NELAP	7/31/2017	Collinsville
Arkansas	ADEQ	88-0966		3/14/2017	Collinsville
Illinois	IDPH	17584		5/31/2017	Collinsville
Kentucky	KDEP	98006		12/31/2016	Collinsville
Kentucky	UST	0073		1/31/2017	Collinsville
Missouri	MDNR	00930		5/31/2017	Collinsville
Missouri	MDNR	930		1/31/2017	Collinsville
Oklahoma	ODEQ	9978		8/31/2017	Collinsville

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

Lab ID: 16090293-001 **Client Sample ID:** D-85

Matrix: GROUNDWATER **Collection Date:** 09/06/2016 9:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
EPA 600 350.1 R2.0 (DISTILLED) TOTAL								
Nitrogen, Ammonia (as N)	NELAP	0.10		**2.90**	mg/L	1	09/08/2016 13:36	122263
EPA 600 353.2 R2.0 (TOTAL)								
Nitrogen, Nitrate-Nitrite (as N)	NELAP	0.050		**< 0.050**	mg/L	1	09/07/2016 10:27	R223185
EPA 600 365.4 (TOTAL)								
Phosphorus, Total (as P)	NELAP	0.250	S	**5.62**	mg/L	1	09/15/2016 8:49	122413
MS and/or MSD did not recover within control limits due to sample composition.								
Inconsistent results obtained during re-prep and re-analysis due to sample composition. Highest results are reported.								
SW-846 9036 (TOTAL)								
Sulfate	NELAP	50		**70**	mg/L	5	09/09/2016 14:45	R223304
SW-846 9060								
Total Organic Carbon (TOC)	NELAP	1.0		**2.2**	mg/L	1	09/07/2016 11:49	R223186
SW-846 9214 (TOTAL)								
Fluoride	NELAP	0.10		**0.21**	mg/L	1	09/08/2016 15:40	R223258
STANDARD METHODS 2340 B, HARDNESS (TOTAL)								
Hardness, as (CaCO3)	NELAP	1.00		**1500**	mg/L	1	09/09/2016 0:00	R223279
SW-846 3005A, 6010B, METALS BY ICP (TOTAL)								
Antimony	NELAP	0.0500	S	**< 0.0500**	mg/L	1	09/13/2016 9:33	122341
Arsenic	NELAP	0.0250		**0.0753**	mg/L	1	09/09/2016 13:56	122231
Barium	NELAP	0.0025		**4.27**	mg/L	1	09/09/2016 13:56	122231
Beryllium	NELAP	0.0005		**0.0031**	mg/L	1	09/09/2016 13:56	122231
Boron	NELAP	0.0200		**0.195**	mg/L	1	09/09/2016 13:56	122231
Cadmium	NELAP	0.0020		**0.0020**	mg/L	1	09/09/2016 13:56	122231
Calcium	NELAP	0.0500	BS	**416**	mg/L	1	09/09/2016 13:56	122231
Chromium	NELAP	0.0050		**0.0702**	mg/L	1	09/09/2016 13:56	122231
Cobalt	NELAP	0.0050		**0.0574**	mg/L	1	09/09/2016 13:56	122231
Copper	NELAP	0.0050		**0.0642**	mg/L	1	09/09/2016 13:56	122231
Lead	NELAP	0.0150		**0.0827**	mg/L	1	09/09/2016 13:56	122231
Magnesium	NELAP	0.0500	S	**111**	mg/L	1	09/09/2016 13:56	122231
Manganese	NELAP	0.0030	S	**4.03**	mg/L	1	09/09/2016 13:56	122231
Nickel	NELAP	0.0050		**0.149**	mg/L	1	09/09/2016 13:56	122231
Selenium	NELAP	0.0400		**< 0.0400**	mg/L	1	09/09/2016 13:56	122231
Silver	NELAP	0.0050		**< 0.0050**	mg/L	1	09/09/2016 13:56	122231
Sodium	NELAP	0.0500	S	**144**	mg/L	1	09/09/2016 13:56	122231
Thallium	NELAP	0.0500		**< 0.0500**	mg/L	1	09/09/2016 13:56	122231
Vanadium	NELAP	0.0100		**0.130**	mg/L	1	09/09/2016 13:56	122231
Zinc	NELAP	0.0100		**0.383**	mg/L	1	09/09/2016 13:56	122231
Sb- MS and MSD did not recover within control limits due to matrix interference. Verified by re-prep.								
Sample result(s) for Ca exceed 10 times the MBLK contamination. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.1).								
MS QC limits for Ca, Mg, Mn, and Na are not applicable due to high sample/spike ratio.								
SW-846 7470A (TOTAL)								
Mercury	NELAP	0.00020	J	**0.00005**	mg/L	1	09/20/2016 10:26	122548
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,1,1-Trichloroethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,1,2,2-Tetrachloroethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,1,2-Trichloroethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,1-Dichloroethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

Lab ID: 16090293-001 **Client Sample ID:** D-85

Matrix: GROUNDWATER **Collection Date:** 09/06/2016 9:27

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1-Dichloroethene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,2,3-Trichloropropane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,2-Dibromo-3-chloropropane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,2-Dibromoethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,2-Dichlorobenzene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,2-Dichloroethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,2-Dichloropropane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
1,4-Dichlorobenzene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
2-Butanone	NELAP	25.0		**ND**	µg/L	1	09/12/2016 11:52	122353
2-Hexanone	NELAP	25.0		**ND**	µg/L	1	09/12/2016 11:52	122353
4-Methyl-2-pentanone	NELAP	25.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Acetone	NELAP	25.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Acrylonitrile	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Benzene	NELAP	2.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Bromochloromethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Bromodichloromethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Bromoform	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Bromomethane	NELAP	10.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Carbon disulfide	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Carbon tetrachloride	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Chlorobenzene	NELAP	5.0		**53.2**	µg/L	1	09/12/2016 11:52	122353
Chloroethane	NELAP	10.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Chloroform	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Chloromethane	NELAP	10.0		**ND**	µg/L	1	09/12/2016 11:52	122353
cis-1,2-Dichloroethene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
cis-1,3-Dichloropropene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Dibromochloromethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Dibromomethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Ethylbenzene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Iodomethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Methylene chloride	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Styrene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Tetrachloroethene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Toluene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
trans-1,2-Dichloroethene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
trans-1,3-Dichloropropene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
trans-1,4-Dichloro-2-butene	NELAP	10.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Trichloroethene	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Trichlorofluoromethane	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Vinyl acetate	NELAP	10.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Vinyl chloride	NELAP	2.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Xylenes, Total	NELAP	5.0		**ND**	µg/L	1	09/12/2016 11:52	122353
Surr: 1,2-Dichloroethane-d4		74.7-129		**105.9**	%REC	1	09/12/2016 11:52	122353
Surr: 4-Bromofluorobenzene		86-119		**103.2**	%REC	1	09/12/2016 11:52	122353
Surr: Dibromofluoromethane		81.7-123		**95.1**	%REC	1	09/12/2016 11:52	122353
Surr: Toluene-d8		84.3-114		**98.8**	%REC	1	09/12/2016 11:52	122353

LCS and LCSD recovered outside upper QC limits for bromomethane and iodomethane. Sample results are below reporting limit. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.2).

Client: Missouri Geological Survey
Work Order: 16090293
Client Project: Appendix I Bridgeton Landfill
Report Date: 20-Sep-16
Lab ID: 16090293-002
Client Sample ID: Trip Blank
Matrix: AQUEOUS
Collection Date: 09/06/2016 15:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
1,1,1,2-Tetrachloroethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,1,1-Trichloroethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,1,2,2-Tetrachloroethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,1,2-Trichloroethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,1-Dichloroethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,1-Dichloroethene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,2,3-Trichloropropane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,2-Dibromo-3-chloropropane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,2-Dibromoethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,2-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,2-Dichloroethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,2-Dichloropropane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
1,4-Dichlorobenzene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
2-Butanone	NELAP	25.0		ND	µg/L	1	09/12/2016 12:18	122353
2-Hexanone	NELAP	25.0		ND	µg/L	1	09/12/2016 12:18	122353
4-Methyl-2-pentanone	NELAP	25.0		ND	µg/L	1	09/12/2016 12:18	122353
Acetone	NELAP	25.0		ND	µg/L	1	09/12/2016 12:18	122353
Acrylonitrile	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Benzene	NELAP	2.0		ND	µg/L	1	09/12/2016 12:18	122353
Bromochloromethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Bromodichloromethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Bromoform	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Bromomethane	NELAP	10.0		ND	µg/L	1	09/12/2016 12:18	122353
Carbon disulfide	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Carbon tetrachloride	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Chlorobenzene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Chloroethane	NELAP	10.0		ND	µg/L	1	09/12/2016 12:18	122353
Chloroform	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Chloromethane	NELAP	10.0		ND	µg/L	1	09/12/2016 12:18	122353
cis-1,2-Dichloroethene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
cis-1,3-Dichloropropene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Dibromochloromethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Dibromomethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Ethylbenzene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Iodomethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Methylene chloride	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Styrene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Tetrachloroethene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Toluene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
trans-1,2-Dichloroethene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
trans-1,3-Dichloropropene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
trans-1,4-Dichloro-2-butene	NELAP	10.0		ND	µg/L	1	09/12/2016 12:18	122353
Trichloroethene	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Trichlorofluoromethane	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353
Vinyl acetate	NELAP	10.0		ND	µg/L	1	09/12/2016 12:18	122353
Vinyl chloride	NELAP	2.0		ND	µg/L	1	09/12/2016 12:18	122353
Xylenes, Total	NELAP	5.0		ND	µg/L	1	09/12/2016 12:18	122353

Client: Missouri Geological Survey
Work Order: 16090293
Client Project: Appendix I Bridgeton Landfill
Report Date: 20-Sep-16
Lab ID: 16090293-002
Client Sample ID: Trip Blank
Matrix: AQUEOUS
Collection Date: 09/06/2016 15:40

Analyses	Certification	RL	Qual	Result	Units	DF	Date Analyzed	Batch
SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS								
Surr: 1,2-Dichloroethane-d4		74.7-129		**103.4**	%REC	1	09/12/2016 12:18	122353
Surr: 4-Bromofluorobenzene		86-119		**103.4**	%REC	1	09/12/2016 12:18	122353
Surr: Dibromofluoromethane		81.7-123		**92.6**	%REC	1	09/12/2016 12:18	122353
Surr: Toluene-d8		84.3-114		**100.2**	%REC	1	09/12/2016 12:18	122353

LCS and LCSD recovered outside upper QC limits for bromomethane and iodomethane. Sample results are below reporting limit. Data is reportable per 2009 TNI Standard (Volume1, Module 4, section 1.7.4.2).

Client: Missouri Geological Survey
Client Project: Appendix I Bridgeton Landfill

Work Order: 16090293
Report Date: 20-Sep-16

Lab Sample ID	Client Sample ID	Matrix	Fractions	Collection Date
16090293-001	D-85	Groundwater	5	09/06/2016 9:27
16090293-002	Trip Blank	Aqueous	1	09/06/2016 15:40

Client: Missouri Geological Survey
Client Project: Appendix I Bridgeton Landfill

Work Order: 16090293
Report Date: 20-Sep-16

Sample ID	Client Sample ID	Collection Date	Received Date		
	Test Name			**Prep Date/Time**	**Analysis Date/Time**
16090293-001A	D-85	09/06/2016 9:27	09/06/2016 15:40		
	SW-846 9036 (Total)				09/09/2016 14:45
	SW-846 9214 (Total)				09/08/2016 15:40
16090293-001B	D-85	09/06/2016 9:27	09/06/2016 15:40		
	Standard Methods 2340 B, Hardness (Total)				09/09/2016 0:00
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/08/2016 9:15	09/09/2016 13:56
	SW-846 3005A, 6010B, Metals by ICP (Total)			09/12/2016 11:53	09/13/2016 9:33
	SW-846 7470A (Total)			09/19/2016 12:25	09/20/2016 10:26
16090293-001C	D-85	09/06/2016 9:27	09/06/2016 15:40		
	SW-846 9060				09/07/2016 11:49
16090293-001D	D-85	09/06/2016 9:27	09/06/2016 15:40		
	EPA 600 350.1 R2.0 (Distilled) Total			09/08/2016 8:22	09/08/2016 13:36
	EPA 600 353.2 R2.0 (Total)				09/07/2016 10:27
	EPA 600 365.4 (Total)			09/13/2016 21:00	09/15/2016 8:49
16090293-001E	D-85	09/06/2016 9:27	09/06/2016 15:40		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/12/2016 11:52
16090293-002A	Trip Blank	09/06/2016 15:40	09/06/2016 15:40		
	SW-846 5030, 8260B, Volatile Organic Compounds by GC/MS				09/12/2016 12:18

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

EPA 600 350.1 R2.0 (DISTILLED) TOTAL

Batch 122263 **SampType:** MBLK Units **mg/L**

SampID: MBLK 160908 NH3-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Nitrogen, Ammonia (as N)	0.10	J	**0.05**						09/08/2016

Batch 122263 **SampType:** LCS Units **mg/L**

SampID: LCS 160908 NH3-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Nitrogen, Ammonia (as N)	0.10		**1.89**	2.000	0	94.4	90	110	09/08/2016

Batch 122263 **SampType:** MS Units **mg/L**

SampID: 16090293-001DMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Nitrogen, Ammonia (as N)	0.10		**4.76**	2.000	2.900	93.0	90	110	09/08/2016

Batch 122263 **SampType:** MSD Units **mg/L** RPD Limit **15**

SampID: 16090293-001DMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Nitrogen, Ammonia (as N)	0.10		**4.83**	2.000	2.900	96.7	4.760	1.54	09/08/2016

EPA 600 353.2 R2.0 (TOTAL)

Batch R223185 **SampType:** MBLK Units **mg/L**

SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Nitrogen, Nitrate-Nitrite (as N)	0.050		**< 0.050**						09/07/2016

Batch R223185 **SampType:** LCS Units **mg/L**

SampID: ICV/LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Nitrogen, Nitrate-Nitrite (as N)	2.50		**11.9**	11.50	0	103.3	90	110	09/07/2016

Batch R223185 **SampType:** MS Units **mg/L**

SampID: 16090293-001DMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Nitrogen, Nitrate-Nitrite (as N)	0.050		**0.269**	0.2500	0	107.6	90	110	09/07/2016

Batch R223185 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 16090293-001DMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Nitrogen, Nitrate-Nitrite (as N)	0.050		**0.269**	0.2500	0	107.6	0.2690	0.00	09/07/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

EPA 600 365.4 (TOTAL)

Batch 122233 **SampType:** MBLK Units **mg/L**
SampID: MBLK 160907 TP-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.050		**< 0.050**						09/08/2016

Batch 122233 **SampType:** LCS Units **mg/L**
SampID: LCS 160907 TP-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.050		**1.06**	1.000	0	106.4	85	115	09/08/2016

Batch 122331 **SampType:** MBLK Units **mg/L**
SampID: MBLK 160909 TP-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.050		**< 0.050**						09/12/2016

Batch 122331 **SampType:** LCS Units **mg/L**
SampID: LCS 160909 TP-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.050		**1.03**	1.000	0	103.1	85	115	09/12/2016

Batch 122413 **SampType:** MBLK Units **mg/L**
SampID: MBLK 160913 TP-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.050		**< 0.050**						09/14/2016

Batch 122413 **SampType:** LCS Units **mg/L**
SampID: LCS 160913 TP-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.050		**1.06**	1.000	0	106.2	85	115	09/14/2016

Batch 122413 **SampType:** MS Units **mg/L**
SampID: 16090293-001DMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Phosphorus, Total (as P)	0.250	S	**11.6**	5.000	5.625	120.3	85	115	09/15/2016

Batch 122413 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 16090293-001DMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Phosphorus, Total (as P)	0.250		**10.2**	5.000	5.625	91.7	11.64	13.09	09/15/2016

Batch 122413 **SampType:** DUP Units **mg/L** RPD Limit **15**
SampID: 16090293-001DDUP

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Phosphorus, Total (as P)	0.250		**6.39**				5.625	12.73	09/15/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 9036 (TOTAL)

Batch R223251 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	10		**< 10**						09/08/2016

Batch R223251 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	10		**19**	20.00	0	97.2	90	110	09/08/2016

Batch R223304 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	10		**< 10**						09/09/2016

Batch R223304 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	10		**21**	20.00	0	104.8	90	110	09/09/2016

Batch R223304 **SampType:** MS Units **mg/L**
SampID: 16090293-001AMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Sulfate	50		**124**	50.00	70.00	108.4	85	115	09/09/2016

Batch R223304 **SampType:** MSD Units **mg/L** RPD Limit **10**
SampID: 16090293-001AMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Sulfate	50		**120**	50.00	70.00	99.4	124.2	3.69	09/09/2016

SW-846 9060

Batch R223186 **SampType:** MBLK Units **mg/L**
SampID: ICB/MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)	1.0		**< 1.0**						09/07/2016

Batch R223186 **SampType:** LCS Units **mg/L**
SampID: ICV/LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)	10.0		**72.7**	68.10	0	106.7	90	110	09/07/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 9060

Batch R223186 **SampType:** MS Units **mg/L**

SampID: 16090293-001CMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Total Organic Carbon (TOC)	1.0		**6.5**	5.000	2.200	86.4	85	115	09/07/2016

Batch R223186 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 16090293-001CMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Total Organic Carbon (TOC)	1.0		**6.7**	5.000	2.200	89.8	6.520	2.57	09/07/2016

SW-846 9214 (TOTAL)

Batch R223258 **SampType:** MBLK Units **mg/L**

SampID: MBLK

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	0.10		**< 0.10**						09/08/2016

Batch R223258 **SampType:** LCS Units **mg/L**

SampID: LCS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	0.10		**1.05**	1.000	0	104.9	90	110	09/08/2016

Batch R223258 **SampType:** MS Units **mg/L**

SampID: 16090293-001AMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Fluoride	0.10		**2.20**	2.000	0.2090	99.7	85	115	09/08/2016

Batch R223258 **SampType:** MSD Units **mg/L** RPD Limit **10**

SampID: 16090293-001AMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Fluoride	0.10		**2.15**	2.000	0.2090	97.1	2.202	2.34	09/08/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 122231 **SampType:** MBLK Units **mg/L**

SampID: MBLK-122231

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony	0.0500		**< 0.0500**	0.05000	0	0	-100	100	09/09/2016
Arsenic	0.0250		**< 0.0250**	0.02500	0	0	-100	100	09/09/2016
Barium	0.0025		**< 0.0025**	0.00250(	0	0	-100	100	09/09/2016
Beryllium	0.0005		**< 0.0005**	.000500(	0	0	-100	100	09/09/2016
Boron	0.0200		**< 0.0200**	0.02000	0	0	-100	100	09/09/2016
Cadmium	0.0020		**< 0.0020**	0.00200(	0	0	-100	100	09/09/2016
Calcium	0.0500	S	**0.182**	0.05000	0	364.8	-100	100	09/09/2016
Chromium	0.0050		**< 0.0050**	0.00500(	0	0	-100	100	09/09/2016
Cobalt	0.0050		**< 0.0050**	0.00500(	0	0	-100	100	09/09/2016
Copper	0.0050		**< 0.0050**	0.00500(	0	0	-100	100	09/09/2016
Lead	0.0150		**< 0.0150**	0.01500	0	0	-100	100	09/09/2016
Magnesium	0.0500	J	**0.033**	0.05000	0	66.0	-100	100	09/09/2016
Manganese	0.0030		**< 0.0030**	0.00300(	0	0	-100	100	09/09/2016
Nickel	0.0050		**< 0.0050**	0.00500(	0	0	-100	100	09/09/2016
Selenium	0.0400		**< 0.0400**	0.04000	0	0	-100	100	09/09/2016
Silver	0.0050		**< 0.0050**	0.00500(	0	0	-100	100	09/09/2016
Sodium	0.0500		**< 0.0500**	0.05000	0	0	-100	100	09/09/2016
Thallium	0.0500		**< 0.0500**	0.05000	0	0	-100	100	09/09/2016
Vanadium	0.0100		**< 0.0100**	0.01000	0	0	-100	100	09/09/2016
Zinc	0.0100	J	**0.0064**	0.01000	0	64.0	-100	100	09/09/2016

Batch 122231 **SampType:** LCS Units **mg/L**

SampID: LCS-122231

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony	0.0500		**0.482**	0.5000	0	96.5	85	115	09/09/2016
Arsenic	0.0250		**0.492**	0.5000	0	98.5	85	115	09/09/2016
Barium	0.0025		**2.07**	2.000	0	103.6	85	115	09/09/2016
Beryllium	0.0005		**0.0519**	0.05000	0	103.8	85	115	09/09/2016
Boron	0.0200		**0.498**	0.5000	0	99.7	85	115	09/09/2016
Cadmium	0.0020		**0.0510**	0.05000	0	102.0	85	115	09/09/2016
Calcium	0.0500	B	**2.74**	2.500	0	109.6	85	115	09/09/2016
Chromium	0.0050		**0.201**	0.2000	0	100.4	85	115	09/09/2016
Cobalt	0.0050		**0.493**	0.5000	0	98.5	85	115	09/09/2016
Copper	0.0050		**0.252**	0.2500	0	100.8	85	115	09/09/2016
Lead	0.0150		**0.521**	0.5000	0	104.2	85	115	09/09/2016
Magnesium	0.0500		**2.56**	2.500	0	102.2	85	115	09/09/2016
Manganese	0.0030		**0.513**	0.5000	0	102.7	85	115	09/09/2016
Nickel	0.0050		**0.503**	0.5000	0	100.5	85	115	09/09/2016
Selenium	0.0400		**0.519**	0.5000	0	103.8	85	115	09/09/2016
Silver	0.0050		**0.0495**	0.05000	0	99.0	85	115	09/09/2016
Sodium	0.0500		**2.34**	2.500	0	93.4	85	115	09/09/2016
Thallium	0.0500		**0.248**	0.2500	0	99.4	85	115	09/09/2016
Vanadium	0.0100		**0.497**	0.5000	0	99.3	85	115	09/09/2016
Zinc	0.0100		**0.495**	0.5000	0	99.1	85	115	09/09/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 122231 **SampType:** MS Units **mg/L**

SampID: 16090293-001BMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Arsenic	0.0250		**0.568**	0.5000	0.07530	98.6	75	125	09/09/2016
Barium	0.0025		**5.94**	2.000	4.271	83.3	75	125	09/09/2016
Beryllium	0.0005		**0.0538**	0.05000	0.003100	101.4	75	125	09/09/2016
Boron	0.0200		**0.698**	0.5000	0.1946	100.7	75	125	09/09/2016
Cadmium	0.0020		**0.0510**	0.05000	0.002000	98.0	75	125	09/09/2016
Calcium	0.0500	BS	**392**	2.500	416.1	-972.0	75	125	09/09/2016
Chromium	0.0050		**0.249**	0.2000	0.07020	89.3	75	125	09/09/2016
Cobalt	0.0050		**0.526**	0.5000	0.05740	93.7	75	125	09/09/2016
Copper	0.0050		**0.318**	0.2500	0.06420	101.7	75	125	09/09/2016
Lead	0.0150		**0.577**	0.5000	0.08270	98.8	75	125	09/09/2016
Magnesium	0.0500	S	**99.4**	2.500	111.3	-476.8	75	125	09/09/2016
Manganese	0.0030	S	**4.23**	0.5000	4.027	40.0	75	125	09/09/2016
Nickel	0.0050		**0.598**	0.5000	0.1491	89.7	75	125	09/09/2016
Selenium	0.0400		**0.533**	0.5000	0	106.7	75	125	09/09/2016
Silver	0.0050		**0.0517**	0.05000	0	103.4	75	125	09/09/2016
Sodium	0.0500		**147**	2.500	144.1	104.0	75	125	09/09/2016
Thallium	0.0500		**0.239**	0.2500	0	95.7	75	125	09/09/2016
Vanadium	0.0100		**0.593**	0.5000	0.1295	92.8	75	125	09/09/2016
Zinc	0.0100		**0.770**	0.5000	0.3827	77.4	75	125	09/09/2016

Batch 122231 **SampType:** MSD Units **mg/L** RPD Limit **20**

SampID: 16090293-001BMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Arsenic	0.0250		**0.578**	0.5000	0.07530	100.6	0.5685	1.74	09/09/2016
Barium	0.0025		**6.21**	2.000	4.271	97.0	5.937	4.53	09/09/2016
Beryllium	0.0005		**0.0548**	0.05000	0.003100	103.4	0.05380	1.84	09/09/2016
Boron	0.0200		**0.693**	0.5000	0.1946	99.7	0.6979	0.68	09/09/2016
Cadmium	0.0020		**0.0513**	0.05000	0.002000	98.6	0.05100	0.59	09/09/2016
Calcium	0.0500	BS	**420**	2.500	416.1	140.0	391.8	6.85	09/09/2016
Chromium	0.0050		**0.275**	0.2000	0.07020	102.2	0.2488	9.86	09/09/2016
Cobalt	0.0050		**0.547**	0.5000	0.05740	97.9	0.5258	3.90	09/09/2016
Copper	0.0050		**0.329**	0.2500	0.06420	105.9	0.3184	3.27	09/09/2016
Lead	0.0150		**0.598**	0.5000	0.08270	103.2	0.5768	3.69	09/09/2016
Magnesium	0.0500	S	**117**	2.500	111.3	220.0	99.38	16.12	09/09/2016
Manganese	0.0030		**4.63**	0.5000	4.027	120.8	4.227	9.12	09/09/2016
Nickel	0.0050		**0.652**	0.5000	0.1491	100.5	0.5978	8.63	09/09/2016
Selenium	0.0400		**0.538**	0.5000	0	107.6	0.5333	0.84	09/09/2016
Silver	0.0050		**0.0517**	0.05000	0	103.4	0.05170	0.00	09/09/2016
Sodium	0.0500	S	**141**	2.500	144.1	-112.0	146.7	3.75	09/09/2016
Thallium	0.0500		**0.236**	0.2500	0	94.4	0.2392	1.35	09/09/2016
Vanadium	0.0100		**0.635**	0.5000	0.1295	101.2	0.5933	6.85	09/09/2016
Zinc	0.0100		**0.840**	0.5000	0.3827	91.4	0.7696	8.74	09/09/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 3005A, 6010B, METALS BY ICP (TOTAL)

Batch 122341 **SampType:** MBLK Units **mg/L**
SampID: MBLK-122341

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony	0.0500		**< 0.0500**	0.05000	0	0	-100	100	09/13/2016

Batch 122341 **SampType:** LCS Units **mg/L**
SampID: LCS-122341

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony	0.0500		**0.487**	0.5000	0	97.4	85	115	09/13/2016

Batch 122341 **SampType:** MS Units **mg/L**
SampID: 16090293-001BMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Antimony	0.0500	S	**0.343**	0.5000	0	68.6	75	125	09/13/2016

Batch 122341 **SampType:** MSD Units **mg/L** RPD Limit **20**
SampID: 16090293-001BMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Antimony	0.0500	S	**0.334**	0.5000	0	66.8	0.3432	2.66	09/13/2016

SW-846 7470A (TOTAL)

Batch 122548 **SampType:** MBLK Units **mg/L**
SampID: MBLK-122548

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury	0.00020		**< 0.00020**	.000200	0	0	-100	100	09/20/2016

Batch 122548 **SampType:** LCS Units **mg/L**
SampID: LCS-122548

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury	0.00020		**0.00501**	0.00500	0	100.2	85	115	09/20/2016

Batch 122548 **SampType:** MS Units **mg/L**
SampID: 16090293-001BMS

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Mercury	0.00020		**0.00615**	0.00500	0.00005100	122.0	75	125	09/20/2016

Batch 122548 **SampType:** MSD Units **mg/L** RPD Limit **15**
SampID: 16090293-001BMSD

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Mercury	0.00020		**0.00607**	0.00500	0.00005100	120.4	0.006151	1.32	09/20/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 122353 **SampType:** MBLK Units µg/L

SampID: MBLK-T160912A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		ND						09/12/2016
1,1,1-Trichloroethane	5.0		ND						09/12/2016
1,1,2,2-Tetrachloroethane	5.0		ND						09/12/2016
1,1,2-Trichloroethane	5.0		ND						09/12/2016
1,1-Dichloroethane	5.0		ND						09/12/2016
1,1-Dichloroethene	5.0		ND						09/12/2016
1,2,3-Trichloropropane	5.0		ND						09/12/2016
1,2-Dibromo-3-chloropropane	5.0		ND						09/12/2016
1,2-Dibromoethane	5.0		ND						09/12/2016
1,2-Dichlorobenzene	5.0		ND						09/12/2016
1,2-Dichloroethane	5.0		ND						09/12/2016
1,2-Dichloropropane	5.0		ND						09/12/2016
1,4-Dichlorobenzene	5.0		ND						09/12/2016
2-Butanone	25.0		ND						09/12/2016
2-Hexanone	25.0		ND						09/12/2016
4-Methyl-2-pentanone	25.0		ND						09/12/2016
Acetone	25.0		ND						09/12/2016
Acrylonitrile	5.0		ND						09/12/2016
Benzene	2.0		ND						09/12/2016
Bromochloromethane	5.0		ND						09/12/2016
Bromodichloromethane	5.0		ND						09/12/2016
Bromoform	5.0		ND						09/12/2016
Bromomethane	10.0		ND						09/12/2016
Carbon disulfide	5.0		ND						09/12/2016
Carbon tetrachloride	5.0		ND						09/12/2016
Chlorobenzene	5.0		ND						09/12/2016
Chloroethane	10.0		ND						09/12/2016
Chloroform	5.0		ND						09/12/2016
Chloromethane	10.0		ND						09/12/2016
cis-1,2-Dichloroethene	5.0		ND						09/12/2016
cis-1,3-Dichloropropene	5.0		ND						09/12/2016
Dibromochloromethane	5.0		ND						09/12/2016
Dibromomethane	5.0		ND						09/12/2016
Ethylbenzene	5.0		ND						09/12/2016
Iodomethane	5.0		ND						09/12/2016
Methylene chloride	5.0		ND						09/12/2016
Styrene	5.0		ND						09/12/2016
Tetrachloroethene	5.0		ND						09/12/2016
Toluene	5.0		ND						09/12/2016
trans-1,2-Dichloroethene	5.0		ND						09/12/2016
trans-1,3-Dichloropropene	5.0		ND						09/12/2016
trans-1,4-Dichloro-2-butene	10.0		ND						09/12/2016
Trichloroethene	5.0		ND						09/12/2016
Trichlorofluoromethane	5.0		ND						09/12/2016
Vinyl acetate	10.0		ND						09/12/2016
Vinyl chloride	2.0		ND						09/12/2016
Xylenes, Total	5.0		ND						09/12/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 122353 **SampType:** MBLK Units **µg/L**

SampID: MBLK-T160912A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**52.0**	50.00		104.0	74.7	129	09/12/2016
Surr: 4-Bromofluorobenzene			**51.6**	50.00		103.2	86	119	09/12/2016
Surr: Dibromofluoromethane			**46.9**	50.00		93.8	81.7	123	09/12/2016
Surr: Toluene-d8			**50.3**	50.00		100.5	84.3	114	09/12/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 122353 **SampType:** LCSD Units µg/L RPD Limit 40

SampID: LCSD-T160912A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		**47.1**	50.00	0	94.2	48.50	2.97	09/12/2016
1,1,1-Trichloroethane	5.0		**49.4**	50.00	0	98.7	50.66	2.60	09/12/2016
1,1,2,2-Tetrachloroethane	5.0		**47.6**	50.00	0	95.1	46.37	2.55	09/12/2016
1,1,2-Trichloroethane	5.0		**45.4**	50.00	0	90.9	46.17	1.59	09/12/2016
1,1-Dichloroethane	5.0		**48.4**	50.00	0	96.8	47.97	0.85	09/12/2016
1,1-Dichloroethene	5.0		**48.8**	50.00	0	97.5	49.12	0.74	09/12/2016
1,2,3-Trichloropropane	5.0		**45.2**	50.00	0	90.3	43.85	2.92	09/12/2016
1,2-Dibromo-3-chloropropane	5.0		**43.4**	50.00	0	86.7	42.54	1.93	09/12/2016
1,2-Dibromoethane	5.0		**45.0**	50.00	0	90.1	45.67	1.41	09/12/2016
1,2-Dichlorobenzene	5.0		**44.5**	50.00	0	89.0	44.54	0.13	09/12/2016
1,2-Dichloroethane	5.0		**50.5**	50.00	0	101.1	50.23	0.62	09/12/2016
1,2-Dichloropropane	5.0		**48.8**	50.00	0	97.6	49.65	1.69	09/12/2016
1,4-Dichlorobenzene	5.0		**45.5**	50.00	0	91.0	46.21	1.50	09/12/2016
2-Butanone	25.0		**103**	125.0	0	82.1	99.36	3.24	09/12/2016
2-Hexanone	25.0		**110**	125.0	0	88.1	109.1	0.98	09/12/2016
4-Methyl-2-pentanone	25.0		**111**	125.0	0	88.8	110.6	0.38	09/12/2016
Acetone	25.0		**90.5**	125.0	0	72.4	85.86	5.31	09/12/2016
Acrylonitrile	5.0		**43.3**	50.00	0	86.6	40.49	6.66	09/12/2016
Benzene	2.0		**47.8**	50.00	0	95.6	47.72	0.15	09/12/2016
Bromochloromethane	5.0		**48.6**	50.00	0	97.1	49.68	2.28	09/12/2016
Bromodichloromethane	5.0		**49.2**	50.00	0	98.4	49.30	0.18	09/12/2016
Bromoform	5.0		**46.7**	50.00	0	93.4	48.13	3.04	09/12/2016
Bromomethane	10.0	S	**114**	50.00	0	227.0	113.5	0.01	09/12/2016
Carbon disulfide	5.0		**46.8**	50.00	0	93.7	47.76	1.92	09/12/2016
Carbon tetrachloride	5.0		**49.7**	50.00	0	99.3	49.88	0.42	09/12/2016
Chlorobenzene	5.0		**46.3**	50.00	0	92.6	48.12	3.83	09/12/2016
Chloroethane	10.0		**51.1**	50.00	0	102.2	51.34	0.49	09/12/2016
Chloroform	5.0		**47.9**	50.00	0	95.9	47.75	0.40	09/12/2016
Chloromethane	10.0		**46.0**	50.00	0	91.9	45.76	0.44	09/12/2016
cis-1,2-Dichloroethene	5.0		**50.1**	50.00	0	100.2	51.00	1.76	09/12/2016
cis-1,3-Dichloropropene	5.0		**49.2**	50.00	0	98.5	49.54	0.63	09/12/2016
Dibromochloromethane	5.0		**45.9**	50.00	0	91.8	48.09	4.64	09/12/2016
Dibromomethane	5.0		**47.3**	50.00	0	94.6	46.80	1.04	09/12/2016
Ethylbenzene	5.0		**48.4**	50.00	0	96.8	49.73	2.75	09/12/2016
Iodomethane	5.0	S	**84.8**	50.00	0	169.7	86.81	2.28	09/12/2016
Methylene chloride	5.0		**46.8**	50.00	0	93.6	46.34	0.97	09/12/2016
Styrene	5.0		**46.4**	50.00	0	92.7	46.62	0.58	09/12/2016
Tetrachloroethene	5.0		**44.6**	50.00	0	89.1	46.33	3.92	09/12/2016
Toluene	5.0		**47.7**	50.00	0	95.4	48.81	2.34	09/12/2016
trans-1,2-Dichloroethene	5.0		**50.6**	50.00	0	101.3	50.98	0.67	09/12/2016
trans-1,3-Dichloropropene	5.0		**48.4**	50.00	0	96.8	50.05	3.35	09/12/2016
trans-1,4-Dichloro-2-butene	10.0		**50.6**	50.00	0	101.1	49.89	1.31	09/12/2016
Trichloroethene	5.0		**47.2**	50.00	0	94.5	48.04	1.66	09/12/2016
Trichlorofluoromethane	5.0		**46.6**	50.00	0	93.2	47.11	1.09	09/12/2016
Vinyl acetate	10.0		**50.2**	50.00	0	100.4	49.44	1.53	09/12/2016
Vinyl chloride	2.0		**56.6**	50.00	0	113.3	56.65	0.02	09/12/2016
Xylenes, Total	5.0		**144**	150.0	0	96.1	149.5	3.66	09/12/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 122353 **SampType:** LCSD Units **µg/L** RPD Limit **40**

SampID: LCSD-T160912A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	RPD Ref Val	%RPD	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**50.9**	50.00		101.8			09/12/2016
Surr: 4-Bromofluorobenzene			**50.7**	50.00		101.5			09/12/2016
Surr: Dibromofluoromethane			**47.3**	50.00		94.5			09/12/2016
Surr: Toluene-d8			**48.7**	50.00		97.4			09/12/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 122353 **SampType:** LCS Units µg/L

SampID: LCS-T160912A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
1,1,1,2-Tetrachloroethane	5.0		**48.5**	50.00	0	97.0	81.9	115	09/12/2016
1,1,1-Trichloroethane	5.0		**50.7**	50.00	0	101.3	79.4	124	09/12/2016
1,1,2,2-Tetrachloroethane	5.0		**46.4**	50.00	0	92.7	74.7	116	09/12/2016
1,1,2-Trichloroethane	5.0		**46.2**	50.00	0	92.3	80.8	111	09/12/2016
1,1-Dichloroethane	5.0		**48.0**	50.00	0	95.9	79.4	114	09/12/2016
1,1-Dichloroethene	5.0		**49.1**	50.00	0	98.2	74.1	117	09/12/2016
1,2,3-Trichloropropane	5.0		**43.8**	50.00	0	87.7	77.3	112	09/12/2016
1,2-Dibromo-3-chloropropane	5.0		**42.5**	50.00	0	85.1	76	122	09/12/2016
1,2-Dibromoethane	5.0		**45.7**	50.00	0	91.3	80.8	114	09/12/2016
1,2-Dichlorobenzene	5.0		**44.5**	50.00	0	89.1	78.3	112	09/12/2016
1,2-Dichloroethane	5.0		**50.2**	50.00	0	100.5	70.6	118	09/12/2016
1,2-Dichloropropane	5.0		**49.6**	50.00	0	99.3	79.6	113	09/12/2016
1,4-Dichlorobenzene	5.0		**46.2**	50.00	0	92.4	77.8	114	09/12/2016
2-Butanone	25.0		**99.4**	125.0	0	79.5	70.7	136	09/12/2016
2-Hexanone	25.0		**109**	125.0	0	87.2	73.3	125	09/12/2016
4-Methyl-2-pentanone	25.0		**111**	125.0	0	88.4	76.3	122	09/12/2016
Acetone	25.0		**85.9**	125.0	0	68.7	56.4	147	09/12/2016
Acrylonitrile	5.0		**40.5**	50.00	0	81.0	74.1	128	09/12/2016
Benzene	2.0		**47.7**	50.00	0	95.4	80	114	09/12/2016
Bromochloromethane	5.0		**49.7**	50.00	0	99.4	73.3	121	09/12/2016
Bromodichloromethane	5.0		**49.3**	50.00	0	98.6	81.6	121	09/12/2016
Bromoform	5.0		**48.1**	50.00	0	96.3	83.1	127	09/12/2016
Bromomethane	10.0	S	**113**	50.00	0	227.0	44.4	154	09/12/2016
Carbon disulfide	5.0		**47.8**	50.00	0	95.5	73.2	118	09/12/2016
Carbon tetrachloride	5.0		**49.9**	50.00	0	99.8	79.4	130	09/12/2016
Chlorobenzene	5.0		**48.1**	50.00	0	96.2	81.4	110	09/12/2016
Chloroethane	10.0		**51.3**	50.00	0	102.7	52.1	137	09/12/2016
Chloroform	5.0		**47.8**	50.00	0	95.5	82.7	116	09/12/2016
Chloromethane	10.0		**45.8**	50.00	0	91.5	48.2	144	09/12/2016
cis-1,2-Dichloroethene	5.0		**51.0**	50.00	0	102.0	78.2	116	09/12/2016
cis-1,3-Dichloropropene	5.0		**49.5**	50.00	0	99.1	83	119	09/12/2016
Dibromochloromethane	5.0		**48.1**	50.00	0	96.2	81.2	121	09/12/2016
Dibromomethane	5.0		**46.8**	50.00	0	93.6	78.3	118	09/12/2016
Ethylbenzene	5.0		**49.7**	50.00	0	99.5	77.2	113	09/12/2016
Iodomethane	5.0	S	**86.8**	50.00	0	173.6	61.3	140	09/12/2016
Methylene chloride	5.0		**46.3**	50.00	0	92.7	74.1	114	09/12/2016
Styrene	5.0		**46.6**	50.00	0	93.2	83.4	113	09/12/2016
Tetrachloroethene	5.0		**46.3**	50.00	0	92.7	72.5	125	09/12/2016
Toluene	5.0		**48.8**	50.00	0	97.6	77.5	113	09/12/2016
trans-1,2-Dichloroethene	5.0		**51.0**	50.00	0	102.0	79	114	09/12/2016
trans-1,3-Dichloropropene	5.0		**50.0**	50.00	0	100.1	78	115	09/12/2016
trans-1,4-Dichloro-2-butene	10.0		**49.9**	50.00	0	99.8	63.3	128	09/12/2016
Trichloroethene	5.0		**48.0**	50.00	0	96.1	84.4	114	09/12/2016
Trichlorofluoromethane	5.0		**47.1**	50.00	0	94.2	75.2	132	09/12/2016
Vinyl acetate	10.0		**49.4**	50.00	0	98.9	64.5	127	09/12/2016
Vinyl chloride	2.0		**56.6**	50.00	0	113.3	58	134	09/12/2016
Xylenes, Total	5.0		**150**	150.0	0	99.7	80.1	111	09/12/2016

Client: Missouri Geological Survey **Work Order:** 16090293

Client Project: Appendix I Bridgeton Landfill **Report Date:** 20-Sep-16

SW-846 5030, 8260B, VOLATILE ORGANIC COMPOUNDS BY GC/MS

Batch 122353 **SampType:** LCS Units **µg/L**

SampID: LCS-T160912A-1

Analyses	RL	Qual	Result	Spike	SPK Ref Val	%REC	Low Limit	High Limit	Date Analyzed
Surr: 1,2-Dichloroethane-d4			**49.3**	50.00		98.7	74.7	129	09/12/2016
Surr: 4-Bromofluorobenzene			**51.3**	50.00		102.6	86	119	09/12/2016
Surr: Dibromofluoromethane			**47.0**	50.00		94.0	81.7	123	09/12/2016
Surr: Toluene-d8			**49.4**	50.00		98.9	84.1	114	09/12/2016

Receiving Check List

Teklab, Inc. Environmental Laboratory

http://www.teklabinc.com/

Client: Missouri Geological Survey
Work Order: 16090293
Client Project: Appendix I Bridgeton Landfill
Report Date: 20-Sep-16

Carrier: Nick Reed
Received By: KF

Completed by: Kalyn Foecke
On: 06-Sep-16

Reviewed by: Elizabeth A. Hurley
On: 06-Sep-16

Pages to follow: Chain of custody 1 Extra pages included 0

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐	Temp °C 3.62
Type of thermal preservation?	None ☐	Ice ☑	Blue Ice ☐	Dry Ice ☐
Chain of custody present?	Yes ☑	No ☐		
Chain of custody signed when relinquished and received?	Yes ☑	No ☐		
Chain of custody agrees with sample labels?	Yes ☑	No ☐		
Samples in proper container/bottle?	Yes ☑	No ☐		
Sample containers intact?	Yes ☑	No ☐		
Sufficient sample volume for indicated test?	Yes ☑	No ☐		
All samples received within holding time?	Yes ☑	No ☐		
Reported field parameters measured:	Field ☐	Lab ☐	NA ☑	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐		
When thermal preservation is required, samples are compliant with a temperature between 0.1°C - 6.0°C, or when samples are received on ice the same day as collected.				
Water – at least one vial per sample has zero headspace?	Yes ☑	No ☐	No VOA vials ☐	
Water - TOX containers have zero headspace?	Yes ☐	No ☐	No TOX containers ☑	
Water - pH acceptable upon receipt?	Yes ☑	No ☐	NA ☐	
NPDES/CWA TCN interferences checked/treated in the field?	Yes ☐	No ☐	NA ☑	

Any No responses must be detailed below or on the COC.

Trip Blank collection date and time will be reported as the received date and time (end of trip). KF 9/6/16

CHAIN OF CUSTODY

pg. ____ of ____ Work order # 160990293

TEKLAB, INC. 5445 Horseshoe Lake Road - Collinsville, IL 62234 - Phone: (618) 344-1004 - Fax: (618) 344-1005

Client:	Missouri Geological Survey
Address:	111 Fairgrounds Road
City / State / Zip	Rolla, MO 65401
Contact:	Brenna McDonald
Phone:	(573) 368-2163
E-Mail:	brenna.mcdonald@dnr.mo.gov
Fax:	

Samples on: [X] ICE [ ] BLUE ICE [ ] NO ICE 3.62 °C

Preserved in: [ ] LAB [X] FIELD KF 9/6/16

FOR LAB USE ONLY

Lab Notes OK headspace ICF 9/6/16

Client Comments:

Metals: Sb As Ba Be B Cd Ca Cr Co Cu Pb Mg Mn Hg Ni Se Ag Na Tl V Zn

Are these samples known to be involved in litigation? If yes, a surcharge will apply [X] Yes [ ] No

Are these samples known to be hazardous? [ ] Yes [X] No

Are there any required reporting limits to be met on the requested analysis?. If yes, please provide limits in the comment section. [ ] Yes [X] No

Project Name/Number: Appendix I Bridgeton Landfill

Sample Collector's Name: Brenna McDonald

Results Requested: [ ] Standard [ ] 1-2 Day (100% Surcharge) [ ] Other ____ [ ] 3 Day (50% Surcharge)

Billing Instructions:

Lab Use Only	Sample Identification	Date/Time Sampled	# and Type of Containers: UNPRES	HNO3	NaOH	H2SO4	HCL	MeOH	NaHSO4	OTHER	MATRIX: Aqueous	Drinking Water	Soil	Sludge	Special Waste	Groundwater	INDICATE ANALYSIS REQUESTED: Ammonia	Fluoride	Hardness	Metals	N3N2	Phosphorus	Sulfate	TOC	VOCs
160990293-001	D-85	9/6/16 0927	1	1		2	2									X	✓	✓	✓	✓	✓	✓	✓	✓	✓
002	Trip blank	9/6/16 0800					2				X														✓

Courier

Relinquished By	Date/Time	Received By	Date/Time
Brenna McDonald	9/6/16 1420	Nicole Reed	9/6/16 1420
	9/6/16 1540	KFolche	9/6/16 1540

The individual signing this agreement on behalf of the client, acknowledges that he/she has read and understands the terms and conditions of this agreement, and that he/she has the authority to sign on behalf of the client.

BottleOrder: 32830

KF 9/6/16

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18757-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
9/20/2016 3:37:55 PM

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
chenise.lambert-sykes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18757-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18757-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/23/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.1 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4), MO-3-SD (160-18757-5) and TRIP BLANK (160-18757-6) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/30/2016.

Analytical Batch: 267150

The laboratory control sample (LCS) for analytical batch 160-267150 recovered outside control limits for the following analyte: Methyl bromide. This analyte was biased high in the LCS and was not detected above the Reporting Limit in the associated samples; therefore, the data have been reported. (LCS 160-267150/3)

The matrix spike/matrix spike duplicate (MS/MSD) recoveries for analytical batch 160-267150 were outside control limits. Sample matrix interference is suspected because the associated laboratory control samples' (LCS/LCSD) recoveries were within acceptance limits. (160-18757-B-5 MS) and (160-18757-B-5 MSD)

Job ID: 160-18757-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The continuing calibration verification (CCV) associated with batch 160-267150 recovered above the upper control limit for Methyl bromide and Chloroethane. The samples associated with this CCV were non-detects for Chloroethane; Methyl bromide was not detected above the Reporting Limit. Therefore, the data have been reported. (CCVIS 160-267150/2)

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-267150: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-267150/2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/25/2016 and analyzed on 08/29/2016 and 08/30/2016.

Preparation Batch: 266532

Due to difficult sample matrix a dilution was preformed on the following sample: MO-2-SD (160-18757-3) The dilution was prepared as follows: 25mL to 50mL

Analytical Batch: 267177

The initial calibration verification (ICV) result for batch analytical batch 160-267177 was above the upper control limit for Thallium. Sample results were below the reporting limit, and have been reported as qualified data. (ICV 160-267177/5)

The continuing calibration verification (CCV) associated with batch analytical batch 160-267177 recovered above the upper control limit for Phosphorus. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 160-267177/57).

The following samples were diluted due to the nature of the sample matrix. Samples are high in salts: MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4), MO-3-SD (160-18757-5), (160-18757-H-1-B MS ^), (160-18757-H-1-C MSD) and (160-18757-H-1-A SD ^). Elevated reporting limits (RLs) are provided.

The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details.

Analytical Batch: 267613

The following sample was diluted to bring the concentration of target analytes within the calibration range: MO-1-SS (160-18757-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/29/2016 and analyzed on 08/30/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 08/25/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Job ID: 160-18757-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 08/30/2016 and 08/31/2016.

Analytical Batch: 267405
The following samples in Anion batch 160-267405 were diluted to bring the concentrations of target analytes within the calibration range: MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/08/2016.

Analytical Batch: 268615
The following samples in NH3 analytical batch 160-268615 were diluted to bring the concentration of the target analyte within the calibration range: MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5). Elevated reporting limits (RLs) are provided.

The following matrix spike (MS) recovery for NH3 analytical batch 160-268615 was outside control limits: (160-18757-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE
Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 09/07/2016.

Analytical Batch: 268618
The following matrix spike (MS) recoveries for NH3 analytical batch 160-268618 were outside control limits: (160-18757-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, and due to the negative values that were recorded for the samples. Additionally, in order to verify the interference, new matrix spikes were prepared the following day that also had no recovery.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE
Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for sulfide in accordance with EPA Method 376.1. The samples were analyzed on 08/29/2016.

Analytical Batch: 267062
The following samples in Sulfide batch 160-267062 were re-analyzed and reported at dilution due to matrix interference found in the undiluted analysis. The undiluted samples required an excessive amount of titrant to reach the end point, which resulted in values that were too negative. Thus, this sample is reported non-detect (ND) at dilution with an elevated reporting limit (RL). MO-2-SD (160-18757-3)

Note: A dilution factor of 1 is reported for this sample. The dilution is accounted for in the sample initial and final volumes to prevent a double calculation of the final result.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND
Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and

Job ID: 160-18757-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

analyzed on 08/31/2016.

Analytical Batch: 267574
The following sample in COD batch 160-267574 was diluted to bring the concentration of target analytes within the calibration range: MO-1-SS (160-18757-2). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)
Samples MO-1-SDR (160-18757-1), MO-1-SS (160-18757-2), MO-2-SD (160-18757-3), MO-3-SS (160-18757-4) and MO-3-SD (160-18757-5) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/10/2016 and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: J. Hahn	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.1
Client Contact: Brenna McDonald	Phone: (314) 997-7440	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 1 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days):			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site:	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide	--	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	D	A	CB			
MO-1-SDR	8-22-2016	09:45	G	Water	N	N	1	1	1	1	3	1			
MO-1-SS	8-22-2016	12:20	G	Water	N	N	1	1	1	1	3	1			
MO-2-SD	8-22-2016	17:25	G	Water	N	N	1	1	1	1	3	1			
MO-3-SS	8-23-2016	9:15	G	Water	N	N	1	1	1	1	3	1			
MO-3-SD	8-23-2016	11:15	G	Water	N	N	1	1	1	1	3	1			
Trip Blank	8-22-2016	9:00	G	Water	N	N					2				
				Water											
				Water											
				Water											
				Water											
				Water											

160-18757 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown ☒ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by: Jessie Hahn	8/23/16 1200		Patty Price	8/23/2016 12:00	MDNR-MGS
Relinquished by: Patty Price	8/23/16 1405	MDNR-MGS		8/23/16 1405	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Page 7 of 43

9/20/2016

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18757-1

Login Number: 18757
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18757-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
376.1	Sulfide	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18757-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18757-1	MO-1-SDR	Water	08/22/16 09:45	08/23/16 14:05
160-18757-2	MO-1-SS	Water	08/22/16 12:20	08/23/16 14:05
160-18757-3	MO-2-SD	Water	08/22/16 17:25	08/23/16 14:05
160-18757-4	MO-3-SS	Water	08/23/16 09:15	08/23/16 14:05
160-18757-5	MO-3-SD	Water	08/23/16 11:15	08/23/16 14:05
160-18757-6	TRIP BLANK	Water	08/22/16 09:00	08/23/16 14:05

Client Sample ID: MO-1-SDR
Date Collected: 08/22/16 09:45
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 01:51	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 01:51	1
Benzene	ND		5.0	0.25	ug/L			08/30/16 01:51	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 01:51	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 01:51	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 01:51	1
Carbon disulfide	**0.67**	**J**	5.0	0.37	ug/L			08/30/16 01:51	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 01:51	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 01:51	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 01:51	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 01:51	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 01:51	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 01:51	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 01:51	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 01:51	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 01:51	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 01:51	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 01:51	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 01:51	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 01:51	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 01:51	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 01:51	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 01:51	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 01:51	1
Methyl bromide	**0.65**	**J ***	10	0.40	ug/L			08/30/16 01:51	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 01:51	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 01:51	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 01:51	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 01:51	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 01:51	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 01:51	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 01:51	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 01:51	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 01:51	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 01:51	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 01:51	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 01:51	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 01:51	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 01:51	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 01:51	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 01:51	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 01:51	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 01:51	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 01:51	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 01:51	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 01:51	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 01:51	1

Client Sample ID: MO-1-SDR

Date Collected: 08/22/16 09:45
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*71 - 139*		*08/30/16 01:51*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 121*		*08/30/16 01:51*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*76 - 121*		*08/30/16 01:51*	*1*
Toluene-d8 (Surr)	*99*		*80 - 129*		*08/30/16 01:51*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.5**		0.10	0.010	mg/L			08/30/16 20:28	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**120**		10	1.0	mg/L			08/30/16 20:42	20
Chloride	**16**		4.0	0.40	mg/L			08/30/16 20:42	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:46	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 19:46	5
Barium	**97**	**J**	250	75	ug/L		08/25/16 14:04	08/29/16 19:46	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 19:46	5
Boron	**130**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 19:46	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 19:46	5
CaHard	**210000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 19:46	5
Calcium	**83000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 19:46	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:46	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 19:46	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 19:46	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:46	5
Magnesium	**46**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 19:46	5
Manganese	**44**	**J**	75	13	ug/L		08/25/16 14:04	08/29/16 19:46	5
MgHard	**190000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 19:46	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 19:46	5
Phosphorus	ND	^	1300	380	ug/L		08/25/16 14:04	08/29/16 19:46	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 19:46	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:46	5
Sodium	**91000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 19:46	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 19:46	5
Total Hardness	**400000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 19:46	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 19:46	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 19:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**660**		5.0	3.5	mg/L			08/25/16 12:13	1
Ammonia	**0.57**	**F1**	0.050	0.022	mg/L			09/08/16 15:51	1
Nitrate/Nitrite	ND	F1	0.050	0.011	mg/L			09/07/16 18:31	1
Sulfide	**3.4**		1.0	0.45	mg/L			08/29/16 10:10	1

Client Sample ID: MO-1-SDR

Date Collected: 08/22/16 09:45
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-1

Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**14**		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	71.6	U	138	138	500	238	pCi/L	09/10/16 09:16	09/12/16 15:57	1

Client Sample ID: MO-1-SS

Date Collected: 08/22/16 12:20
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.9**	**J**	20	6.7	ug/L			08/30/16 02:16	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 02:16	1
Benzene	**0.35**	**J**	5.0	0.25	ug/L			08/30/16 02:16	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 02:16	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 02:16	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 02:16	1
Carbon disulfide	**0.77**	**J**	5.0	0.37	ug/L			08/30/16 02:16	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 02:16	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 02:16	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 02:16	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 02:16	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 02:16	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 02:16	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 02:16	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 02:16	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 02:16	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 02:16	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 02:16	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 02:16	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 02:16	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 02:16	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 02:16	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 02:16	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 02:16	1
Methyl bromide	**2.6**	**J ***	10	0.40	ug/L			08/30/16 02:16	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 02:16	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 02:16	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 02:16	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 02:16	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 02:16	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 02:16	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 02:16	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 02:16	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 02:16	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 02:16	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 02:16	1

Client Sample ID: MO-1-SS
Date Collected: 08/22/16 12:20
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 02:16	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 02:16	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 02:16	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 02:16	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 02:16	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 02:16	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 02:16	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 02:16	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 02:16	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 02:16	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 02:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 139*		*08/30/16 02:16*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 121*		*08/30/16 02:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*113*		*76 - 121*		*08/30/16 02:16*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*		*08/30/16 02:16*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.3**		0.20	0.020	mg/L			08/30/16 23:07	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**440**		25	2.5	mg/L			08/30/16 23:21	50
Chloride	**70**		10	1.0	mg/L			08/30/16 23:21	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:04	5
Arsenic	**35**	**J**	50	20	ug/L		08/25/16 14:04	08/29/16 20:04	5
Barium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:04	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:04	5
Boron	**490**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 20:04	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:04	5
CaHard	**70000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:04	5
Calcium	**28000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:04	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:04	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:04	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:04	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:04	5
Magnesium	**12**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:04	5
Manganese	**220**		75	13	ug/L		08/25/16 14:04	08/29/16 20:04	5
MgHard	**48000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:04	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:04	5
Phosphorus	ND	^	1300	380	ug/L		08/25/16 14:04	08/29/16 20:04	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:04	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:04	5
Sodium	**520000**		10000	3000	ug/L		08/25/16 14:04	08/30/16 21:32	10
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:04	5

Client Sample ID: MO-1-SS

Date Collected: 08/22/16 12:20
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	**120000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:04	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:04	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:04	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1600**		10	7.0	mg/L			08/25/16 12:13	1
Ammonia	**1.1**		0.050	0.022	mg/L			09/08/16 15:58	1
Nitrate/Nitrite	ND		0.050	0.011	mg/L			09/07/16 18:40	1
Sulfide	**16**		1.0	0.45	mg/L			08/29/16 10:10	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**190**		25	5.6	mg/L		08/31/16 08:55	08/31/16 14:03	5

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	32.4	U	131	131	500	232	pCi/L	09/10/16 09:16	09/12/16 16:43	1

Client Sample ID: MO-2-SD

Date Collected: 08/22/16 17:25
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.2**	**J**	20	6.7	ug/L			08/30/16 02:41	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 02:41	1
Benzene	**0.30**	**J**	5.0	0.25	ug/L			08/30/16 02:41	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 02:41	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 02:41	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 02:41	1
Carbon disulfide	**1.3**	**J**	5.0	0.37	ug/L			08/30/16 02:41	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 02:41	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 02:41	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 02:41	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 02:41	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 02:41	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 02:41	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 02:41	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 02:41	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 02:41	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 02:41	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 02:41	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 02:41	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 02:41	1

Client Sample ID: MO-2-SD
Date Collected: 08/22/16 17:25
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 02:41	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 02:41	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 02:41	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 02:41	1
Methyl bromide	**0.94**	**J ***	10	0.40	ug/L			08/30/16 02:41	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 02:41	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 02:41	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 02:41	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 02:41	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 02:41	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 02:41	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 02:41	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 02:41	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 02:41	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 02:41	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 02:41	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 02:41	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 02:41	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 02:41	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 02:41	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 02:41	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 02:41	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 02:41	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 02:41	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 02:41	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 02:41	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 02:41	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*71 - 139*		*08/30/16 02:41*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 121*		*08/30/16 02:41*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*76 - 121*		*08/30/16 02:41*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*		*08/30/16 02:41*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.6**		0.10	0.010	mg/L			08/30/16 23:50	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**50**		10	1.0	mg/L			08/31/16 00:04	20
Chloride	**21**		4.0	0.40	mg/L			08/31/16 00:04	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:09	5
Arsenic	**52**	**J**	100	40	ug/L		08/25/16 14:04	08/29/16 20:09	5
Barium	**410**	**J**	500	150	ug/L		08/25/16 14:04	08/29/16 20:09	5
Beryllium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:09	5
Boron	**270**	**J**	1000	250	ug/L		08/25/16 14:04	08/29/16 20:09	5

Client Sample ID: MO-2-SD

Date Collected: 08/22/16 17:25
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-3
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:09	5
CaHard	**420000**		25000	7500	ug/L		08/25/16 14:04	08/29/16 20:09	5
Calcium	**170000**		10000	3000	ug/L		08/25/16 14:04	08/29/16 20:09	5
Chromium	**71**	**J**	100	30	ug/L		08/25/16 14:04	08/29/16 20:09	5
Cobalt	ND		500	150	ug/L		08/25/16 14:04	08/29/16 20:09	5
Copper	ND		250	50	ug/L		08/25/16 14:04	08/29/16 20:09	5
Lead	**200**		100	30	ug/L		08/25/16 14:04	08/29/16 20:09	5
Magnesium	**69**		10	3.0	mg/L		08/25/16 14:04	08/29/16 20:09	5
Manganese	**2300**		150	25	ug/L		08/25/16 14:04	08/29/16 20:09	5
MgHard	**280000**		41000	12000	ug/L		08/25/16 14:04	08/29/16 20:09	5
Nickel	**0.15**	**J**	0.40	0.10	mg/L		08/25/16 14:04	08/29/16 20:09	5
Phosphorus	**2000**	**J ^**	2500	750	ug/L		08/25/16 14:04	08/29/16 20:09	5
Selenium	ND		150	50	ug/L		08/25/16 14:04	08/29/16 20:09	5
Silver	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:09	5
Sodium	**76000**		10000	3000	ug/L		08/25/16 14:04	08/29/16 20:09	5
Thallium	ND	^	200	50	ug/L		08/25/16 14:04	08/29/16 20:09	5
Total Hardness	**710000**		66000	20000	ug/L		08/25/16 14:04	08/29/16 20:09	5
Vanadium	ND		500	150	ug/L		08/25/16 14:04	08/29/16 20:09	5
Zinc	**220**		200	60	ug/L		08/25/16 14:04	08/29/16 20:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.081**	**J**	0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**530**		10	7.0	mg/L			08/25/16 12:13	1
Nitrate/Nitrite	**0.13**		0.050	0.011	mg/L			09/07/16 18:43	1
Chemical Oxygen Demand	**42**		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**1.7**		0.25	0.11	mg/L			09/08/16 16:00	5
Sulfide	**4.4**		2.0	0.91	mg/L			08/29/16 10:10	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	69.4	U	137	137	500	237	pCi/L	09/10/16 09:16	09/12/16 17:28	1

Client Sample ID: MO-3-SS

Date Collected: 08/23/16 09:15
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.7**	**J**	20	6.7	ug/L			08/30/16 03:06	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 03:06	1
Benzene	**3.3**	**J**	5.0	0.25	ug/L			08/30/16 03:06	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 03:06	1

Client Sample ID: MO-3-SS
Date Collected: 08/23/16 09:15
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 03:06	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 03:06	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 03:06	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 03:06	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 03:06	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 03:06	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 03:06	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 03:06	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 03:06	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 03:06	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 03:06	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 03:06	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 03:06	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 03:06	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 03:06	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 03:06	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 03:06	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 03:06	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 03:06	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 03:06	1
Methyl bromide	**0.57**	**J ***	10	0.40	ug/L			08/30/16 03:06	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 03:06	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 03:06	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 03:06	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 03:06	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 03:06	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 03:06	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 03:06	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 03:06	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 03:06	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 03:06	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 03:06	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 03:06	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 03:06	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 03:06	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 03:06	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 03:06	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 03:06	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 03:06	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 03:06	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 03:06	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 03:06	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*71 - 139*		*08/30/16 03:06*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 121*		*08/30/16 03:06*	*1*
1,2-Dichloroethane-d4 (Surr)	*111*		*76 - 121*		*08/30/16 03:06*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*		*08/30/16 03:06*	*1*

Client Sample Results

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18757-1

Client Sample ID: MO-3-SS
Date Collected: 08/23/16 09:15
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-4
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.5**		0.10	0.010	mg/L			08/31/16 01:02	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**57**		10	1.0	mg/L			08/31/16 01:16	20
Chloride	**41**		4.0	0.40	mg/L			08/31/16 01:16	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:13	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:13	5
Barium	**130**	**J**	250	75	ug/L		08/25/16 14:04	08/29/16 20:13	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:13	5
Boron	**150**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 20:13	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:13	5
CaHard	**270000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:13	5
Calcium	**110000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:13	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:13	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:13	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:13	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:13	5
Magnesium	**53**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:13	5
Manganese	**520**		75	13	ug/L		08/25/16 14:04	08/29/16 20:13	5
MgHard	**220000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:13	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:13	5
Phosphorus	ND	^	1300	380	ug/L		08/25/16 14:04	08/29/16 20:13	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:13	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:13	5
Sodium	**60000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:13	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:13	5
Total Hardness	**490000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:13	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:13	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:13	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**690**		5.0	3.5	mg/L			08/25/16 12:13	1
Nitrate/Nitrite	ND		0.050	0.011	mg/L			09/07/16 18:46	1
Sulfide	**2.4**		1.0	0.45	mg/L			08/29/16 10:10	1
Chemical Oxygen Demand	**28**		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**2.7**		0.25	0.11	mg/L			09/08/16 16:02	5

Client Sample ID: MO-3-SS

Lab Sample ID: 160-18757-4

Date Collected: 08/23/16 09:15

Matrix: Water

Date Received: 08/23/16 14:05

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**443**		174	179	500	233	pCi/L	09/10/16 09:16	09/12/16 17:51	1

Client Sample ID: MO-3-SD

Lab Sample ID: 160-18757-5

Date Collected: 08/23/16 11:15

Matrix: Water

Date Received: 08/23/16 14:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.2**	**J**	20	6.7	ug/L			08/30/16 03:31	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 03:31	1
Benzene	**5.1**		5.0	0.25	ug/L			08/30/16 03:31	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 03:31	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 03:31	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 03:31	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 03:31	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 03:31	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 03:31	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 03:31	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 03:31	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 03:31	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 03:31	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 03:31	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 03:31	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 03:31	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 03:31	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 03:31	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 03:31	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 03:31	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 03:31	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 03:31	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 03:31	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 03:31	1
Methyl bromide	**1.7**	**J ***	10	0.40	ug/L			08/30/16 03:31	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 03:31	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 03:31	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 03:31	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 03:31	1
Methyl iodide	**9.2**	**F1**	5.0	1.5	ug/L			08/30/16 03:31	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 03:31	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 03:31	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 03:31	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 03:31	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 03:31	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 03:31	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 03:31	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 03:31	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 03:31	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 03:31	1

Client Sample ID: MO-3-SD

Date Collected: 08/23/16 11:15
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 03:31	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 03:31	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 03:31	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 03:31	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 03:31	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 03:31	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 139*		*08/30/16 03:31*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 121*		*08/30/16 03:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*109*		*76 - 121*		*08/30/16 03:31*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*		*08/30/16 03:31*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.90**		0.10	0.010	mg/L			08/31/16 01:45	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**130**		10	1.0	mg/L			08/31/16 02:00	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**95**		20	2.0	mg/L			08/31/16 02:14	100

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:32	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:32	5
Barium	**230**	**J**	250	75	ug/L		08/25/16 14:04	08/29/16 20:32	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:32	5
Boron	**190**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 20:32	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:32	5
CaHard	**220000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:32	5
Calcium	**90000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:32	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:32	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:32	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:32	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:32	5
Magnesium	**44**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:32	5
Manganese	**1100**		75	13	ug/L		08/25/16 14:04	08/29/16 20:32	5
MgHard	**180000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:32	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:32	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:32	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:32	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:32	5
Sodium	**140000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:32	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:32	5
Total Hardness	**400000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:32	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:32	5

Client Sample ID: MO-3-SD

Lab Sample ID: 160-18757-5
Matrix: Water
Date Collected: 08/23/16 11:15
Date Received: 08/23/16 14:05

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**860**		10	7.0	mg/L			08/25/16 12:13	1
Nitrate/Nitrite	ND		0.050	0.011	mg/L			09/07/16 18:49	1
Sulfide	**17**		1.0	0.45	mg/L			08/29/16 10:10	1
Chemical Oxygen Demand	**79**		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**4.9**		0.50	0.22	mg/L			09/08/16 16:05	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**925**		211	226	500	228	pCi/L	09/10/16 09:16	09/12/16 18:13	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18757-6
Matrix: Water
Date Collected: 08/22/16 09:00
Date Received: 08/23/16 14:05

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 01:26	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 01:26	1
Benzene	ND		5.0	0.25	ug/L			08/30/16 01:26	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 01:26	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 01:26	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 01:26	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 01:26	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 01:26	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 01:26	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 01:26	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 01:26	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 01:26	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 01:26	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 01:26	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 01:26	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 01:26	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 01:26	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 01:26	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 01:26	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 01:26	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 01:26	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 01:26	1

Client Sample ID: TRIP BLANK

Date Collected: 08/22/16 09:00
Date Received: 08/23/16 14:05

Lab Sample ID: 160-18757-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 01:26	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 01:26	1
Methyl bromide	ND	*	10	0.40	ug/L			08/30/16 01:26	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 01:26	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 01:26	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 01:26	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 01:26	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 01:26	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 01:26	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 01:26	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 01:26	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 01:26	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 01:26	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 01:26	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 01:26	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 01:26	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 01:26	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 01:26	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 01:26	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 01:26	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 01:26	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 01:26	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 01:26	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 01:26	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 01:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*71 - 139*		*08/30/16 01:26*	*1*
Dibromofluoromethane (Surr)	*105*		*80 - 121*		*08/30/16 01:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*76 - 121*		*08/30/16 01:26*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*		*08/30/16 01:26*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-267150/6
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/29/16 22:05	1
Acrylonitrile	ND		50	1.7	ug/L			08/29/16 22:05	1
Benzene	ND		5.0	0.25	ug/L			08/29/16 22:05	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/29/16 22:05	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/29/16 22:05	1
Bromoform	ND		5.0	0.37	ug/L			08/29/16 22:05	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/29/16 22:05	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/29/16 22:05	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/29/16 22:05	1
Chloroethane	ND		10	0.38	ug/L			08/29/16 22:05	1
Chloroform	ND		5.0	0.15	ug/L			08/29/16 22:05	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/29/16 22:05	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/29/16 22:05	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/29/16 22:05	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/29/16 22:05	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/29/16 22:05	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/29/16 22:05	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/29/16 22:05	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/29/16 22:05	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/29/16 22:05	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/29/16 22:05	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/29/16 22:05	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/29/16 22:05	1
2-Hexanone	ND		20	0.59	ug/L			08/29/16 22:05	1
Methyl bromide	ND		10	0.40	ug/L			08/29/16 22:05	1
Methyl chloride	ND		10	0.55	ug/L			08/29/16 22:05	1
Methylene bromide	ND		5.0	0.41	ug/L			08/29/16 22:05	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/29/16 22:05	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/29/16 22:05	1
Methyl iodide	ND		5.0	1.5	ug/L			08/29/16 22:05	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/29/16 22:05	1
Styrene	ND		5.0	0.35	ug/L			08/29/16 22:05	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/29/16 22:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/29/16 22:05	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/29/16 22:05	1
Toluene	ND		5.0	1.0	ug/L			08/29/16 22:05	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/29/16 22:05	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/29/16 22:05	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/29/16 22:05	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/29/16 22:05	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/29/16 22:05	1
Trichloroethene	ND		5.0	0.29	ug/L			08/29/16 22:05	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/29/16 22:05	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/29/16 22:05	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/29/16 22:05	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/29/16 22:05	1
Xylenes, Total	ND		10	0.85	ug/L			08/29/16 22:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-267150/6
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		71 - 139		08/29/16 22:05	1
Dibromofluoromethane (Surr)	105		80 - 121		08/29/16 22:05	1
1,2-Dichloroethane-d4 (Surr)	110		76 - 121		08/29/16 22:05	1
Toluene-d8 (Surr)	103		80 - 129		08/29/16 22:05	1

Lab Sample ID: LCS 160-267150/3
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	55.5		ug/L		111	63 - 131
Acrylonitrile	500	540		ug/L		108	81 - 117
Benzene	50.0	51.0		ug/L		102	80 - 120
Bromochloromethane	50.0	50.7		ug/L		101	80 - 120
Bromodichloromethane	50.0	52.9		ug/L		106	80 - 120
Bromoform	50.0	47.8		ug/L		96	80 - 120
Carbon disulfide	50.0	55.9		ug/L		112	79 - 126
Carbon tetrachloride	50.0	52.5		ug/L		105	73 - 123
Chlorobenzene	50.0	51.7		ug/L		103	80 - 120
Chloroethane	50.0	66.5		ug/L		133	52 - 140
Chloroform	50.0	50.9		ug/L		102	80 - 120
cis-1,2-Dichloroethene	50.0	48.1		ug/L		96	80 - 120
cis-1,3-Dichloropropene	50.0	51.5		ug/L		103	80 - 122
Dibromochloromethane	50.0	47.4		ug/L		95	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/L		96	77 - 125
1,2-Dibromoethane (EDB)	50.0	49.2		ug/L		98	80 - 120
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	80 - 120
1,4-Dichlorobenzene	50.0	51.5		ug/L		103	80 - 120
1,1-Dichloroethane	50.0	51.5		ug/L		103	80 - 120
1,2-Dichloroethane	50.0	53.6		ug/L		107	69 - 124
1,1-Dichloroethene	50.0	52.5		ug/L		105	77 - 126
1,2-Dichloropropane	50.0	53.2		ug/L		106	80 - 120
Ethylbenzene	50.0	51.4		ug/L		103	80 - 120
2-Hexanone	50.0	46.4		ug/L		93	64 - 136
Methyl bromide	50.0	72.9	*	ug/L		146	57 - 139
Methyl chloride	50.0	56.9		ug/L		114	70 - 127
Methylene bromide	50.0	51.4		ug/L		103	78 - 120
Methylene Chloride	50.0	50.8		ug/L		102	80 - 120
Methyl Ethyl Ketone	50.0	50.3		ug/L		101	70 - 130
Methyl iodide	50.0	60.1		ug/L		120	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	48.8		ug/L		98	76 - 129
Styrene	50.0	52.5		ug/L		105	80 - 120
1,1,1,2-Tetrachloroethane	50.0	49.8		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	80 - 120
Tetrachloroethene	50.0	50.7		ug/L		101	80 - 120
Toluene	50.0	53.0		ug/L		106	80 - 120
trans-1,4-Dichloro-2-butene	50.0	53.3		ug/L		107	75 - 127
trans-1,2-Dichloroethene	50.0	48.7		ug/L		97	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-267150/3
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	50.2		ug/L		100	80 - 130		
1,1,1-Trichloroethane			50.0	51.8		ug/L		104	76 - 120		
1,1,2-Trichloroethane			50.0	49.7		ug/L		99	80 - 120		
Trichloroethene			50.0	52.2		ug/L		104	73 - 120		
Trichlorofluoromethane			50.0	56.7		ug/L		113	74 - 130		
1,2,3-Trichloropropane			50.0	50.8		ug/L		102	80 - 120		
Vinyl acetate			50.0	57.6		ug/L		115	37 - 140		
Vinyl chloride			50.0	58.1		ug/L		116	51 - 140		
Xylenes, Total			100	105		ug/L		105	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*
Dibromofluoromethane (Surr)	*104*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*109*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: LCSD 160-267150/4
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	52.2		ug/L		104	63 - 131	6	20
Acrylonitrile			500	526		ug/L		105	81 - 117	3	20
Benzene			50.0	48.5		ug/L		97	80 - 120	5	20
Bromochloromethane			50.0	49.8		ug/L		100	80 - 120	2	20
Bromodichloromethane			50.0	52.1		ug/L		104	80 - 120	2	20
Bromoform			50.0	46.9		ug/L		94	80 - 120	2	20
Carbon disulfide			50.0	51.8		ug/L		104	79 - 126	8	20
Carbon tetrachloride			50.0	51.6		ug/L		103	73 - 123	2	20
Chlorobenzene			50.0	50.3		ug/L		101	80 - 120	3	20
Chloroethane			50.0	62.9		ug/L		126	52 - 140	6	20
Chloroform			50.0	48.1		ug/L		96	80 - 120	6	20
cis-1,2-Dichloroethene			50.0	46.7		ug/L		93	80 - 120	3	20
cis-1,3-Dichloropropene			50.0	51.4		ug/L		103	80 - 122	0	20
Dibromochloromethane			50.0	46.4		ug/L		93	80 - 120	2	20
1,2-Dibromo-3-Chloropropane			50.0	49.9		ug/L		100	77 - 125	3	20
1,2-Dibromoethane (EDB)			50.0	48.7		ug/L		97	80 - 120	1	20
1,2-Dichlorobenzene			50.0	48.1		ug/L		96	80 - 120	2	20
1,4-Dichlorobenzene			50.0	51.2		ug/L		102	80 - 120	1	20
1,1-Dichloroethane			50.0	49.2		ug/L		98	80 - 120	4	20
1,2-Dichloroethane			50.0	52.2		ug/L		104	69 - 124	3	20
1,1-Dichloroethene			50.0	50.0		ug/L		100	77 - 126	5	20
1,2-Dichloropropane			50.0	52.3		ug/L		105	80 - 120	2	20
Ethylbenzene			50.0	50.2		ug/L		100	80 - 120	2	20
2-Hexanone			50.0	49.4		ug/L		99	64 - 136	6	20
Methyl bromide			50.0	69.0		ug/L		138	57 - 139	6	20
Methyl chloride			50.0	53.1		ug/L		106	70 - 127	7	20
Methylene bromide			50.0	49.4		ug/L		99	78 - 120	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-267150/4
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	48.3		ug/L		97	80 - 120	5	20
Methyl Ethyl Ketone			50.0	52.3		ug/L		105	70 - 130	4	20
Methyl iodide			50.0	59.4		ug/L		119	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)			50.0	50.0		ug/L		100	76 - 129	3	20
Styrene			50.0	50.2		ug/L		100	80 - 120	4	20
1,1,1,2-Tetrachloroethane			50.0	48.7		ug/L		97	80 - 120	2	20
1,1,2,2-Tetrachloroethane			50.0	52.1		ug/L		104	80 - 120	3	20
Tetrachloroethene			50.0	49.5		ug/L		99	80 - 120	2	20
Toluene			50.0	52.2		ug/L		104	80 - 120	2	20
trans-1,4-Dichloro-2-butene			50.0	54.2		ug/L		108	75 - 127	2	20
trans-1,2-Dichloroethene			50.0	46.6		ug/L		93	80 - 120	4	20
trans-1,3-Dichloropropene			50.0	49.6		ug/L		99	80 - 130	1	20
1,1,1-Trichloroethane			50.0	50.0		ug/L		100	76 - 120	4	20
1,1,2-Trichloroethane			50.0	48.7		ug/L		97	80 - 120	2	20
Trichloroethene			50.0	49.8		ug/L		100	73 - 120	5	20
Trichlorofluoromethane			50.0	55.0		ug/L		110	74 - 130	3	20
1,2,3-Trichloropropane			50.0	50.0		ug/L		100	80 - 120	2	20
Vinyl acetate			50.0	56.4		ug/L		113	37 - 140	2	20
Vinyl chloride			50.0	54.7		ug/L		109	51 - 140	6	20
Xylenes, Total			100	102		ug/L		102	80 - 121	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*71 - 139*
Dibromofluoromethane (Surr)	*101*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*103*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: 160-18757-5 MS
Matrix: Water
Analysis Batch: 267150

Client Sample ID: MO-3-SD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	7.2	J	50.0	57.5		ug/L		101	52 - 138
Acrylonitrile	ND		500	550		ug/L		110	58 - 142
Benzene	5.1		50.0	57.1		ug/L		104	80 - 120
Bromochloromethane	ND		50.0	53.8		ug/L		108	72 - 125
Bromodichloromethane	ND		50.0	55.0		ug/L		110	71 - 128
Bromoform	ND		50.0	47.9		ug/L		96	65 - 133
Carbon disulfide	ND		50.0	52.1		ug/L		104	69 - 139
Carbon tetrachloride	ND		50.0	52.4		ug/L		105	70 - 126
Chlorobenzene	ND		50.0	50.9		ug/L		102	80 - 120
Chloroethane	ND		50.0	62.8		ug/L		126	59 - 144
Chloroform	ND		50.0	52.3		ug/L		105	80 - 120
cis-1,2-Dichloroethene	ND		50.0	49.5		ug/L		99	80 - 124
cis-1,3-Dichloropropene	ND		50.0	50.7		ug/L		101	67 - 130
Dibromochloromethane	ND		50.0	47.4		ug/L		95	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	47.2		ug/L		94	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	49.5		ug/L		99	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18757-5 MS
Matrix: Water
Analysis Batch: 267150

Client Sample ID: MO-3-SD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	49.6		ug/L		99	80 - 124
1,4-Dichlorobenzene	ND		50.0	52.0		ug/L		104	80 - 120
1,1-Dichloroethane	ND		50.0	52.9		ug/L		106	80 - 120
1,2-Dichloroethane	ND		50.0	56.1		ug/L		112	56 - 136
1,1-Dichloroethene	ND		50.0	47.3		ug/L		95	66 - 137
1,2-Dichloropropane	ND		50.0	54.6		ug/L		109	80 - 123
Ethylbenzene	ND		50.0	50.8		ug/L		102	80 - 121
2-Hexanone	ND		50.0	46.1		ug/L		92	47 - 150
Methyl bromide	1.7	J *	50.0	34.9		ug/L		66	53 - 146
Methyl chloride	ND		50.0	51.2		ug/L		102	61 - 137
Methylene bromide	ND		50.0	54.0		ug/L		108	61 - 136
Methylene Chloride	ND		50.0	52.4		ug/L		105	80 - 120
Methyl Ethyl Ketone	ND		50.0	53.6		ug/L		107	58 - 143
Methyl iodide	9.2	F1	50.0	84.6	F1	ug/L		151	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	49.3		ug/L		99	53 - 150
Styrene	ND		50.0	50.7		ug/L		101	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	49.3		ug/L		99	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	51.7		ug/L		103	60 - 150
Tetrachloroethene	ND		50.0	49.0		ug/L		98	66 - 132
Toluene	ND		50.0	50.5		ug/L		101	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	53.1		ug/L		106	55 - 146
trans-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	79 - 121
trans-1,3-Dichloropropene	ND		50.0	50.4		ug/L		101	68 - 143
1,1,1-Trichloroethane	ND		50.0	51.8		ug/L		104	74 - 123
1,1,2-Trichloroethane	ND		50.0	50.4		ug/L		101	70 - 134
Trichloroethene	ND		50.0	52.7		ug/L		105	63 - 120
Trichlorofluoromethane	ND		50.0	55.0		ug/L		110	53 - 150
1,2,3-Trichloropropane	ND		50.0	49.4		ug/L		99	62 - 137
Vinyl acetate	ND		50.0	60.3		ug/L		121	63 - 150
Vinyl chloride	ND		50.0	53.1		ug/L		106	54 - 140
Xylenes, Total	ND		100	104		ug/L		104	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*
Dibromofluoromethane (Surr)	*111*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*113*		*76 - 121*
Toluene-d8 (Surr)	*96*		*80 - 129*

Lab Sample ID: 160-18757-5 MSD
Matrix: Water
Analysis Batch: 267150

Client Sample ID: MO-3-SD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	7.2	J	50.0	56.8		ug/L		99	52 - 138	1	20
Acrylonitrile	ND		500	555		ug/L		111	58 - 142	1	20
Benzene	5.1		50.0	55.1		ug/L		100	80 - 120	4	20
Bromochloromethane	ND		50.0	52.4		ug/L		105	72 - 125	3	20
Bromodichloromethane	ND		50.0	53.1		ug/L		106	71 - 128	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18757-5 MSD
Matrix: Water
Analysis Batch: 267150

Client Sample ID: MO-3-SD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	48.3		ug/L		97	65 - 133	1	20
Carbon disulfide	ND		50.0	57.7		ug/L		115	69 - 139	10	20
Carbon tetrachloride	ND		50.0	49.2		ug/L		98	70 - 126	6	20
Chlorobenzene	ND		50.0	49.4		ug/L		99	80 - 120	3	20
Chloroethane	ND		50.0	63.8		ug/L		128	59 - 144	1	20
Chloroform	ND		50.0	49.7		ug/L		99	80 - 120	5	20
cis-1,2-Dichloroethene	ND		50.0	48.1		ug/L		96	80 - 124	3	20
cis-1,3-Dichloropropene	ND		50.0	50.7		ug/L		101	67 - 130	0	20
Dibromochloromethane	ND		50.0	47.4		ug/L		95	68 - 133	0	20
1,2-Dibromo-3-Chloropropane	ND		50.0	49.5		ug/L		99	58 - 148	5	20
1,2-Dibromoethane (EDB)	ND		50.0	49.7		ug/L		99	65 - 138	0	20
1,2-Dichlorobenzene	ND		50.0	50.1		ug/L		100	80 - 124	1	20
1,4-Dichlorobenzene	ND		50.0	50.0		ug/L		100	80 - 120	4	20
1,1-Dichloroethane	ND		50.0	50.6		ug/L		101	80 - 120	4	20
1,2-Dichloroethane	ND		50.0	54.0		ug/L		108	56 - 136	4	20
1,1-Dichloroethene	ND		50.0	52.8		ug/L		106	66 - 137	11	20
1,2-Dichloropropane	ND		50.0	53.6		ug/L		107	80 - 123	2	20
Ethylbenzene	ND		50.0	48.7		ug/L		97	80 - 121	4	20
2-Hexanone	ND		50.0	48.9		ug/L		98	47 - 150	6	20
Methyl bromide	1.7	J *	50.0	38.0		ug/L		73	53 - 146	9	20
Methyl chloride	ND		50.0	49.2		ug/L		98	61 - 137	4	20
Methylene bromide	ND		50.0	52.8		ug/L		106	61 - 136	2	20
Methylene Chloride	ND		50.0	49.7		ug/L		99	80 - 120	5	20
Methyl Ethyl Ketone	ND		50.0	55.4		ug/L		111	58 - 143	3	20
Methyl iodide	9.2	F1	50.0	97.1	F1	ug/L		176	69 - 124	14	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	53.0		ug/L		106	53 - 150	7	20
Styrene	ND		50.0	49.8		ug/L		100	44 - 150	2	20
1,1,1,2-Tetrachloroethane	ND		50.0	47.9		ug/L		96	80 - 120	3	20
1,1,2,2-Tetrachloroethane	ND		50.0	51.6		ug/L		103	60 - 150	0	20
Tetrachloroethene	ND		50.0	46.6		ug/L		93	66 - 132	5	20
Toluene	ND		50.0	48.9		ug/L		98	75 - 134	3	20
trans-1,4-Dichloro-2-butene	ND		50.0	53.7		ug/L		107	55 - 146	1	20
trans-1,2-Dichloroethene	ND		50.0	46.4		ug/L		93	79 - 121	4	20
trans-1,3-Dichloropropene	ND		50.0	49.7		ug/L		99	68 - 143	1	20
1,1,1-Trichloroethane	ND		50.0	49.0		ug/L		98	74 - 123	6	20
1,1,2-Trichloroethane	ND		50.0	50.7		ug/L		101	70 - 134	1	20
Trichloroethene	ND		50.0	49.8		ug/L		100	63 - 120	6	20
Trichlorofluoromethane	ND		50.0	53.2		ug/L		106	53 - 150	3	20
1,2,3-Trichloropropane	ND		50.0	50.6		ug/L		101	62 - 137	2	20
Vinyl acetate	ND		50.0	61.1		ug/L		122	63 - 150	1	20
Vinyl chloride	ND		50.0	54.1		ug/L		108	54 - 140	2	20
Xylenes, Total	ND		100	99.9		ug/L		100	80 - 124	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*71 - 139*
Dibromofluoromethane (Surr)	*106*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*109*		*76 - 121*
Toluene-d8 (Surr)	*93*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-267405/9
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			08/30/16 15:39	1
Sulfate	ND		0.50	0.050	mg/L			08/30/16 15:39	1
Chloride	ND		0.20	0.020	mg/L			08/30/16 15:39	1

Lab Sample ID: LCS 160-267405/10
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			1.00	1.00		mg/L		100	90 - 110		
Sulfate			8.00	7.74		mg/L		97	90 - 110		
Chloride			2.00	1.95		mg/L		97	90 - 110		

Lab Sample ID: 160-18757-1 MS
Matrix: Water
Analysis Batch: 267405

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	1.5		2.00	3.41	E	mg/L		93	90 - 110		

Lab Sample ID: 160-18757-1 DU
Matrix: Water
Analysis Batch: 267405

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	1.5			1.55		mg/L				0.8	20

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18757-1 MS
Matrix: Water
Analysis Batch: 267405

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate - DL	120		80.0	192		mg/L		95	90 - 110		
Chloride - DL	16		40.0	53.6		mg/L		94	90 - 110		

Lab Sample ID: 160-18757-1 DU
Matrix: Water
Analysis Batch: 267405

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate - DL	120			116		mg/L				0.6	20
Chloride - DL	16			16.1		mg/L				0.7	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-266532/1-A
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266532

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Arsenic	ND		10	4.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Barium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:37	1
Beryllium	ND		5.0	1.5	ug/L		08/25/16 14:04	08/29/16 19:37	1
Boron	ND		100	25	ug/L		08/25/16 14:04	08/29/16 19:37	1
Cadmium	ND		5.0	1.5	ug/L		08/25/16 14:04	08/29/16 19:37	1
CaHard	ND		2500	750	ug/L		08/25/16 14:04	08/29/16 19:37	1
Calcium	ND		1000	300	ug/L		08/25/16 14:04	08/29/16 19:37	1
Chromium	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Cobalt	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:37	1
Copper	ND		25	5.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Lead	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Magnesium	ND		1.0	0.30	mg/L		08/25/16 14:04	08/29/16 19:37	1
Manganese	ND		15	2.5	ug/L		08/25/16 14:04	08/29/16 19:37	1
MgHard	ND		4100	1200	ug/L		08/25/16 14:04	08/29/16 19:37	1
Nickel	ND		0.040	0.010	mg/L		08/25/16 14:04	08/29/16 19:37	1
Phosphorus	ND	^	250	75	ug/L		08/25/16 14:04	08/29/16 19:37	1
Selenium	ND		15	5.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Silver	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Sodium	ND		1000	300	ug/L		08/25/16 14:04	08/29/16 19:37	1
Thallium	ND	^	20	5.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Total Hardness	ND		6600	2000	ug/L		08/25/16 14:04	08/29/16 19:37	1
Vanadium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:37	1
Zinc	ND		20	6.0	ug/L		08/25/16 14:04	08/29/16 19:37	1

Lab Sample ID: LCS 160-266532/2-A
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	484		ug/L		97	80 - 120
Arsenic	1000	942		ug/L		94	80 - 120
Barium	1000	976		ug/L		98	80 - 120
Beryllium	1000	993		ug/L		99	80 - 120
Boron	2000	1940		ug/L		97	80 - 120
Cadmium	1000	974		ug/L		97	80 - 120
Calcium	10000	10300		ug/L		103	80 - 120
Chromium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	1020		ug/L		102	80 - 120
Copper	1000	987		ug/L		99	80 - 120
Lead	1000	1030		ug/L		103	80 - 120
Magnesium	10.0	9.77		mg/L		98	80 - 120
Manganese	1000	985		ug/L		98	80 - 120
Nickel	1.00	1.02		mg/L		102	80 - 120
Phosphorus	1000	1150	^	ug/L		115	80 - 120
Selenium	500	488		ug/L		98	80 - 120
Silver	200	201		ug/L		100	80 - 120
Sodium	10000	10000		ug/L		100	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-266532/2-A
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	214	^	ug/L		107	80 - 120
Vanadium	1000	980		ug/L		98	80 - 120
Zinc	1000	976		ug/L		98	80 - 120

Lab Sample ID: 160-18757-1 MS
Matrix: Water
Analysis Batch: 267177

Client Sample ID: MO-1-SDR
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	498		ug/L		100	75 - 125
Arsenic	ND		1000	989		ug/L		99	75 - 125
Barium	97	J	1000	1090		ug/L		100	75 - 125
Beryllium	ND		1000	1030		ug/L		103	75 - 125
Boron	130	J	2000	2140		ug/L		107	75 - 125
Cadmium	ND		1000	1010		ug/L		101	75 - 125
Calcium	83000		10000	92800	4	ug/L		102	75 - 125
Chromium	ND		1000	1040		ug/L		104	75 - 125
Cobalt	ND		1000	1050		ug/L		105	75 - 125
Copper	ND		1000	1020		ug/L		102	75 - 125
Lead	ND		1000	1070		ug/L		107	75 - 125
Magnesium	46		10.0	56.0	4	mg/L		98	75 - 125
Manganese	44	J	1000	1050		ug/L		101	75 - 125
Nickel	ND		1.00	1.06		mg/L		106	75 - 125
Phosphorus	ND	^	1000	1220	J ^	ug/L		122	75 - 125
Selenium	ND		500	403		ug/L		81	75 - 125
Silver	ND		200	211		ug/L		105	75 - 125
Sodium	91000		10000	102000	4	ug/L		104	75 - 125
Thallium	ND	^	200	222	^	ug/L		111	75 - 125
Vanadium	ND		1000	1020		ug/L		102	75 - 125
Zinc	ND		1000	1020		ug/L		102	75 - 125

Lab Sample ID: 160-18757-1 MSD
Matrix: Water
Analysis Batch: 267177

Client Sample ID: MO-1-SDR
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	507		ug/L		101	75 - 125	2	20
Arsenic	ND		1000	996		ug/L		100	75 - 125	1	20
Barium	97	J	1000	1110		ug/L		102	75 - 125	2	20
Beryllium	ND		1000	1040		ug/L		104	75 - 125	1	20
Boron	130	J	2000	2120		ug/L		106	75 - 125	1	20
Cadmium	ND		1000	1010		ug/L		101	75 - 125	0	20
Calcium	83000		10000	93000	4	ug/L		104	75 - 125	0	20
Chromium	ND		1000	1040		ug/L		104	75 - 125	0	20
Cobalt	ND		1000	1050		ug/L		105	75 - 125	0	20
Copper	ND		1000	1020		ug/L		102	75 - 125	0	20
Lead	ND		1000	1070		ug/L		107	75 - 125	1	20
Magnesium	46		10.0	56.2	4	mg/L		101	75 - 125	0	20
Manganese	44	J	1000	1060		ug/L		101	75 - 125	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18757-1 MSD — **Client Sample ID: MO-1-SDR**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267177 — **Prep Batch: 266532**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	ND		1.00	1.06		mg/L		106	75 - 125	0	20
Phosphorus	ND	^	1000	1230	J ^	ug/L		123	75 - 125	1	20
Selenium	ND		500	411		ug/L		82	75 - 125	2	20
Silver	ND		200	207		ug/L		104	75 - 125	2	20
Sodium	91000		10000	103000	4	ug/L		114	75 - 125	1	20
Thallium	ND	^	200	229	^	ug/L		114	75 - 125	3	20
Vanadium	ND		1000	1020		ug/L		102	75 - 125	0	20
Zinc	ND		1000	1020		ug/L		102	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-267134/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 11:56	1

Lab Sample ID: LCS 160-267134/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.96		ug/L		99	80 - 120

Lab Sample ID: 160-18471-F-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.87		ug/L		97	80 - 120

Lab Sample ID: 160-18471-F-3-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.88		ug/L		98	80 - 120	0	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-266513/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			08/25/16 12:13	1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 160-266513/2
Matrix: Water
Analysis Batch: 266513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	506		mg/L		101	90 - 110

Lab Sample ID: 160-18754-C-1 DU
Matrix: Water
Analysis Batch: 266513

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	450		447		mg/L		1	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-268615/20
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/08/16 15:42	1

Lab Sample ID: LCS 160-268615/23
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.493		mg/L		99	90 - 110

Lab Sample ID: 160-18757-1 MS
Matrix: Water
Analysis Batch: 268615

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.57	F1	0.500	0.996	F1	mg/L		86	90 - 110

Lab Sample ID: 160-18757-1 DU
Matrix: Water
Analysis Batch: 268615

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia	0.57	F1	0.504		mg/L		12	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-268618/13
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050	0.011	mg/L			09/07/16 18:25	1

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCS 160-268618/14
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			0.500	0.462		mg/L		92	90 - 110		

Lab Sample ID: 160-18757-1 MS
Matrix: Water
Analysis Batch: 268618

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	ND	F1	0.500	ND	F1	mg/L		0	90 - 110		

Lab Sample ID: 160-18757-1 DU
Matrix: Water
Analysis Batch: 268618

Client Sample ID: MO-1-SDR
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Nitrate/Nitrite	ND	F1		ND		mg/L				NC	20

Method: 376.1 - Sulfide

Lab Sample ID: MB 160-267062/1
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0	0.45	mg/L			08/29/16 10:10	1

Lab Sample ID: LCS 160-267062/2
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide			10.0	9.90		mg/L		99	90 - 110		

Lab Sample ID: 160-18756-A-1 MS
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfide	ND		200	180		mg/L		90	90 - 110		

Lab Sample ID: 160-18756-A-1 DU
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfide	ND			ND		mg/L				NC	20

Method: 410.4 - COD

Lab Sample ID: MB 160-267445/3-A
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Lab Sample ID: LCS 160-267445/4-A
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	48.0		mg/L		96	90 - 110

Lab Sample ID: 160-18756-C-4-C MS
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		50.0	48.0		mg/L		96	90 - 110

Lab Sample ID: 160-18756-C-4-B DU
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	ND		ND		mg/L		NC	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-268968/1-A
Matrix: Water
Analysis Batch: 269334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268968

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	100.0	U	138	138	500	231	pCi/L	09/10/16 09:16	09/12/16 14:25	1

Lab Sample ID: LCS 160-268968/2-A
Matrix: Water
Analysis Batch: 269334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268968

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Tritium	3030	3123		438	500	233	pCi/L	103	74 - 114

Lab Sample ID: 160-18757-2 MS
Matrix: Water
Analysis Batch: 269334

Client Sample ID: MO-1-SS
Prep Type: Total/NA
Prep Batch: 268968

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Tritium	32.4	U	3030	2907		421	500	237	pCi/L	96	67 - 130

Method: 906.0 - Tritium, Total (LSC) (Continued)

Lab Sample ID: 160-18757-1 DU
Matrix: Water
Analysis Batch: 269334

Client Sample ID: MO-1-SDR
Prep Type: Total/NA
Prep Batch: 268968

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	71.6	U		44.14	U	132	500	232	pCi/L			0.10	1

GC/MS VOA

Analysis Batch: 267150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	8260C	
160-18757-2	MO-1-SS	Total/NA	Water	8260C	
160-18757-3	MO-2-SD	Total/NA	Water	8260C	
160-18757-4	MO-3-SS	Total/NA	Water	8260C	
160-18757-5	MO-3-SD	Total/NA	Water	8260C	
160-18757-6	TRIP BLANK	Total/NA	Water	8260C	
MB 160-267150/6	Method Blank	Total/NA	Water	8260C	
LCS 160-267150/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-267150/4	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18757-5 MS	MO-3-SD	Total/NA	Water	8260C	
160-18757-5 MSD	MO-3-SD	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 267405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	300.0	
160-18757-1 - DL	MO-1-SDR	Total/NA	Water	300.0	
160-18757-2 - DL	MO-1-SS	Total/NA	Water	300.0	
160-18757-2 - DL2	MO-1-SS	Total/NA	Water	300.0	
160-18757-3	MO-2-SD	Total/NA	Water	300.0	
160-18757-3 - DL	MO-2-SD	Total/NA	Water	300.0	
160-18757-4	MO-3-SS	Total/NA	Water	300.0	
160-18757-4 - DL	MO-3-SS	Total/NA	Water	300.0	
160-18757-5	MO-3-SD	Total/NA	Water	300.0	
160-18757-5 - DL	MO-3-SD	Total/NA	Water	300.0	
160-18757-5 - DL2	MO-3-SD	Total/NA	Water	300.0	
MB 160-267405/9	Method Blank	Total/NA	Water	300.0	
LCS 160-267405/10	Lab Control Sample	Total/NA	Water	300.0	
160-18757-1 MS	MO-1-SDR	Total/NA	Water	300.0	
160-18757-1 MS - DL	MO-1-SDR	Total/NA	Water	300.0	
160-18757-1 DU	MO-1-SDR	Total/NA	Water	300.0	
160-18757-1 DU - DL	MO-1-SDR	Total/NA	Water	300.0	

Metals

Prep Batch: 266532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	3010A	
160-18757-2	MO-1-SS	Total/NA	Water	3010A	
160-18757-3	MO-2-SD	Total/NA	Water	3010A	
160-18757-4	MO-3-SS	Total/NA	Water	3010A	
160-18757-5	MO-3-SD	Total/NA	Water	3010A	
MB 160-266532/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-266532/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18757-1 MS	MO-1-SDR	Total/NA	Water	3010A	
160-18757-1 MSD	MO-1-SDR	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 267134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	7470A	
160-18757-2	MO-1-SS	Total/NA	Water	7470A	
160-18757-3	MO-2-SD	Total/NA	Water	7470A	
160-18757-4	MO-3-SS	Total/NA	Water	7470A	
160-18757-5	MO-3-SD	Total/NA	Water	7470A	
MB 160-267134/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-267134/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18471-F-3-C MS	Matrix Spike	Total/NA	Water	7470A	
160-18471-F-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 267177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	6010C	266532
160-18757-2	MO-1-SS	Total/NA	Water	6010C	266532
160-18757-3	MO-2-SD	Total/NA	Water	6010C	266532
160-18757-4	MO-3-SS	Total/NA	Water	6010C	266532
160-18757-5	MO-3-SD	Total/NA	Water	6010C	266532
MB 160-266532/1-A	Method Blank	Total/NA	Water	6010C	266532
LCS 160-266532/2-A	Lab Control Sample	Total/NA	Water	6010C	266532
160-18757-1 MS	MO-1-SDR	Total/NA	Water	6010C	266532
160-18757-1 MSD	MO-1-SDR	Total/NA	Water	6010C	266532

Analysis Batch: 267552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	7470A	267134
160-18757-2	MO-1-SS	Total/NA	Water	7470A	267134
160-18757-3	MO-2-SD	Total/NA	Water	7470A	267134
160-18757-4	MO-3-SS	Total/NA	Water	7470A	267134
160-18757-5	MO-3-SD	Total/NA	Water	7470A	267134
MB 160-267134/1-A	Method Blank	Total/NA	Water	7470A	267134
LCS 160-267134/2-A	Lab Control Sample	Total/NA	Water	7470A	267134
160-18471-F-3-C MS	Matrix Spike	Total/NA	Water	7470A	267134
160-18471-F-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	267134

Analysis Batch: 267613

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-2	MO-1-SS	Total/NA	Water	6010C	266532

General Chemistry

Analysis Batch: 266513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	160.1	
160-18757-2	MO-1-SS	Total/NA	Water	160.1	
160-18757-3	MO-2-SD	Total/NA	Water	160.1	
160-18757-4	MO-3-SS	Total/NA	Water	160.1	
160-18757-5	MO-3-SD	Total/NA	Water	160.1	
MB 160-266513/1	Method Blank	Total/NA	Water	160.1	
LCS 160-266513/2	Lab Control Sample	Total/NA	Water	160.1	
160-18754-C-1 DU	Duplicate	Total/NA	Water	160.1	

General Chemistry (Continued)

Analysis Batch: 267062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	376.1	
160-18757-2	MO-1-SS	Total/NA	Water	376.1	
160-18757-3 - DL	MO-2-SD	Total/NA	Water	376.1	
160-18757-4	MO-3-SS	Total/NA	Water	376.1	
160-18757-5	MO-3-SD	Total/NA	Water	376.1	
MB 160-267062/1	Method Blank	Total/NA	Water	376.1	
LCS 160-267062/2	Lab Control Sample	Total/NA	Water	376.1	
160-18756-A-1 MS	Matrix Spike	Total/NA	Water	376.1	
160-18756-A-1 DU	Duplicate	Total/NA	Water	376.1	

Prep Batch: 267445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	410.4	
160-18757-2 - DL	MO-1-SS	Total/NA	Water	410.4	
160-18757-3	MO-2-SD	Total/NA	Water	410.4	
160-18757-4	MO-3-SS	Total/NA	Water	410.4	
160-18757-5	MO-3-SD	Total/NA	Water	410.4	
MB 160-267445/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-267445/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18756-C-4-C MS	Matrix Spike	Total/NA	Water	410.4	
160-18756-C-4-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 267574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	410.4	267445
160-18757-2 - DL	MO-1-SS	Total/NA	Water	410.4	267445
160-18757-3	MO-2-SD	Total/NA	Water	410.4	267445
160-18757-4	MO-3-SS	Total/NA	Water	410.4	267445
160-18757-5	MO-3-SD	Total/NA	Water	410.4	267445
MB 160-267445/3-A	Method Blank	Total/NA	Water	410.4	267445
LCS 160-267445/4-A	Lab Control Sample	Total/NA	Water	410.4	267445
160-18756-C-4-C MS	Matrix Spike	Total/NA	Water	410.4	267445
160-18756-C-4-B DU	Duplicate	Total/NA	Water	410.4	267445

Analysis Batch: 268615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	350.1	
160-18757-2	MO-1-SS	Total/NA	Water	350.1	
160-18757-3 - DL	MO-2-SD	Total/NA	Water	350.1	
160-18757-4 - DL	MO-3-SS	Total/NA	Water	350.1	
160-18757-5 - DL	MO-3-SD	Total/NA	Water	350.1	
MB 160-268615/20	Method Blank	Total/NA	Water	350.1	
LCS 160-268615/23	Lab Control Sample	Total/NA	Water	350.1	
160-18757-1 MS	MO-1-SDR	Total/NA	Water	350.1	
160-18757-1 DU	MO-1-SDR	Total/NA	Water	350.1	

Analysis Batch: 268618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	353.1 Preserved	
160-18757-2	MO-1-SS	Total/NA	Water	353.1 Preserved	
160-18757-3	MO-2-SD	Total/NA	Water	353.1 Preserved	

General Chemistry (Continued)

Analysis Batch: 268618 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-4	MO-3-SS	Total/NA	Water	353.1 Preserved	
160-18757-5	MO-3-SD	Total/NA	Water	353.1 Preserved	
MB 160-268618/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-268618/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18757-1 MS	MO-1-SDR	Total/NA	Water	353.1 Preserved	
160-18757-1 DU	MO-1-SDR	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 268968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-1	MO-1-SDR	Total/NA	Water	LSC_Dist_Susp	
160-18757-2	MO-1-SS	Total/NA	Water	LSC_Dist_Susp	
160-18757-3	MO-2-SD	Total/NA	Water	LSC_Dist_Susp	
160-18757-4	MO-3-SS	Total/NA	Water	LSC_Dist_Susp	
160-18757-5	MO-3-SD	Total/NA	Water	LSC_Dist_Susp	
MB 160-268968/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-268968/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-18757-2 MS	MO-1-SS	Total/NA	Water	LSC_Dist_Susp	
160-18757-1 DU	MO-1-SDR	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18757-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18757-1	MO-1-SDR	101	108	113	99
160-18757-2	MO-1-SS	100	108	113	101
160-18757-3	MO-2-SD	103	110	111	101
160-18757-4	MO-3-SS	103	110	111	100
160-18757-5	MO-3-SD	100	111	109	103
160-18757-5 MS	MO-3-SD	99	111	113	96
160-18757-5 MSD	MO-3-SD	96	106	109	93
160-18757-6	TRIP BLANK	106	105	107	103
LCS 160-267150/3	Lab Control Sample	99	104	109	101
LCSD 160-267150/4	Lab Control Sample Dup	96	101	103	101
MB 160-267150/6	Method Blank	106	105	110	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18758-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
9/20/2016 2:25:46 PM

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
chenise.lambert-sykes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18758-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18758-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/23/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 9.6 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5), PZ-116-SS (160-18758-6) and TRIP BLANK (160-18758-7) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 08/30/2016.

Analytical Batch: 267150

The continuing calibration verification (CCV) associated with batch 160-267150 recovered above the upper control limit for Methyl bromide and Chloroethane. The samples associated with this CCV were non-detects for Chloroethane; Methyl bromide was not detected above the Reporting Limit. Therefore, the data have been reported. (CCVIS 160-267150/2)

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-267150: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-267150/2)

Job ID: 160-18758-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The laboratory control sample (LCS) for analytical batch 160-267150 recovered outside control limits for the following analyte: Methyl bromide. This analyte was biased high in the LCS and was not detected above the Reporting Limit in the associated samples; therefore, the data have been reported. (LCS 160-267150/3)

The a matrix spike/matrix spike duplicate (MS/MSD) recoveries for analytical batch 160-267150 were outside control limits. Sample matrix interference is suspected because the associated laboratory control samples' (LCS/LCSD) recoveries were within acceptance limits. (160-18757-B-5 MS) and (160-18757-B-5 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 08/25/2016 and analyzed on 08/29/2016.

Analytical Batch: 267177

The initial calibration verification (ICV) result for batch analytical batch 160-267177 was above the upper control limit for Thallium. Sample results were below the reporting limit, and have been reported as qualified data. (ICV 160-267177/5)

The continuing calibration verification (CCV) associated with batch analytical batch 160-267177 recovered above the upper control limit for Phosphorus. The samples associated with this CCV were below the reporting limit for the affected analytes; therefore, the data have been reported. The following sample is impacted: (CCV 160-267177/57).

The following samples were diluted due to the nature of the sample matrix. Samples are high in salts: PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5), PZ-116-SS (160-18758-6), (160-18757-H-1-A ^5), (160-18757-H-1-B MS ^), (160-18757-H-1-C MSD) and (160-18757-H-1-A SD ^). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 08/29/2016 and analyzed on 08/30/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 08/25/2016 and 08/26/2016.

Analytical Batch: 266765

The following samples in TDS batch 160-266765 were diluted to bring the concentrations of the target analyte within the calibration range: PZ-106-SD (160-18758-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 08/31/2016.

Analytical Batch: 267405

Job ID: 160-18758-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The following samples in Anion batch 160-267405 were diluted to bring the concentrations of target analytes within the calibration range: PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/08/2016.

Analytical Batch: 268615

The following samples in NH3 analytical batch 160-268615 were diluted to bring the concentration of the target analyte within the calibration range: PZ-106-SD (160-18758-3). Elevated reporting limits (RLs) are provided.

The following matrix spike (MS) recovery for NH3 analytical batch 160-268615 was outside control limits: (160-18757-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 09/07/2016.

Analytical Batch: 268618

The continuing calibration verification (CCV) associated with the following samples in batch 160-268618 recovered above the upper control limit for NH3: PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The following matrix spike (MS) recoveries for NH3 analytical batch 160-268618 were outside control limits: (160-18757-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, and due to the negative values that were recorded for the samples. Additionally, in order to verify the interference, new matrix spikes were prepared the following day that also had no recovery.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

SULFIDE

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for sulfide in accordance with EPA Method 376.1. The samples were analyzed on 08/29/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 08/31/2016.

Analytical Batch: 267574

The following sample in COD batch 160-267574 was diluted to bring the concentration of target analytes within the calibration range: PZ-106-SD (160-18758-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 160-18758-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

TRITIUM, TOTAL (LSC)

Samples PZ-110-SS (160-18758-1), PZ-109-SS (160-18758-2), PZ-106-SD (160-18758-3), PZ-106-SS (160-18758-4), PZ-105-SS (160-18758-5) and PZ-116-SS (160-18758-6) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/10/2016 and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis

13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.1
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 1 of 6
Company: Missouri Attorney General's Office		Analysis Requested		Job #:
Address: PO BOX 899	Due Date Requested: Standard			Preservation Codes:
City: Jefferson City	TAT Requested (days):			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			Other:

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA
M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	D	A	CB		
PZ-110-SS	8/23/16	0842	G	Water	N	N	✓	✓	✓	✓	✓	✓	8	
PZ-109-SS	8/23/16	0945	G	Water	N	N	✓	✓	✓	✓	✓	✓	8	
PZ-106-SD	8/23/16	1131	G	Water	N	N	✓	✓	✓	✓	✓	✓	8	
PZ-106-SS	8/23/16	1226	G	Water	N	N	✓	✓	✓	✓	✓	✓	8	
PZ-105-SS	8/23/16	1439	G	Water	N	N	✓	✓	✓	✓	✓	✓	8	
PZ-116-SS	8/23/16	1555	G	Water	N	N	✓	✓	✓	✓	✓	✓	8	
TRIPBLANK	8/23/16	0800	G	Water	N	N					✓			
				Water										
				Water										
				Water										
				Water										

160-18758 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For ______ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Brenna McDonald	Date/Time: 8/23/16 1635	Company: MDNR/LKS	Received by: [signature]	Date/Time: 8.23.16 1635	Company: TASTL
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:
Relinquished by:	Date/Time:	Company:	Received by:	Date/Time:	Company:

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18758-1

Login Number: 18758
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18758-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
376.1	Sulfide	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18758-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18758-1	PZ-110-SS	Water	08/23/16 08:42	08/23/16 16:35
160-18758-2	PZ-109-SS	Water	08/23/16 09:45	08/23/16 16:35
160-18758-3	PZ-106-SD	Water	08/23/16 11:31	08/23/16 16:35
160-18758-4	PZ-106-SS	Water	08/23/16 12:26	08/23/16 16:35
160-18758-5	PZ-105-SS	Water	08/23/16 14:39	08/23/16 16:35
160-18758-6	PZ-116-SS	Water	08/23/16 15:55	08/23/16 16:35
160-18758-7	TRIP BLANK	Water	08/23/16 08:00	08/23/16 16:35

Client Sample ID: PZ-110-SS

Date Collected: 08/23/16 08:42
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 05:37	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 05:37	1
Benzene	**4.3**	**J**	5.0	0.25	ug/L			08/30/16 05:37	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 05:37	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 05:37	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 05:37	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 05:37	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 05:37	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 05:37	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 05:37	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 05:37	1
cis-1,2-Dichloroethene	**1.7**	**J**	5.0	0.16	ug/L			08/30/16 05:37	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 05:37	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 05:37	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 05:37	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 05:37	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 05:37	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 05:37	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 05:37	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 05:37	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 05:37	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 05:37	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 05:37	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 05:37	1
Methyl bromide	**0.87**	**J ***	10	0.40	ug/L			08/30/16 05:37	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 05:37	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 05:37	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 05:37	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 05:37	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 05:37	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 05:37	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 05:37	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 05:37	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 05:37	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 05:37	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 05:37	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 05:37	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 05:37	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 05:37	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 05:37	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 05:37	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 05:37	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 05:37	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 05:37	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 05:37	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 05:37	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 05:37	1

Client Sample ID: PZ-110-SS

Date Collected: 08/23/16 08:42
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*103*		*71 - 139*		*08/30/16 05:37*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 121*		*08/30/16 05:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*76 - 121*		*08/30/16 05:37*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*		*08/30/16 05:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.27**		0.20	0.020	mg/L			08/31/16 02:29	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**51**		25	2.5	mg/L			08/31/16 02:43	50
Chloride	**230**		10	1.0	mg/L			08/31/16 02:43	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:36	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:36	5
Barium	**270**		250	75	ug/L		08/25/16 14:04	08/29/16 20:36	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:36	5
Boron	**200**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 20:36	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:36	5
CaHard	**570000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:36	5
Calcium	**230000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:36	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:36	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:36	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:36	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:36	5
Magnesium	**85**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:36	5
Manganese	**160**		75	13	ug/L		08/25/16 14:04	08/29/16 20:36	5
MgHard	**350000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:36	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:36	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:36	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:36	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:36	5
Sodium	**78000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:36	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:36	5
Total Hardness	**920000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:36	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:36	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:36	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1300**		10	7.0	mg/L			08/25/16 12:13	1
Ammonia	**0.51**		0.050	0.022	mg/L			09/08/16 16:07	1
Nitrate/Nitrite	**0.020**	**J ^**	0.050	0.011	mg/L			09/07/16 18:59	1
Sulfide	**1.2**		1.0	0.45	mg/L			08/29/16 10:10	1

Client Sample ID: PZ-110-SS

Lab Sample ID: 160-18758-1
Matrix: Water
Date Collected: 08/23/16 08:42
Date Received: 08/23/16 16:35

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	65		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	1150		231	252	500	234	pCi/L	09/10/16 09:16	09/12/16 18:36	1

Client Sample ID: PZ-109-SS

Lab Sample ID: 160-18758-2
Matrix: Water
Date Collected: 08/23/16 09:45
Date Received: 08/23/16 16:35

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 06:02	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 06:02	1
Benzene	ND		5.0	0.25	ug/L			08/30/16 06:02	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 06:02	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 06:02	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 06:02	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 06:02	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 06:02	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 06:02	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 06:02	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 06:02	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 06:02	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 06:02	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 06:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 06:02	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 06:02	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 06:02	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 06:02	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 06:02	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 06:02	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 06:02	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 06:02	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 06:02	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 06:02	1
Methyl bromide	0.84	J *	10	0.40	ug/L			08/30/16 06:02	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 06:02	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 06:02	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 06:02	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 06:02	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 06:02	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 06:02	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 06:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 06:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 06:02	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 06:02	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 06:02	1

Client Sample ID: PZ-109-SS
Date Collected: 08/23/16 09:45
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 06:02	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 06:02	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 06:02	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 06:02	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 06:02	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 06:02	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 06:02	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 06:02	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 06:02	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 06:02	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 06:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 139*		*08/30/16 06:02*	*1*
Dibromofluoromethane (Surr)	*111*		*80 - 121*		*08/30/16 06:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*76 - 121*		*08/30/16 06:02*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*		*08/30/16 06:02*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**2.1**		0.10	0.010	mg/L			08/31/16 03:41	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**23**		10	1.0	mg/L			08/31/16 03:55	20
Chloride	**4.7**		4.0	0.40	mg/L			08/31/16 03:55	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:41	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:41	5
Barium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:41	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:41	5
Boron	**160**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 20:41	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:41	5
CaHard	**240000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:41	5
Calcium	**96000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:41	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:41	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:41	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:41	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:41	5
Magnesium	**52**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:41	5
Manganese	ND		75	13	ug/L		08/25/16 14:04	08/29/16 20:41	5
MgHard	**210000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:41	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:41	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:41	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:41	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:41	5
Sodium	**10000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:41	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:41	5

Client Sample ID: PZ-109-SS

Lab Sample ID: 160-18758-2

Date Collected: 08/23/16 09:45

Matrix: Water

Date Received: 08/23/16 16:35

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	**450000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:41	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:41	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:41	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**480**		5.0	3.5	mg/L			08/25/16 12:13	1
Ammonia	**0.028**	**J**	0.050	0.022	mg/L			09/08/16 16:09	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:02	1
Sulfide	ND		1.0	0.45	mg/L			08/29/16 10:10	1
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	88.3	U	136	136	500	228	pCi/L	09/10/16 09:16	09/12/16 18:59	1

Client Sample ID: PZ-106-SD

Lab Sample ID: 160-18758-3

Date Collected: 08/23/16 11:31

Matrix: Water

Date Received: 08/23/16 16:35

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 06:27	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 06:27	1
Benzene	**2.0**	**J**	5.0	0.25	ug/L			08/30/16 06:27	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 06:27	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 06:27	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 06:27	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 06:27	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 06:27	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 06:27	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 06:27	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 06:27	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 06:27	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 06:27	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 06:27	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 06:27	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 06:27	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 06:27	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 06:27	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 06:27	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 06:27	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 06:27	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 06:27	1

Client Sample ID: PZ-106-SD

Date Collected: 08/23/16 11:31
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 06:27	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 06:27	1
Methyl bromide	**1.4**	**J ***	10	0.40	ug/L			08/30/16 06:27	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 06:27	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 06:27	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 06:27	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 06:27	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 06:27	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 06:27	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 06:27	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 06:27	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 06:27	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 06:27	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 06:27	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 06:27	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 06:27	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 06:27	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 06:27	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 06:27	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 06:27	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 06:27	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 06:27	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 06:27	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 06:27	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 06:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*71 - 139*		*08/30/16 06:27*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 121*		*08/30/16 06:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*76 - 121*		*08/30/16 06:27*	*1*
Toluene-d8 (Surr)	*97*		*80 - 129*		*08/30/16 06:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.1**		0.20	0.020	mg/L			08/31/16 04:24	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**38**		25	2.5	mg/L			08/31/16 04:38	50

Method: 300.0 - Anions, Ion Chromatography - DL3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**340**		40	4.0	mg/L			08/31/16 04:53	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:45	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:45	5
Barium	**660**		250	75	ug/L		08/25/16 14:04	08/29/16 20:45	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:45	5
Boron	**1300**		500	130	ug/L		08/25/16 14:04	08/29/16 20:45	5

Client Sample ID: PZ-106-SD

Lab Sample ID: 160-18758-3
Date Collected: 08/23/16 11:31
Matrix: Water
Date Received: 08/23/16 16:35

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:45	5
CaHard	**280000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:45	5
Calcium	**110000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:45	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:45	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:45	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:45	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:45	5
Magnesium	**76**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:45	5
Manganese	**32**	**J**	75	13	ug/L		08/25/16 14:04	08/29/16 20:45	5
MgHard	**310000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:45	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:45	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:45	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:45	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:45	5
Sodium	**250000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:45	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:45	5
Total Hardness	**590000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:45	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:45	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:45	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1400**		10	7.0	mg/L			08/26/16 10:27	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:05	1
Sulfide	**6.4**		1.0	0.45	mg/L			08/29/16 10:10	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**62**		2.5	1.1	mg/L			09/08/16 16:16	50
Chemical Oxygen Demand	**220**		25	5.6	mg/L		08/31/16 08:55	08/31/16 14:03	5

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**13000**		655	1320	500	231	pCi/L	09/10/16 09:16	09/12/16 19:21	1

Client Sample ID: PZ-106-SS

Lab Sample ID: 160-18758-4
Date Collected: 08/23/16 12:26
Matrix: Water
Date Received: 08/23/16 16:35

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 06:53	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 06:53	1
Benzene	ND		5.0	0.25	ug/L			08/30/16 06:53	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 06:53	1

Client Sample ID: PZ-106-SS
Date Collected: 08/23/16 12:26
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 06:53	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 06:53	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 06:53	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 06:53	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 06:53	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 06:53	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 06:53	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 06:53	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 06:53	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 06:53	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 06:53	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 06:53	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 06:53	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 06:53	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 06:53	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 06:53	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 06:53	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 06:53	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 06:53	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 06:53	1
Methyl bromide	**0.54**	**J ***	10	0.40	ug/L			08/30/16 06:53	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 06:53	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 06:53	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 06:53	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 06:53	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 06:53	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 06:53	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 06:53	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 06:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 06:53	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 06:53	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 06:53	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 06:53	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 06:53	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 06:53	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 06:53	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 06:53	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 06:53	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 06:53	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 06:53	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 06:53	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 06:53	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 06:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*71 - 139*		*08/30/16 06:53*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 121*		*08/30/16 06:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*76 - 121*		*08/30/16 06:53*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*		*08/30/16 06:53*	*1*

Client Sample ID: PZ-106-SS

Date Collected: 08/23/16 12:26
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.6**		0.10	0.010	mg/L			08/31/16 05:07	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**46**		10	1.0	mg/L			08/31/16 05:22	20
Chloride	**42**		4.0	0.40	mg/L			08/31/16 05:22	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:50	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:50	5
Barium	**170**	**J**	250	75	ug/L		08/25/16 14:04	08/29/16 20:50	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:50	5
Boron	ND		500	130	ug/L		08/25/16 14:04	08/29/16 20:50	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:50	5
CaHard	**280000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:50	5
Calcium	**110000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:50	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:50	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:50	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:50	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:50	5
Magnesium	**51**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:50	5
Manganese	**18**	**J**	75	13	ug/L		08/25/16 14:04	08/29/16 20:50	5
MgHard	**210000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:50	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:50	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:50	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:50	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:50	5
Sodium	**23000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:50	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:50	5
Total Hardness	**490000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:50	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:50	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:35	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**600**		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	**0.21**		0.050	0.022	mg/L			09/08/16 16:18	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:08	1
Sulfide	ND		1.0	0.45	mg/L			08/29/16 10:10	1
Chemical Oxygen Demand	**15**		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**353**		163	166	500	227	pCi/L	09/10/16 09:16	09/12/16 19:44	1

Client Sample ID: PZ-105-SS
Date Collected: 08/23/16 14:39
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 07:18	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 07:18	1
Benzene	ND		5.0	0.25	ug/L			08/30/16 07:18	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 07:18	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 07:18	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 07:18	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 07:18	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 07:18	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 07:18	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 07:18	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 07:18	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 07:18	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 07:18	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 07:18	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 07:18	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 07:18	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 07:18	1
1,4-Dichlorobenzene	**0.64**	**J**	5.0	0.35	ug/L			08/30/16 07:18	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 07:18	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 07:18	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 07:18	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 07:18	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 07:18	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 07:18	1
Methyl bromide	**0.90**	**J ***	10	0.40	ug/L			08/30/16 07:18	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 07:18	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 07:18	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 07:18	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 07:18	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 07:18	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 07:18	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 07:18	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 07:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 07:18	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 07:18	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 07:18	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 07:18	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 07:18	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 07:18	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 07:18	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 07:18	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 07:18	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 07:18	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 07:18	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 07:18	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 07:18	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 07:18	1

Client Sample ID: PZ-105-SS

Date Collected: 08/23/16 14:39
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-5

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 139*		*08/30/16 07:18*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 121*		*08/30/16 07:18*	*1*
1,2-Dichloroethane-d4 (Surr)	*112*		*76 - 121*		*08/30/16 07:18*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*		*08/30/16 07:18*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.36**		0.10	0.010	mg/L			08/31/16 06:19	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**50**		10	1.0	mg/L			08/31/16 06:34	20
Chloride	**70**		4.0	0.40	mg/L			08/31/16 06:34	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:55	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:55	5
Barium	**180**	**J**	250	75	ug/L		08/25/16 14:04	08/29/16 20:55	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:55	5
Boron	ND		500	130	ug/L		08/25/16 14:04	08/29/16 20:55	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:55	5
CaHard	**300000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:55	5
Calcium	**120000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:55	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:55	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:55	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:55	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:55	5
Magnesium	**58**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:55	5
Manganese	**140**		75	13	ug/L		08/25/16 14:04	08/29/16 20:55	5
MgHard	**240000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:55	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:55	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:55	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:55	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:55	5
Sodium	**43000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:55	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:55	5
Total Hardness	**540000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:55	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:55	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:55	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:37	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**690**		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	**0.052**		0.050	0.022	mg/L			09/08/16 16:21	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:11	1
Sulfide	ND		1.0	0.45	mg/L			08/29/16 10:10	1

Client Sample ID: PZ-105-SS

Date Collected: 08/23/16 14:39
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-5
Matrix: Water

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	3.0	J	5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	155	U	146	146	500	234	pCi/L	09/10/16 09:16	09/12/16 20:07	1

Client Sample ID: PZ-116-SS

Date Collected: 08/23/16 15:55
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 07:43	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 07:43	1
Benzene	14		5.0	0.25	ug/L			08/30/16 07:43	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 07:43	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 07:43	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 07:43	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 07:43	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 07:43	1
Chlorobenzene	1.0	J	5.0	0.38	ug/L			08/30/16 07:43	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 07:43	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 07:43	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 07:43	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 07:43	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 07:43	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 07:43	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 07:43	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 07:43	1
1,4-Dichlorobenzene	5.6		5.0	0.35	ug/L			08/30/16 07:43	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 07:43	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 07:43	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 07:43	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 07:43	1
Ethylbenzene	2.7	J	5.0	0.30	ug/L			08/30/16 07:43	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 07:43	1
Methyl bromide	0.79	J *	10	0.40	ug/L			08/30/16 07:43	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 07:43	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 07:43	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 07:43	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 07:43	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 07:43	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 07:43	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 07:43	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 07:43	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 07:43	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 07:43	1
Toluene	3.3	J	5.0	1.0	ug/L			08/30/16 07:43	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18758-1

Client Sample ID: PZ-116-SS
Date Collected: 08/23/16 15:55
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 07:43	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 07:43	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 07:43	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 07:43	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 07:43	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 07:43	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 07:43	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 07:43	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 07:43	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 07:43	1
Xylenes, Total	**5.4**	**J**	10	0.85	ug/L			08/30/16 07:43	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*97*		*71 - 139*		*08/30/16 07:43*	*1*
Dibromofluoromethane (Surr)	*110*		*80 - 121*		*08/30/16 07:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*114*		*76 - 121*		*08/30/16 07:43*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*		*08/30/16 07:43*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**2.4**		0.10	0.010	mg/L			08/31/16 07:03	1
Chloride	**3.6**		0.20	0.020	mg/L			08/31/16 07:03	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**36**		10	1.0	mg/L			08/31/16 07:17	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:59	5
Arsenic	ND		50	20	ug/L		08/25/16 14:04	08/29/16 20:59	5
Barium	**78**	**J**	250	75	ug/L		08/25/16 14:04	08/29/16 20:59	5
Beryllium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:59	5
Boron	**350**	**J**	500	130	ug/L		08/25/16 14:04	08/29/16 20:59	5
Cadmium	ND		25	7.5	ug/L		08/25/16 14:04	08/29/16 20:59	5
CaHard	**130000**		12000	3700	ug/L		08/25/16 14:04	08/29/16 20:59	5
Calcium	**51000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:59	5
Chromium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:59	5
Cobalt	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:59	5
Copper	ND		130	25	ug/L		08/25/16 14:04	08/29/16 20:59	5
Lead	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:59	5
Magnesium	**34**		5.0	1.5	mg/L		08/25/16 14:04	08/29/16 20:59	5
Manganese	**180**		75	13	ug/L		08/25/16 14:04	08/29/16 20:59	5
MgHard	**140000**		21000	6200	ug/L		08/25/16 14:04	08/29/16 20:59	5
Nickel	ND		0.20	0.050	mg/L		08/25/16 14:04	08/29/16 20:59	5
Phosphorus	ND		1300	380	ug/L		08/25/16 14:04	08/29/16 20:59	5
Selenium	ND		75	25	ug/L		08/25/16 14:04	08/29/16 20:59	5
Silver	ND		50	15	ug/L		08/25/16 14:04	08/29/16 20:59	5
Sodium	**41000**		5000	1500	ug/L		08/25/16 14:04	08/29/16 20:59	5
Thallium	ND	^	100	25	ug/L		08/25/16 14:04	08/29/16 20:59	5

Client Sample ID: PZ-116-SS

Lab Sample ID: 160-18758-6

Date Collected: 08/23/16 15:55

Matrix: Water

Date Received: 08/23/16 16:35

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	**270000**		33000	9900	ug/L		08/25/16 14:04	08/29/16 20:59	5
Vanadium	ND		250	75	ug/L		08/25/16 14:04	08/29/16 20:59	5
Zinc	ND		100	30	ug/L		08/25/16 14:04	08/29/16 20:59	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 12:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**390**		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	**0.027**	**J**	0.050	0.022	mg/L			09/08/16 16:23	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:14	1
Sulfide	ND		1.0	0.45	mg/L			08/29/16 10:10	1
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	108	U	141	141	500	236	pCi/L	09/10/16 09:16	09/12/16 20:29	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18758-7

Date Collected: 08/23/16 08:00

Matrix: Water

Date Received: 08/23/16 16:35

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/30/16 05:12	1
Acrylonitrile	ND		50	1.7	ug/L			08/30/16 05:12	1
Benzene	ND		5.0	0.25	ug/L			08/30/16 05:12	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/30/16 05:12	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/30/16 05:12	1
Bromoform	ND		5.0	0.37	ug/L			08/30/16 05:12	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/30/16 05:12	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/30/16 05:12	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/30/16 05:12	1
Chloroethane	ND		10	0.38	ug/L			08/30/16 05:12	1
Chloroform	ND		5.0	0.15	ug/L			08/30/16 05:12	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/30/16 05:12	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/30/16 05:12	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/30/16 05:12	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/30/16 05:12	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/30/16 05:12	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/30/16 05:12	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/30/16 05:12	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/30/16 05:12	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/30/16 05:12	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/30/16 05:12	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/30/16 05:12	1

Client Sample ID: TRIP BLANK

Date Collected: 08/23/16 08:00
Date Received: 08/23/16 16:35

Lab Sample ID: 160-18758-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		5.0	0.30	ug/L			08/30/16 05:12	1
2-Hexanone	ND		20	0.59	ug/L			08/30/16 05:12	1
Methyl bromide	**0.75**	**J ***	10	0.40	ug/L			08/30/16 05:12	1
Methyl chloride	ND		10	0.55	ug/L			08/30/16 05:12	1
Methylene bromide	ND		5.0	0.41	ug/L			08/30/16 05:12	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/30/16 05:12	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/30/16 05:12	1
Methyl iodide	ND		5.0	1.5	ug/L			08/30/16 05:12	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/30/16 05:12	1
Styrene	ND		5.0	0.35	ug/L			08/30/16 05:12	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/30/16 05:12	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/30/16 05:12	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/30/16 05:12	1
Toluene	ND		5.0	1.0	ug/L			08/30/16 05:12	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/30/16 05:12	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/30/16 05:12	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/30/16 05:12	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/30/16 05:12	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/30/16 05:12	1
Trichloroethene	ND		5.0	0.29	ug/L			08/30/16 05:12	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/30/16 05:12	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/30/16 05:12	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/30/16 05:12	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/30/16 05:12	1
Xylenes, Total	ND		10	0.85	ug/L			08/30/16 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*71 - 139*		*08/30/16 05:12*	*1*
Dibromofluoromethane (Surr)	*109*		*80 - 121*		*08/30/16 05:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*76 - 121*		*08/30/16 05:12*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*		*08/30/16 05:12*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-267150/6
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			08/29/16 22:05	1
Acrylonitrile	ND		50	1.7	ug/L			08/29/16 22:05	1
Benzene	ND		5.0	0.25	ug/L			08/29/16 22:05	1
Bromochloromethane	ND		5.0	0.55	ug/L			08/29/16 22:05	1
Bromodichloromethane	ND		5.0	0.25	ug/L			08/29/16 22:05	1
Bromoform	ND		5.0	0.37	ug/L			08/29/16 22:05	1
Carbon disulfide	ND		5.0	0.37	ug/L			08/29/16 22:05	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			08/29/16 22:05	1
Chlorobenzene	ND		5.0	0.38	ug/L			08/29/16 22:05	1
Chloroethane	ND		10	0.38	ug/L			08/29/16 22:05	1
Chloroform	ND		5.0	0.15	ug/L			08/29/16 22:05	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			08/29/16 22:05	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			08/29/16 22:05	1
Dibromochloromethane	ND		5.0	0.33	ug/L			08/29/16 22:05	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			08/29/16 22:05	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			08/29/16 22:05	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			08/29/16 22:05	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			08/29/16 22:05	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			08/29/16 22:05	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			08/29/16 22:05	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			08/29/16 22:05	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			08/29/16 22:05	1
Ethylbenzene	ND		5.0	0.30	ug/L			08/29/16 22:05	1
2-Hexanone	ND		20	0.59	ug/L			08/29/16 22:05	1
Methyl bromide	ND		10	0.40	ug/L			08/29/16 22:05	1
Methyl chloride	ND		10	0.55	ug/L			08/29/16 22:05	1
Methylene bromide	ND		5.0	0.41	ug/L			08/29/16 22:05	1
Methylene Chloride	ND		5.0	1.7	ug/L			08/29/16 22:05	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			08/29/16 22:05	1
Methyl iodide	ND		5.0	1.5	ug/L			08/29/16 22:05	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			08/29/16 22:05	1
Styrene	ND		5.0	0.35	ug/L			08/29/16 22:05	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			08/29/16 22:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			08/29/16 22:05	1
Tetrachloroethene	ND		5.0	0.28	ug/L			08/29/16 22:05	1
Toluene	ND		5.0	1.0	ug/L			08/29/16 22:05	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			08/29/16 22:05	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			08/29/16 22:05	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			08/29/16 22:05	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			08/29/16 22:05	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			08/29/16 22:05	1
Trichloroethene	ND		5.0	0.29	ug/L			08/29/16 22:05	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			08/29/16 22:05	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			08/29/16 22:05	1
Vinyl acetate	ND		5.0	0.61	ug/L			08/29/16 22:05	1
Vinyl chloride	ND		5.0	0.43	ug/L			08/29/16 22:05	1
Xylenes, Total	ND		10	0.85	ug/L			08/29/16 22:05	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-267150/6
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		71 - 139		08/29/16 22:05	1
Dibromofluoromethane (Surr)	105		80 - 121		08/29/16 22:05	1
1,2-Dichloroethane-d4 (Surr)	110		76 - 121		08/29/16 22:05	1
Toluene-d8 (Surr)	103		80 - 129		08/29/16 22:05	1

Lab Sample ID: LCS 160-267150/3
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	55.5		ug/L		111	63 - 131
Acrylonitrile	500	540		ug/L		108	81 - 117
Benzene	50.0	51.0		ug/L		102	80 - 120
Bromochloromethane	50.0	50.7		ug/L		101	80 - 120
Bromodichloromethane	50.0	52.9		ug/L		106	80 - 120
Bromoform	50.0	47.8		ug/L		96	80 - 120
Carbon disulfide	50.0	55.9		ug/L		112	79 - 126
Carbon tetrachloride	50.0	52.5		ug/L		105	73 - 123
Chlorobenzene	50.0	51.7		ug/L		103	80 - 120
Chloroethane	50.0	66.5		ug/L		133	52 - 140
Chloroform	50.0	50.9		ug/L		102	80 - 120
cis-1,2-Dichloroethene	50.0	48.1		ug/L		96	80 - 120
cis-1,3-Dichloropropene	50.0	51.5		ug/L		103	80 - 122
Dibromochloromethane	50.0	47.4		ug/L		95	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	48.2		ug/L		96	77 - 125
1,2-Dibromoethane (EDB)	50.0	49.2		ug/L		98	80 - 120
1,2-Dichlorobenzene	50.0	49.0		ug/L		98	80 - 120
1,4-Dichlorobenzene	50.0	51.5		ug/L		103	80 - 120
1,1-Dichloroethane	50.0	51.5		ug/L		103	80 - 120
1,2-Dichloroethane	50.0	53.6		ug/L		107	69 - 124
1,1-Dichloroethene	50.0	52.5		ug/L		105	77 - 126
1,2-Dichloropropane	50.0	53.2		ug/L		106	80 - 120
Ethylbenzene	50.0	51.4		ug/L		103	80 - 120
2-Hexanone	50.0	46.4		ug/L		93	64 - 136
Methyl bromide	50.0	72.9	*	ug/L		146	57 - 139
Methyl chloride	50.0	56.9		ug/L		114	70 - 127
Methylene bromide	50.0	51.4		ug/L		103	78 - 120
Methylene Chloride	50.0	50.8		ug/L		102	80 - 120
Methyl Ethyl Ketone	50.0	50.3		ug/L		101	70 - 130
Methyl iodide	50.0	60.1		ug/L		120	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	48.8		ug/L		98	76 - 129
Styrene	50.0	52.5		ug/L		105	80 - 120
1,1,1,2-Tetrachloroethane	50.0	49.8		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.5		ug/L		101	80 - 120
Tetrachloroethene	50.0	50.7		ug/L		101	80 - 120
Toluene	50.0	53.0		ug/L		106	80 - 120
trans-1,4-Dichloro-2-butene	50.0	53.3		ug/L		107	75 - 127
trans-1,2-Dichloroethene	50.0	48.7		ug/L		97	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-267150/3
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	50.2		ug/L		100	80 - 130		
1,1,1-Trichloroethane			50.0	51.8		ug/L		104	76 - 120		
1,1,2-Trichloroethane			50.0	49.7		ug/L		99	80 - 120		
Trichloroethene			50.0	52.2		ug/L		104	73 - 120		
Trichlorofluoromethane			50.0	56.7		ug/L		113	74 - 130		
1,2,3-Trichloropropane			50.0	50.8		ug/L		102	80 - 120		
Vinyl acetate			50.0	57.6		ug/L		115	37 - 140		
Vinyl chloride			50.0	58.1		ug/L		116	51 - 140		
Xylenes, Total			100	105		ug/L		105	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*
Dibromofluoromethane (Surr)	*104*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*109*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: LCSD 160-267150/4
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	52.2		ug/L		104	63 - 131	6	20
Acrylonitrile			500	526		ug/L		105	81 - 117	3	20
Benzene			50.0	48.5		ug/L		97	80 - 120	5	20
Bromochloromethane			50.0	49.8		ug/L		100	80 - 120	2	20
Bromodichloromethane			50.0	52.1		ug/L		104	80 - 120	2	20
Bromoform			50.0	46.9		ug/L		94	80 - 120	2	20
Carbon disulfide			50.0	51.8		ug/L		104	79 - 126	8	20
Carbon tetrachloride			50.0	51.6		ug/L		103	73 - 123	2	20
Chlorobenzene			50.0	50.3		ug/L		101	80 - 120	3	20
Chloroethane			50.0	62.9		ug/L		126	52 - 140	6	20
Chloroform			50.0	48.1		ug/L		96	80 - 120	6	20
cis-1,2-Dichloroethene			50.0	46.7		ug/L		93	80 - 120	3	20
cis-1,3-Dichloropropene			50.0	51.4		ug/L		103	80 - 122	0	20
Dibromochloromethane			50.0	46.4		ug/L		93	80 - 120	2	20
1,2-Dibromo-3-Chloropropane			50.0	49.9		ug/L		100	77 - 125	3	20
1,2-Dibromoethane (EDB)			50.0	48.7		ug/L		97	80 - 120	1	20
1,2-Dichlorobenzene			50.0	48.1		ug/L		96	80 - 120	2	20
1,4-Dichlorobenzene			50.0	51.2		ug/L		102	80 - 120	1	20
1,1-Dichloroethane			50.0	49.2		ug/L		98	80 - 120	4	20
1,2-Dichloroethane			50.0	52.2		ug/L		104	69 - 124	3	20
1,1-Dichloroethene			50.0	50.0		ug/L		100	77 - 126	5	20
1,2-Dichloropropane			50.0	52.3		ug/L		105	80 - 120	2	20
Ethylbenzene			50.0	50.2		ug/L		100	80 - 120	2	20
2-Hexanone			50.0	49.4		ug/L		99	64 - 136	6	20
Methyl bromide			50.0	69.0		ug/L		138	57 - 139	6	20
Methyl chloride			50.0	53.1		ug/L		106	70 - 127	7	20
Methylene bromide			50.0	49.4		ug/L		99	78 - 120	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-267150/4
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	48.3		ug/L		97	80 - 120	5	20
Methyl Ethyl Ketone			50.0	52.3		ug/L		105	70 - 130	4	20
Methyl iodide			50.0	59.4		ug/L		119	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)			50.0	50.0		ug/L		100	76 - 129	3	20
Styrene			50.0	50.2		ug/L		100	80 - 120	4	20
1,1,1,2-Tetrachloroethane			50.0	48.7		ug/L		97	80 - 120	2	20
1,1,2,2-Tetrachloroethane			50.0	52.1		ug/L		104	80 - 120	3	20
Tetrachloroethene			50.0	49.5		ug/L		99	80 - 120	2	20
Toluene			50.0	52.2		ug/L		104	80 - 120	2	20
trans-1,4-Dichloro-2-butene			50.0	54.2		ug/L		108	75 - 127	2	20
trans-1,2-Dichloroethene			50.0	46.6		ug/L		93	80 - 120	4	20
trans-1,3-Dichloropropene			50.0	49.6		ug/L		99	80 - 130	1	20
1,1,1-Trichloroethane			50.0	50.0		ug/L		100	76 - 120	4	20
1,1,2-Trichloroethane			50.0	48.7		ug/L		97	80 - 120	2	20
Trichloroethene			50.0	49.8		ug/L		100	73 - 120	5	20
Trichlorofluoromethane			50.0	55.0		ug/L		110	74 - 130	3	20
1,2,3-Trichloropropane			50.0	50.0		ug/L		100	80 - 120	2	20
Vinyl acetate			50.0	56.4		ug/L		113	37 - 140	2	20
Vinyl chloride			50.0	54.7		ug/L		109	51 - 140	6	20
Xylenes, Total			100	102		ug/L		102	80 - 121	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*71 - 139*
Dibromofluoromethane (Surr)	*101*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*103*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: 160-18757-B-5 MS
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	7.2	J	50.0	57.5		ug/L		101	52 - 138
Acrylonitrile	ND		500	550		ug/L		110	58 - 142
Benzene	5.1		50.0	57.1		ug/L		104	80 - 120
Bromochloromethane	ND		50.0	53.8		ug/L		108	72 - 125
Bromodichloromethane	ND		50.0	55.0		ug/L		110	71 - 128
Bromoform	ND		50.0	47.9		ug/L		96	65 - 133
Carbon disulfide	ND		50.0	52.1		ug/L		104	69 - 139
Carbon tetrachloride	ND		50.0	52.4		ug/L		105	70 - 126
Chlorobenzene	ND		50.0	50.9		ug/L		102	80 - 120
Chloroethane	ND		50.0	62.8		ug/L		126	59 - 144
Chloroform	ND		50.0	52.3		ug/L		105	80 - 120
cis-1,2-Dichloroethene	ND		50.0	49.5		ug/L		99	80 - 124
cis-1,3-Dichloropropene	ND		50.0	50.7		ug/L		101	67 - 130
Dibromochloromethane	ND		50.0	47.4		ug/L		95	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	47.2		ug/L		94	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	49.5		ug/L		99	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18757-B-5 MS
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	49.6		ug/L		99	80 - 124
1,4-Dichlorobenzene	ND		50.0	52.0		ug/L		104	80 - 120
1,1-Dichloroethane	ND		50.0	52.9		ug/L		106	80 - 120
1,2-Dichloroethane	ND		50.0	56.1		ug/L		112	56 - 136
1,1-Dichloroethene	ND		50.0	47.3		ug/L		95	66 - 137
1,2-Dichloropropane	ND		50.0	54.6		ug/L		109	80 - 123
Ethylbenzene	ND		50.0	50.8		ug/L		102	80 - 121
2-Hexanone	ND		50.0	46.1		ug/L		92	47 - 150
Methyl bromide	1.7	J *	50.0	34.9		ug/L		66	53 - 146
Methyl chloride	ND		50.0	51.2		ug/L		102	61 - 137
Methylene bromide	ND		50.0	54.0		ug/L		108	61 - 136
Methylene Chloride	ND		50.0	52.4		ug/L		105	80 - 120
Methyl Ethyl Ketone	ND		50.0	53.6		ug/L		107	58 - 143
Methyl iodide	9.2	F1	50.0	84.6	F1	ug/L		151	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	49.3		ug/L		99	53 - 150
Styrene	ND		50.0	50.7		ug/L		101	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	49.3		ug/L		99	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	51.7		ug/L		103	60 - 150
Tetrachloroethene	ND		50.0	49.0		ug/L		98	66 - 132
Toluene	ND		50.0	50.5		ug/L		101	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	53.1		ug/L		106	55 - 146
trans-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	79 - 121
trans-1,3-Dichloropropene	ND		50.0	50.4		ug/L		101	68 - 143
1,1,1-Trichloroethane	ND		50.0	51.8		ug/L		104	74 - 123
1,1,2-Trichloroethane	ND		50.0	50.4		ug/L		101	70 - 134
Trichloroethene	ND		50.0	52.7		ug/L		105	63 - 120
Trichlorofluoromethane	ND		50.0	55.0		ug/L		110	53 - 150
1,2,3-Trichloropropane	ND		50.0	49.4		ug/L		99	62 - 137
Vinyl acetate	ND		50.0	60.3		ug/L		121	63 - 150
Vinyl chloride	ND		50.0	53.1		ug/L		106	54 - 140
Xylenes, Total	ND		100	104		ug/L		104	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*
Dibromofluoromethane (Surr)	*111*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*113*		*76 - 121*
Toluene-d8 (Surr)	*96*		*80 - 129*

Lab Sample ID: 160-18757-B-5 MSD
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	7.2	J	50.0	56.8		ug/L		99	52 - 138	1	20
Acrylonitrile	ND		500	555		ug/L		111	58 - 142	1	20
Benzene	5.1		50.0	55.1		ug/L		100	80 - 120	4	20
Bromochloromethane	ND		50.0	52.4		ug/L		105	72 - 125	3	20
Bromodichloromethane	ND		50.0	53.1		ug/L		106	71 - 128	4	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18757-B-5 MSD
Matrix: Water
Analysis Batch: 267150

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	48.3		ug/L		97	65 - 133	1	20
Carbon disulfide	ND		50.0	57.7		ug/L		115	69 - 139	10	20
Carbon tetrachloride	ND		50.0	49.2		ug/L		98	70 - 126	6	20
Chlorobenzene	ND		50.0	49.4		ug/L		99	80 - 120	3	20
Chloroethane	ND		50.0	63.8		ug/L		128	59 - 144	1	20
Chloroform	ND		50.0	49.7		ug/L		99	80 - 120	5	20
cis-1,2-Dichloroethene	ND		50.0	48.1		ug/L		96	80 - 124	3	20
cis-1,3-Dichloropropene	ND		50.0	50.7		ug/L		101	67 - 130	0	20
Dibromochloromethane	ND		50.0	47.4		ug/L		95	68 - 133	0	20
1,2-Dibromo-3-Chloropropane	ND		50.0	49.5		ug/L		99	58 - 148	5	20
1,2-Dibromoethane (EDB)	ND		50.0	49.7		ug/L		99	65 - 138	0	20
1,2-Dichlorobenzene	ND		50.0	50.1		ug/L		100	80 - 124	1	20
1,4-Dichlorobenzene	ND		50.0	50.0		ug/L		100	80 - 120	4	20
1,1-Dichloroethane	ND		50.0	50.6		ug/L		101	80 - 120	4	20
1,2-Dichloroethane	ND		50.0	54.0		ug/L		108	56 - 136	4	20
1,1-Dichloroethene	ND		50.0	52.8		ug/L		106	66 - 137	11	20
1,2-Dichloropropane	ND		50.0	53.6		ug/L		107	80 - 123	2	20
Ethylbenzene	ND		50.0	48.7		ug/L		97	80 - 121	4	20
2-Hexanone	ND		50.0	48.9		ug/L		98	47 - 150	6	20
Methyl bromide	1.7	J *	50.0	38.0		ug/L		73	53 - 146	9	20
Methyl chloride	ND		50.0	49.2		ug/L		98	61 - 137	4	20
Methylene bromide	ND		50.0	52.8		ug/L		106	61 - 136	2	20
Methylene Chloride	ND		50.0	49.7		ug/L		99	80 - 120	5	20
Methyl Ethyl Ketone	ND		50.0	55.4		ug/L		111	58 - 143	3	20
Methyl iodide	9.2	F1	50.0	97.1	F1	ug/L		176	69 - 124	14	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	53.0		ug/L		106	53 - 150	7	20
Styrene	ND		50.0	49.8		ug/L		100	44 - 150	2	20
1,1,1,2-Tetrachloroethane	ND		50.0	47.9		ug/L		96	80 - 120	3	20
1,1,2,2-Tetrachloroethane	ND		50.0	51.6		ug/L		103	60 - 150	0	20
Tetrachloroethene	ND		50.0	46.6		ug/L		93	66 - 132	5	20
Toluene	ND		50.0	48.9		ug/L		98	75 - 134	3	20
trans-1,4-Dichloro-2-butene	ND		50.0	53.7		ug/L		107	55 - 146	1	20
trans-1,2-Dichloroethene	ND		50.0	46.4		ug/L		93	79 - 121	4	20
trans-1,3-Dichloropropene	ND		50.0	49.7		ug/L		99	68 - 143	1	20
1,1,1-Trichloroethane	ND		50.0	49.0		ug/L		98	74 - 123	6	20
1,1,2-Trichloroethane	ND		50.0	50.7		ug/L		101	70 - 134	1	20
Trichloroethene	ND		50.0	49.8		ug/L		100	63 - 120	6	20
Trichlorofluoromethane	ND		50.0	53.2		ug/L		106	53 - 150	3	20
1,2,3-Trichloropropane	ND		50.0	50.6		ug/L		101	62 - 137	2	20
Vinyl acetate	ND		50.0	61.1		ug/L		122	63 - 150	1	20
Vinyl chloride	ND		50.0	54.1		ug/L		108	54 - 140	2	20
Xylenes, Total	ND		100	99.9		ug/L		100	80 - 124	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*71 - 139*
Dibromofluoromethane (Surr)	*106*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*109*		*76 - 121*
Toluene-d8 (Surr)	*93*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-267405/9
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			08/30/16 15:39	1
Sulfate	ND		0.50	0.050	mg/L			08/30/16 15:39	1
Chloride	ND		0.20	0.020	mg/L			08/30/16 15:39	1

Lab Sample ID: LCS 160-267405/10
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	1.00		mg/L		100	90 - 110
Sulfate	8.00	7.74		mg/L		97	90 - 110
Chloride	2.00	1.95		mg/L		97	90 - 110

Lab Sample ID: 160-18757-D-1 MS
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.5		2.00	3.41	E	mg/L		93	90 - 110

Lab Sample ID: 160-18757-D-1 DU
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	1.5		1.55		mg/L		0.8	20

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18757-D-1 MS
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate - DL	120		80.0	192		mg/L		95	90 - 110
Chloride - DL	16		40.0	53.6		mg/L		94	90 - 110

Lab Sample ID: 160-18757-D-1 DU
Matrix: Water
Analysis Batch: 267405

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate - DL	120		116		mg/L		0.6	20
Chloride - DL	16		16.1		mg/L		0.7	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-266532/1-A
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 266532

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Arsenic	ND		10	4.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Barium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:37	1
Beryllium	ND		5.0	1.5	ug/L		08/25/16 14:04	08/29/16 19:37	1
Boron	ND		100	25	ug/L		08/25/16 14:04	08/29/16 19:37	1
Cadmium	ND		5.0	1.5	ug/L		08/25/16 14:04	08/29/16 19:37	1
CaHard	ND		2500	750	ug/L		08/25/16 14:04	08/29/16 19:37	1
Calcium	ND		1000	300	ug/L		08/25/16 14:04	08/29/16 19:37	1
Chromium	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Cobalt	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:37	1
Copper	ND		25	5.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Lead	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Magnesium	ND		1.0	0.30	mg/L		08/25/16 14:04	08/29/16 19:37	1
Manganese	ND		15	2.5	ug/L		08/25/16 14:04	08/29/16 19:37	1
MgHard	ND		4100	1200	ug/L		08/25/16 14:04	08/29/16 19:37	1
Nickel	ND		0.040	0.010	mg/L		08/25/16 14:04	08/29/16 19:37	1
Phosphorus	ND	^	250	75	ug/L		08/25/16 14:04	08/29/16 19:37	1
Selenium	ND		15	5.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Silver	ND		10	3.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Sodium	ND		1000	300	ug/L		08/25/16 14:04	08/29/16 19:37	1
Thallium	ND	^	20	5.0	ug/L		08/25/16 14:04	08/29/16 19:37	1
Total Hardness	ND		6600	2000	ug/L		08/25/16 14:04	08/29/16 19:37	1
Vanadium	ND		50	15	ug/L		08/25/16 14:04	08/29/16 19:37	1
Zinc	ND		20	6.0	ug/L		08/25/16 14:04	08/29/16 19:37	1

Lab Sample ID: LCS 160-266532/2-A
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	484		ug/L		97	80 - 120
Arsenic	1000	942		ug/L		94	80 - 120
Barium	1000	976		ug/L		98	80 - 120
Beryllium	1000	993		ug/L		99	80 - 120
Boron	2000	1940		ug/L		97	80 - 120
Cadmium	1000	974		ug/L		97	80 - 120
Calcium	10000	10300		ug/L		103	80 - 120
Chromium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	1020		ug/L		102	80 - 120
Copper	1000	987		ug/L		99	80 - 120
Lead	1000	1030		ug/L		103	80 - 120
Magnesium	10.0	9.77		mg/L		98	80 - 120
Manganese	1000	985		ug/L		98	80 - 120
Nickel	1.00	1.02		mg/L		102	80 - 120
Phosphorus	1000	1150	^	ug/L		115	80 - 120
Selenium	500	488		ug/L		98	80 - 120
Silver	200	201		ug/L		100	80 - 120
Sodium	10000	10000		ug/L		100	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-266532/2-A
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	214	^	ug/L		107	80 - 120
Vanadium	1000	980		ug/L		98	80 - 120
Zinc	1000	976		ug/L		98	80 - 120

Lab Sample ID: 160-18757-H-1-B MS ^5
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	498		ug/L		100	75 - 125
Arsenic	ND		1000	989		ug/L		99	75 - 125
Barium	97	J	1000	1090		ug/L		100	75 - 125
Beryllium	ND		1000	1030		ug/L		103	75 - 125
Boron	130	J	2000	2140		ug/L		107	75 - 125
Cadmium	ND		1000	1010		ug/L		101	75 - 125
Calcium	83000		10000	92800	4	ug/L		102	75 - 125
Chromium	ND		1000	1040		ug/L		104	75 - 125
Cobalt	ND		1000	1050		ug/L		105	75 - 125
Copper	ND		1000	1020		ug/L		102	75 - 125
Lead	ND		1000	1070		ug/L		107	75 - 125
Magnesium	46		10.0	56.0	4	mg/L		98	75 - 125
Manganese	44	J	1000	1050		ug/L		101	75 - 125
Nickel	ND		1.00	1.06		mg/L		106	75 - 125
Phosphorus	ND	^	1000	1220	J ^	ug/L		122	75 - 125
Selenium	ND		500	403		ug/L		81	75 - 125
Silver	ND		200	211		ug/L		105	75 - 125
Sodium	91000		10000	102000	4	ug/L		104	75 - 125
Thallium	ND	^	200	222	^	ug/L		111	75 - 125
Vanadium	ND		1000	1020		ug/L		102	75 - 125
Zinc	ND		1000	1020		ug/L		102	75 - 125

Lab Sample ID: 160-18757-H-1-C MSD ^5
Matrix: Water
Analysis Batch: 267177

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 266532

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	507		ug/L		101	75 - 125	2	20
Arsenic	ND		1000	996		ug/L		100	75 - 125	1	20
Barium	97	J	1000	1110		ug/L		102	75 - 125	2	20
Beryllium	ND		1000	1040		ug/L		104	75 - 125	1	20
Boron	130	J	2000	2120		ug/L		106	75 - 125	1	20
Cadmium	ND		1000	1010		ug/L		101	75 - 125	0	20
Calcium	83000		10000	93000	4	ug/L		104	75 - 125	0	20
Chromium	ND		1000	1040		ug/L		104	75 - 125	0	20
Cobalt	ND		1000	1050		ug/L		105	75 - 125	0	20
Copper	ND		1000	1020		ug/L		102	75 - 125	0	20
Lead	ND		1000	1070		ug/L		107	75 - 125	1	20
Magnesium	46		10.0	56.2	4	mg/L		101	75 - 125	0	20
Manganese	44	J	1000	1060		ug/L		101	75 - 125	1	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18757-H-1-C MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267177 — **Prep Batch: 266532**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	ND		1.00	1.06		mg/L		106	75 - 125	0	20
Phosphorus	ND	^	1000	1230	J ^	ug/L		123	75 - 125	1	20
Selenium	ND		500	411		ug/L		82	75 - 125	2	20
Silver	ND		200	207		ug/L		104	75 - 125	2	20
Sodium	91000		10000	103000	4	ug/L		114	75 - 125	1	20
Thallium	ND	^	200	229	^	ug/L		114	75 - 125	3	20
Vanadium	ND		1000	1020		ug/L		102	75 - 125	0	20
Zinc	ND		1000	1020		ug/L		102	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-267134/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		08/29/16 15:29	08/30/16 11:56	1

Lab Sample ID: LCS 160-267134/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.96		ug/L		99	80 - 120

Lab Sample ID: 160-18471-F-3-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.87		ug/L		97	80 - 120

Lab Sample ID: 160-18471-F-3-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267552 — **Prep Batch: 267134**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.88		ug/L		98	80 - 120	0	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-266513/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266513

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			08/25/16 12:13	1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 160-266513/2
Matrix: Water
Analysis Batch: 266513

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	506		mg/L		101	90 - 110

Lab Sample ID: 160-18754-C-1 DU
Matrix: Water
Analysis Batch: 266513

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	450		447		mg/L		1	20

Lab Sample ID: MB 160-266765/1
Matrix: Water
Analysis Batch: 266765

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			08/26/16 10:27	1

Lab Sample ID: LCS 160-266765/2
Matrix: Water
Analysis Batch: 266765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	515		mg/L		103	90 - 110

Lab Sample ID: 160-18758-3 DU
Matrix: Water
Analysis Batch: 266765

Client Sample ID: PZ-106-SD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	1400		1400		mg/L		1	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-268615/20
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/08/16 15:42	1

Lab Sample ID: LCS 160-268615/23
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.493		mg/L		99	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 160-18757-E-1 MS
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.57	F1	0.500	0.996	F1	mg/L		86	90 - 110

Lab Sample ID: 160-18757-E-1 DU
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia	0.57	F1	0.504		mg/L		12	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-268618/13
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050	0.011	mg/L			09/07/16 18:25	1

Lab Sample ID: LCS 160-268618/14
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.462		mg/L		92	90 - 110

Lab Sample ID: 160-18757-E-1 MS
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	ND	F1	0.500	ND	F1	mg/L		0	90 - 110

Lab Sample ID: 160-18757-E-1 DU
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	ND	F1	ND		mg/L		NC	20

Method: 376.1 - Sulfide

Lab Sample ID: MB 160-267062/1
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	ND		1.0	0.45	mg/L			08/29/16 10:10	1

Method: 376.1 - Sulfide (Continued)

Lab Sample ID: LCS 160-267062/2
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	10.0	9.90		mg/L		99	90 - 110

Lab Sample ID: 160-18756-A-1 MS
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	ND		200	180		mg/L		90	90 - 110

Lab Sample ID: 160-18756-A-1 DU
Matrix: Water
Analysis Batch: 267062

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	ND		ND		mg/L		NC	20

Method: 410.4 - COD

Lab Sample ID: MB 160-267445/3-A
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Lab Sample ID: LCS 160-267445/4-A
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	48.0		mg/L		96	90 - 110

Lab Sample ID: 160-18756-C-4-C MS
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	ND		50.0	48.0		mg/L		96	90 - 110

Lab Sample ID: 160-18756-C-4-B DU
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	ND		ND		mg/L		NC	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-268968/1-A
Matrix: Water
Analysis Batch: 269334

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268968

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	100.0	U	138	138	500	231	pCi/L	09/10/16 09:16	09/12/16 14:25	1

Lab Sample ID: LCS 160-268968/2-A
Matrix: Water
Analysis Batch: 269334

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268968

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3030	3123		438	500	233	pCi/L	103	74 - 114		

Lab Sample ID: 160-18757-G-2-B MS
Matrix: Water
Analysis Batch: 269334

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 268968

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	32.4	U	3030	2907		421	500	237	pCi/L	96	67 - 130		

Lab Sample ID: 160-18757-G-1-B DU
Matrix: Water
Analysis Batch: 269334

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 268968

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	71.6	U		44.14	U	132	500	232	pCi/L			0.10	1

QC Association Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18758-1

GC/MS VOA

Analysis Batch: 267150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	8260C	
160-18758-2	PZ-109-SS	Total/NA	Water	8260C	
160-18758-3	PZ-106-SD	Total/NA	Water	8260C	
160-18758-4	PZ-106-SS	Total/NA	Water	8260C	
160-18758-5	PZ-105-SS	Total/NA	Water	8260C	
160-18758-6	PZ-116-SS	Total/NA	Water	8260C	
160-18758-7	TRIP BLANK	Total/NA	Water	8260C	
MB 160-267150/6	Method Blank	Total/NA	Water	8260C	
LCS 160-267150/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-267150/4	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18757-B-5 MS	Matrix Spike	Total/NA	Water	8260C	
160-18757-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 267405

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1 - DL	PZ-110-SS	Total/NA	Water	300.0	
160-18758-1 - DL2	PZ-110-SS	Total/NA	Water	300.0	
160-18758-2	PZ-109-SS	Total/NA	Water	300.0	
160-18758-2 - DL	PZ-109-SS	Total/NA	Water	300.0	
160-18758-3 - DL	PZ-106-SD	Total/NA	Water	300.0	
160-18758-3 - DL2	PZ-106-SD	Total/NA	Water	300.0	
160-18758-3 - DL3	PZ-106-SD	Total/NA	Water	300.0	
160-18758-4	PZ-106-SS	Total/NA	Water	300.0	
160-18758-4 - DL	PZ-106-SS	Total/NA	Water	300.0	
160-18758-5	PZ-105-SS	Total/NA	Water	300.0	
160-18758-5 - DL	PZ-105-SS	Total/NA	Water	300.0	
160-18758-6	PZ-116-SS	Total/NA	Water	300.0	
160-18758-6 - DL	PZ-116-SS	Total/NA	Water	300.0	
MB 160-267405/9	Method Blank	Total/NA	Water	300.0	
LCS 160-267405/10	Lab Control Sample	Total/NA	Water	300.0	
160-18757-D-1 MS	Matrix Spike	Total/NA	Water	300.0	
160-18757-D-1 MS - DL	Matrix Spike	Total/NA	Water	300.0	
160-18757-D-1 DU	Duplicate	Total/NA	Water	300.0	
160-18757-D-1 DU - DL	Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 266532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	3010A	
160-18758-2	PZ-109-SS	Total/NA	Water	3010A	
160-18758-3	PZ-106-SD	Total/NA	Water	3010A	
160-18758-4	PZ-106-SS	Total/NA	Water	3010A	
160-18758-5	PZ-105-SS	Total/NA	Water	3010A	
160-18758-6	PZ-116-SS	Total/NA	Water	3010A	
MB 160-266532/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-266532/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18757-H-1-B MS ^5	Matrix Spike	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 266532 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18757-H-1-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	3010A	

Prep Batch: 267134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	7470A	
160-18758-2	PZ-109-SS	Total/NA	Water	7470A	
160-18758-3	PZ-106-SD	Total/NA	Water	7470A	
160-18758-4	PZ-106-SS	Total/NA	Water	7470A	
160-18758-5	PZ-105-SS	Total/NA	Water	7470A	
160-18758-6	PZ-116-SS	Total/NA	Water	7470A	
MB 160-267134/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-267134/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18471-F-3-C MS	Matrix Spike	Total/NA	Water	7470A	
160-18471-F-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 267177

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	6010C	266532
160-18758-2	PZ-109-SS	Total/NA	Water	6010C	266532
160-18758-3	PZ-106-SD	Total/NA	Water	6010C	266532
160-18758-4	PZ-106-SS	Total/NA	Water	6010C	266532
160-18758-5	PZ-105-SS	Total/NA	Water	6010C	266532
160-18758-6	PZ-116-SS	Total/NA	Water	6010C	266532
MB 160-266532/1-A	Method Blank	Total/NA	Water	6010C	266532
LCS 160-266532/2-A	Lab Control Sample	Total/NA	Water	6010C	266532
160-18757-H-1-B MS ^5	Matrix Spike	Total/NA	Water	6010C	266532
160-18757-H-1-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	6010C	266532

Analysis Batch: 267552

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	7470A	267134
160-18758-2	PZ-109-SS	Total/NA	Water	7470A	267134
160-18758-3	PZ-106-SD	Total/NA	Water	7470A	267134
160-18758-4	PZ-106-SS	Total/NA	Water	7470A	267134
160-18758-5	PZ-105-SS	Total/NA	Water	7470A	267134
160-18758-6	PZ-116-SS	Total/NA	Water	7470A	267134
MB 160-267134/1-A	Method Blank	Total/NA	Water	7470A	267134
LCS 160-267134/2-A	Lab Control Sample	Total/NA	Water	7470A	267134
160-18471-F-3-C MS	Matrix Spike	Total/NA	Water	7470A	267134
160-18471-F-3-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	267134

General Chemistry

Analysis Batch: 266513

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	160.1	
160-18758-2	PZ-109-SS	Total/NA	Water	160.1	
MB 160-266513/1	Method Blank	Total/NA	Water	160.1	
LCS 160-266513/2	Lab Control Sample	Total/NA	Water	160.1	
160-18754-C-1 DU	Duplicate	Total/NA	Water	160.1	

General Chemistry (Continued)

Analysis Batch: 266765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-3	PZ-106-SD	Total/NA	Water	160.1	
160-18758-4	PZ-106-SS	Total/NA	Water	160.1	
160-18758-5	PZ-105-SS	Total/NA	Water	160.1	
160-18758-6	PZ-116-SS	Total/NA	Water	160.1	
MB 160-266765/1	Method Blank	Total/NA	Water	160.1	
LCS 160-266765/2	Lab Control Sample	Total/NA	Water	160.1	
160-18758-3 DU	PZ-106-SD	Total/NA	Water	160.1	

Analysis Batch: 267062

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	376.1	
160-18758-2	PZ-109-SS	Total/NA	Water	376.1	
160-18758-3	PZ-106-SD	Total/NA	Water	376.1	
160-18758-4	PZ-106-SS	Total/NA	Water	376.1	
160-18758-5	PZ-105-SS	Total/NA	Water	376.1	
160-18758-6	PZ-116-SS	Total/NA	Water	376.1	
MB 160-267062/1	Method Blank	Total/NA	Water	376.1	
LCS 160-267062/2	Lab Control Sample	Total/NA	Water	376.1	
160-18756-A-1 MS	Matrix Spike	Total/NA	Water	376.1	
160-18756-A-1 DU	Duplicate	Total/NA	Water	376.1	

Prep Batch: 267445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	410.4	
160-18758-2	PZ-109-SS	Total/NA	Water	410.4	
160-18758-3 - DL	PZ-106-SD	Total/NA	Water	410.4	
160-18758-4	PZ-106-SS	Total/NA	Water	410.4	
160-18758-5	PZ-105-SS	Total/NA	Water	410.4	
160-18758-6	PZ-116-SS	Total/NA	Water	410.4	
MB 160-267445/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-267445/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18756-C-4-C MS	Matrix Spike	Total/NA	Water	410.4	
160-18756-C-4-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 267574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	410.4	267445
160-18758-2	PZ-109-SS	Total/NA	Water	410.4	267445
160-18758-3 - DL	PZ-106-SD	Total/NA	Water	410.4	267445
160-18758-4	PZ-106-SS	Total/NA	Water	410.4	267445
160-18758-5	PZ-105-SS	Total/NA	Water	410.4	267445
160-18758-6	PZ-116-SS	Total/NA	Water	410.4	267445
MB 160-267445/3-A	Method Blank	Total/NA	Water	410.4	267445
LCS 160-267445/4-A	Lab Control Sample	Total/NA	Water	410.4	267445
160-18756-C-4-C MS	Matrix Spike	Total/NA	Water	410.4	267445
160-18756-C-4-B DU	Duplicate	Total/NA	Water	410.4	267445

Analysis Batch: 268615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	350.1	
160-18758-2	PZ-109-SS	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 268615 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-3 - DL	PZ-106-SD	Total/NA	Water	350.1	
160-18758-4	PZ-106-SS	Total/NA	Water	350.1	
160-18758-5	PZ-105-SS	Total/NA	Water	350.1	
160-18758-6	PZ-116-SS	Total/NA	Water	350.1	
MB 160-268615/20	Method Blank	Total/NA	Water	350.1	
LCS 160-268615/23	Lab Control Sample	Total/NA	Water	350.1	
160-18757-E-1 MS	Matrix Spike	Total/NA	Water	350.1	
160-18757-E-1 DU	Duplicate	Total/NA	Water	350.1	

Analysis Batch: 268618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	353.1 Preserved	
160-18758-2	PZ-109-SS	Total/NA	Water	353.1 Preserved	
160-18758-3	PZ-106-SD	Total/NA	Water	353.1 Preserved	
160-18758-4	PZ-106-SS	Total/NA	Water	353.1 Preserved	
160-18758-5	PZ-105-SS	Total/NA	Water	353.1 Preserved	
160-18758-6	PZ-116-SS	Total/NA	Water	353.1 Preserved	
MB 160-268618/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-268618/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18757-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18757-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 268968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18758-1	PZ-110-SS	Total/NA	Water	LSC_Dist_Susp	
160-18758-2	PZ-109-SS	Total/NA	Water	LSC_Dist_Susp	
160-18758-3	PZ-106-SD	Total/NA	Water	LSC_Dist_Susp	
160-18758-4	PZ-106-SS	Total/NA	Water	LSC_Dist_Susp	
160-18758-5	PZ-105-SS	Total/NA	Water	LSC_Dist_Susp	
160-18758-6	PZ-116-SS	Total/NA	Water	LSC_Dist_Susp	
MB 160-268968/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-268968/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-18757-G-2-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
160-18757-G-1-B DU	Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18758-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18757-B-5 MS	Matrix Spike	99	111	113	96
160-18757-B-5 MSD	Matrix Spike Duplicate	96	106	109	93
160-18758-1	PZ-110-SS	103	109	112	103
160-18758-2	PZ-109-SS	100	111	114	101
160-18758-3	PZ-106-SD	97	107	105	97
160-18758-4	PZ-106-SS	101	110	112	100
160-18758-5	PZ-105-SS	100	113	112	103
160-18758-6	PZ-116-SS	97	110	114	100
160-18758-7	TRIP BLANK	105	109	107	104
LCS 160-267150/3	Lab Control Sample	99	104	109	101
LCSD 160-267150/4	Lab Control Sample Dup	96	101	103	101
MB 160-267150/6	Method Blank	106	105	110	103

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18778-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
9/23/2016 4:32:32 PM

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
chenise.lambert-sykes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18778-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18778-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/24/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 22.2 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4), PZ-201A-SS (160-18778-5) and TRIP BLANK (160-18778-6) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/01/2016 and 09/02/2016.

Analytical Batch: 267786

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-267786: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-267786/3)

The following sample in was analyzed at reduced volume due to high concentrations of target analytes: PZ-104-SD (160-18778-3). The reporting limits have been elevated by the appropriate factor.

Job ID: 160-18778-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 160-267786 were outside control limits. Sample matrix interference is suspected because the associated laboratory control samples' (LCS/LCSD) recoveries were within acceptance limits. (160-18778-B-5 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/09/2016 and analyzed on 09/14/2016.

Analytical Batch: 269953

The initial calibration verification (ICV) result for batch analytical batch 160-269953 was above the upper control limit for Thallium. Sample results were non-detects, and have been reported as qualified data. (ICV 160-269953/14)

The following sample(s) was diluted due to the nature of the sample matrix. Samples are high in salts: PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4), PZ-201A-SS (160-18778-5), (160-18778-G-1-C MS ^), (160-18778-G-1-D MSD) and (160-18778-G-1-B SD ^). Elevated reporting limits (RLs) are provided.

The LCS is above the linear range check (LRC) for Boron. The LCS is within acceptable QC limits. (LCS 160-268820/2-A)

Due to the high concentration of Calcium, Sodium, and Magnesium the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-268820 and analytical batch 160-269953 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details. (160-18778-G-1-C MS ^) and (160-18778-G-1-D MSD)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-268820 and analytical batch 160-269953 were outside control limits for Phosphorous. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (160-18778-G-1-C MS ^) and (160-18778-G-1-D MSD)

The serial dilution performed for the following sample associated with batch 160-269953 was outside control limits for Manganese indicating matrix interference: (160-18778-G-1-B SD ^)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/07/2016 and analyzed on 09/08/2016.

Analytical Batch: 268743

Mercury was detected in method blank MB 160-268303/1-A at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 08/26/2016.

Analytical Batch: 266765

The following samples in TDS batch 160-266765 were diluted to bring the concentrations of the target analyte within the calibration range:

Job ID: 160-18778-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

PZ-202-SS (160-18778-1) and PZ-104-SD (160-18778-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/07/2016.

Analytical Batch: 268208

The following samples in Anion batch 160-268208 were diluted to bring the concentrations of target analytes within the calibration range: PZ-202-SS (160-18778-1), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5). Elevated reporting limits (RLs) are provided.

The following samples in Anion batch 160-268208 were analyzed at dilution to start (2x or 5x dilutions, respectively) due to high sample conductivities, which made undiluted analysis inadvisable: PZ-202-SS (160-18778-1) and PZ-104-SD (160-18778-3). As a result, some results for Fluoride and Sulfate are below the adjusted reporting limit (RL) at the initial dilution.

The following matrix spike (MS) recovered outside control limits for Fluoride (85%) in Anion batch 160-268208: (160-18897-D-1 MS). Sample matrix interference is suspected, because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/08/2016.

Analytical Batch: 268615

The following samples in NH3 analytical batch 160-268615 were diluted to bring the concentration of the target analyte within the calibration range: PZ-104-SD (160-18778-3). Elevated reporting limits (RLs) are provided.

The following matrix spike (MS) recovery for NH3 analytical batch 160-268615 was outside control limits: (160-18757-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 09/07/2016 and 09/22/2016.

Analytical Batch: 268618

The continuing calibration verification (CCV) associated with the following samples in batch 160-268618 recovered above the upper control limit for NH3: PZ-104-SS (160-18778-2) and PZ-201A-SS (160-18778-5). The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

The following matrix spike (MS) recoveries for NH3 analytical batch 160-268618 were outside control limits: (160-18757-E-1 MS) and (160-18778-E-5 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, and due to the negative values that were recorded for the samples. Additionally, in order to verify the interference, new matrix spikes were prepared the following day that also had no recovery.

Analytical Batch: 271218

Reanalysis of the following samples in NO3-NO2 analytical batch 160-271218 was performed outside of the analytical holding time due to failed QC requirements in the initial run: (160-18764-N-1 ^20). Reanalysis was performed within two times the holding time, and the original, in hold results are included with the raw data.

Job ID: 160-18778-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Due to the high concentration of NO3-NO2, the following matrix spikes (MS) for NO3-NO2 analytical batch 160-271218 could not be evaluated for accuracy: (160-18764-N-1 MS ^20). The concentration of ammonia spiked into the sample was diluted below reliable detection limits. The associated laboratory control sample (LCS) met acceptance criteria.

Analytical Batch: 271335
The following matrix spike (MS) recoveries for NO3-NO2 analytical batch 160-271335 were outside control limits: (160-18807-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, as well as the historically low MS recoveries for this client.

Reanalysis of the following samples in NO3-NO2 analytical batch 160-271335 was performed outside of the analytical holding time due to failed QC requirements in the initial run: PZ-202-SS (160-18778-1) and PZ-104-SD (160-18778-3). Reanalysis was performed within two times the holding time, and the original raw data is included with the rest of the raw data.

Nitrate/Nitrite was detected in method blank MB 160-271335/4 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND
Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 08/31/2016.

Analytical Batch: 267574
The following samples in COD batch 160-267574 were diluted to bring the concentration of target analytes within the calibration range: PZ-202-SS (160-18778-1) and PZ-104-SD (160-18778-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)
Samples PZ-202-SS (160-18778-1), PZ-104-SS (160-18778-2), PZ-104-SD (160-18778-3), PZ-212-SD (160-18778-4) and PZ-201A-SS (160-18778-5) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.2
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 2 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days): Standard			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1_Sulfide → Perform this analysis if this one is not necessary	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	D	A	CB		
PZ-202-SS	8/24/16	0834	G	Water	N	N	✓	✓	✓	✓	✓			
PZ-104-SS	8/24/16	1012	G	Water	N	N	✓	✓	✓	✓	✓			
PZ-104-SD	8/24/16	1054	G	Water	N	N	✓	✓	✓	✓	✓			
PZ-212-SD	8/24/16	1326	G	Water	N	N	✓	✓	✓	✓	✓			
PZ-201A-SS	8/24/16	1411	G	Water	N	N	✓	✓	✓	✓	✓			
Trip blank	8/24/16	0850	G	Water	W	N					✓			
				Water										
				Water										
				Water										
				Water										
				Water										

160-18778 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Brenna McDonald	8/24/16 1515			8/24/16 1515	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18778-1

Login Number: 18778
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18778-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18778-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18778-1	PZ-202-SS	Water	08/24/16 08:34	08/24/16 15:15
160-18778-2	PZ-104-SS	Water	08/24/16 10:12	08/24/16 15:15
160-18778-3	PZ-104-SD	Water	08/24/16 10:54	08/24/16 15:15
160-18778-4	PZ-212-SD	Water	08/24/16 13:26	08/24/16 15:15
160-18778-5	PZ-201A-SS	Water	08/24/16 14:11	08/24/16 15:15
160-18778-6	TRIP BLANK	Water	08/24/16 08:00	08/24/16 15:15

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18778-1

Client Sample ID: PZ-202-SS
Date Collected: 08/24/16 08:34
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 19:54	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 19:54	1
Benzene	**160**		5.0	0.25	ug/L			09/01/16 19:54	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 19:54	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 19:54	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 19:54	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 19:54	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 19:54	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/01/16 19:54	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 19:54	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 19:54	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 19:54	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 19:54	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 19:54	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 19:54	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 19:54	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/01/16 19:54	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/01/16 19:54	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 19:54	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 19:54	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 19:54	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 19:54	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/01/16 19:54	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 19:54	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 19:54	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 19:54	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 19:54	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 19:54	1
Methyl Ethyl Ketone	**2.5**	**J**	20	0.39	ug/L			09/01/16 19:54	1
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 19:54	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 19:54	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 19:54	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 19:54	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 19:54	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 19:54	1
Toluene	**4.1**	**J**	5.0	1.0	ug/L			09/01/16 19:54	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 19:54	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 19:54	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 19:54	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 19:54	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 19:54	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 19:54	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 19:54	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 19:54	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 19:54	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 19:54	1
Xylenes, Total	ND		10	0.85	ug/L			09/01/16 19:54	1

Client Sample ID: PZ-202-SS

Date Collected: 08/24/16 08:34
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*71 - 139*		*09/01/16 19:54*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 121*		*09/01/16 19:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*76 - 121*		*09/01/16 19:54*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*		*09/01/16 19:54*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.25**	**J**	0.50	0.050	mg/L			09/07/16 07:26	5
Sulfate	**1.5**	**J**	2.5	0.25	mg/L			09/07/16 07:26	5

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1900**		400	40	mg/L			09/07/16 07:55	2000

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		09/09/16 11:13	09/14/16 18:20	10
Arsenic	**80**	**J**	100	40	ug/L		09/09/16 11:13	09/14/16 18:20	10
Barium	**2600**		500	150	ug/L		09/09/16 11:13	09/14/16 18:20	10
Beryllium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:20	10
Boron	ND		1000	250	ug/L		09/09/16 11:13	09/14/16 18:20	10
Cadmium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:20	10
CaHard	**1600000**		25000	7500	ug/L		09/09/16 11:13	09/14/16 18:20	10
Calcium	**630000**		10000	3000	ug/L		09/09/16 11:13	09/14/16 18:20	10
Chromium	ND		100	30	ug/L		09/09/16 11:13	09/14/16 18:20	10
Cobalt	ND		500	150	ug/L		09/09/16 11:13	09/14/16 18:20	10
Copper	ND		250	50	ug/L		09/09/16 11:13	09/14/16 18:20	10
Lead	ND		100	30	ug/L		09/09/16 11:13	09/14/16 18:20	10
Magnesium	**280**		10	3.0	mg/L		09/09/16 11:13	09/14/16 18:20	10
Manganese	**2300**		150	25	ug/L		09/09/16 11:13	09/14/16 18:20	10
MgHard	**1200000**		41000	12000	ug/L		09/09/16 11:13	09/14/16 18:20	10
Nickel	ND		0.40	0.10	mg/L		09/09/16 11:13	09/14/16 18:20	10
Phosphorus	ND	F1	2500	750	ug/L		09/09/16 11:13	09/14/16 18:20	10
Selenium	ND		150	50	ug/L		09/09/16 11:13	09/14/16 18:20	10
Silver	ND		100	30	ug/L		09/09/16 11:13	09/14/16 18:20	10
Sodium	**190000**		10000	3000	ug/L		09/09/16 11:13	09/14/16 18:20	10
Thallium	ND	^	200	50	ug/L		09/09/16 11:13	09/14/16 18:20	10
Total Hardness	**2700000**		66000	20000	ug/L		09/09/16 11:13	09/14/16 18:20	10
Vanadium	ND		500	150	ug/L		09/09/16 11:13	09/14/16 18:20	10
Zinc	ND		200	60	ug/L		09/09/16 11:13	09/14/16 18:20	10

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.066**	**J B**	0.20	0.060	ug/L		09/07/16 11:14	09/08/16 10:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**2500**		25	17	mg/L			08/26/16 10:27	1
Ammonia	**0.49**		0.050	0.022	mg/L			09/08/16 16:25	1
Nitrate/Nitrite	**0.49**	**H B**	0.050	0.011	mg/L			09/22/16 21:36	1

Client Sample ID: PZ-202-SS

Lab Sample ID: 160-18778-1

Date Collected: 08/24/16 08:34

Matrix: Water

Date Received: 08/24/16 15:15

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**720**		50	11	mg/L		08/31/16 08:58	08/31/16 14:03	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**25400**		914	2410	500	291	pCi/L	09/12/16 12:47	09/12/16 19:56	1

Client Sample ID: PZ-104-SS

Lab Sample ID: 160-18778-2

Date Collected: 08/24/16 10:12

Matrix: Water

Date Received: 08/24/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 22:47	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 22:47	1
Benzene	**160**		5.0	0.25	ug/L			09/01/16 22:47	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 22:47	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 22:47	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 22:47	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 22:47	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 22:47	1
Chlorobenzene	**2.3**	**J**	5.0	0.38	ug/L			09/01/16 22:47	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 22:47	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 22:47	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 22:47	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 22:47	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 22:47	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 22:47	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 22:47	1
1,2-Dichlorobenzene	**0.35**	**J**	5.0	0.28	ug/L			09/01/16 22:47	1
1,4-Dichlorobenzene	**9.0**		5.0	0.35	ug/L			09/01/16 22:47	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 22:47	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 22:47	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 22:47	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 22:47	1
Ethylbenzene	**6.2**		5.0	0.30	ug/L			09/01/16 22:47	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 22:47	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 22:47	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 22:47	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 22:47	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 22:47	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/01/16 22:47	1
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 22:47	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 22:47	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 22:47	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 22:47	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 22:47	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 22:47	1
Toluene	**17**		5.0	1.0	ug/L			09/01/16 22:47	1

Client Sample ID: PZ-104-SS

Date Collected: 08/24/16 10:12
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 22:47	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 22:47	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 22:47	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 22:47	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 22:47	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 22:47	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 22:47	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 22:47	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 22:47	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 22:47	1
Xylenes, Total	**21**		10	0.85	ug/L			09/01/16 22:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*71 - 139*		*09/01/16 22:47*	*1*
Dibromofluoromethane (Surr)	*108*		*80 - 121*		*09/01/16 22:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*76 - 121*		*09/01/16 22:47*	*1*
Toluene-d8 (Surr)	*119*		*80 - 129*		*09/01/16 22:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.59**		0.10	0.010	mg/L			09/07/16 08:38	1
Sulfate	**15**		0.50	0.050	mg/L			09/07/16 08:38	1
Chloride	**3.8**		0.20	0.020	mg/L			09/07/16 08:38	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:52	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 18:52	5
Barium	**99**	**J**	250	75	ug/L		09/09/16 11:13	09/14/16 18:52	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 18:52	5
Boron	ND		500	130	ug/L		09/09/16 11:13	09/14/16 18:52	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 18:52	5
CaHard	**210000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 18:52	5
Calcium	**86000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 18:52	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:52	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:52	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 18:52	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:52	5
Magnesium	**51**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 18:52	5
Manganese	**22**	**J**	75	13	ug/L		09/09/16 11:13	09/14/16 18:52	5
MgHard	**210000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 18:52	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 18:52	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 18:52	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 18:52	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:52	5
Sodium	**14000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 18:52	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 18:52	5
Total Hardness	**420000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 18:52	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:52	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 18:52	5

Client Sample ID: PZ-104-SS

Lab Sample ID: 160-18778-2

Date Collected: 08/24/16 10:12

Matrix: Water

Date Received: 08/24/16 15:15

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/07/16 11:14	09/08/16 10:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1100**		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	**0.12**		0.050	0.022	mg/L			09/08/16 16:27	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:21	1
Chemical Oxygen Demand	**32**		5.0	1.1	mg/L		08/31/16 08:58	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-76.1	U	153	153	500	287	pCi/L	09/12/16 12:47	09/12/16 20:18	1

Client Sample ID: PZ-104-SD

Lab Sample ID: 160-18778-3

Date Collected: 08/24/16 10:54

Matrix: Water

Date Received: 08/24/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 23:13	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 23:13	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 23:13	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 23:13	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 23:13	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 23:13	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 23:13	1
Chlorobenzene	**3.9**	**J**	5.0	0.38	ug/L			09/01/16 23:13	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 23:13	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 23:13	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 23:13	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 23:13	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 23:13	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 23:13	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 23:13	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/01/16 23:13	1
1,4-Dichlorobenzene	**8.6**		5.0	0.35	ug/L			09/01/16 23:13	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 23:13	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 23:13	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 23:13	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 23:13	1
Ethylbenzene	**6.2**		5.0	0.30	ug/L			09/01/16 23:13	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 23:13	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 23:13	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 23:13	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 23:13	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 23:13	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/01/16 23:13	1
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 23:13	1

Client Sample ID: PZ-104-SD

Date Collected: 08/24/16 10:54
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 23:13	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 23:13	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 23:13	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 23:13	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 23:13	1
Toluene	**9.2**		5.0	1.0	ug/L			09/01/16 23:13	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 23:13	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 23:13	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 23:13	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 23:13	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 23:13	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 23:13	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 23:13	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 23:13	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 23:13	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 23:13	1
Xylenes, Total	**32**		10	0.85	ug/L			09/01/16 23:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*71 - 139*		*09/01/16 23:13*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 121*		*09/01/16 23:13*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*		*09/01/16 23:13*	*1*
Toluene-d8 (Surr)	*114*		*80 - 129*		*09/01/16 23:13*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**370**		13	0.63	ug/L			09/01/16 23:37	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*71 - 139*		*09/01/16 23:37*	*2.5*
Dibromofluoromethane (Surr)	*95*		*80 - 121*		*09/01/16 23:37*	*2.5*
1,2-Dichloroethane-d4 (Surr)	*94*		*76 - 121*		*09/01/16 23:37*	*2.5*
Toluene-d8 (Surr)	*111*		*80 - 129*		*09/01/16 23:37*	*2.5*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.72**		0.20	0.020	mg/L			09/07/16 10:52	2
Sulfate	**0.89**	**J**	1.0	0.10	mg/L			09/07/16 10:52	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**390**		100	10	mg/L			09/07/16 11:21	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:56	5
Arsenic	**22**	**J**	50	20	ug/L		09/09/16 11:13	09/14/16 18:56	5
Barium	**650**		250	75	ug/L		09/09/16 11:13	09/14/16 18:56	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 18:56	5
Boron	**1200**		500	130	ug/L		09/09/16 11:13	09/14/16 18:56	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 18:56	5

Client Sample ID: PZ-104-SD

Date Collected: 08/24/16 10:54
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-3
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
CaHard	310000		12000	3700	ug/L		09/09/16 11:13	09/14/16 18:56	5
Calcium	120000		5000	1500	ug/L		09/09/16 11:13	09/14/16 18:56	5
Chromium	17	J	50	15	ug/L		09/09/16 11:13	09/14/16 18:56	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:56	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 18:56	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:56	5
Magnesium	74		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 18:56	5
Manganese	150		75	13	ug/L		09/09/16 11:13	09/14/16 18:56	5
MgHard	300000		21000	6200	ug/L		09/09/16 11:13	09/14/16 18:56	5
Nickel	0.083	J	0.20	0.050	mg/L		09/09/16 11:13	09/14/16 18:56	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 18:56	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 18:56	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:56	5
Sodium	200000		5000	1500	ug/L		09/09/16 11:13	09/14/16 18:56	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 18:56	5
Total Hardness	610000		33000	9900	ug/L		09/09/16 11:13	09/14/16 18:56	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:56	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 18:56	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.061	J B	0.20	0.060	ug/L		09/07/16 11:14	09/08/16 10:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	920		10	7.0	mg/L			08/26/16 10:27	1
Nitrate/Nitrite	0.14	H B	0.050	0.011	mg/L			09/22/16 21:39	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	61		2.5	1.1	mg/L			09/08/16 16:30	50
Chemical Oxygen Demand	390		25	5.6	mg/L		08/31/16 08:58	08/31/16 14:03	5

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	2660		331	405	500	286	pCi/L	09/12/16 12:47	09/12/16 20:41	1

Client Sample ID: PZ-212-SD

Date Collected: 08/24/16 13:26
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/02/16 00:02	1
Acrylonitrile	ND		50	1.7	ug/L			09/02/16 00:02	1
Benzene	ND		5.0	0.25	ug/L			09/02/16 00:02	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/02/16 00:02	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/02/16 00:02	1
Bromoform	ND		5.0	0.37	ug/L			09/02/16 00:02	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18778-1

Client Sample ID: PZ-212-SD
Date Collected: 08/24/16 13:26
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.37	ug/L			09/02/16 00:02	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/02/16 00:02	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/02/16 00:02	1
Chloroethane	ND		10	0.38	ug/L			09/02/16 00:02	1
Chloroform	ND		5.0	0.15	ug/L			09/02/16 00:02	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/02/16 00:02	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/02/16 00:02	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/02/16 00:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/02/16 00:02	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/02/16 00:02	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/02/16 00:02	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/02/16 00:02	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/02/16 00:02	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/02/16 00:02	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/02/16 00:02	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/02/16 00:02	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/02/16 00:02	1
2-Hexanone	ND		20	0.59	ug/L			09/02/16 00:02	1
Methyl bromide	ND		10	0.40	ug/L			09/02/16 00:02	1
Methyl chloride	ND		10	0.55	ug/L			09/02/16 00:02	1
Methylene bromide	ND		5.0	0.41	ug/L			09/02/16 00:02	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/02/16 00:02	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/02/16 00:02	1
Methyl iodide	ND		5.0	1.5	ug/L			09/02/16 00:02	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/02/16 00:02	1
Styrene	ND		5.0	0.35	ug/L			09/02/16 00:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/02/16 00:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/02/16 00:02	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/02/16 00:02	1
Toluene	ND		5.0	1.0	ug/L			09/02/16 00:02	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/02/16 00:02	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/02/16 00:02	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/02/16 00:02	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/02/16 00:02	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/02/16 00:02	1
Trichloroethene	ND		5.0	0.29	ug/L			09/02/16 00:02	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/02/16 00:02	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/02/16 00:02	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/02/16 00:02	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/02/16 00:02	1
Xylenes, Total	ND		10	0.85	ug/L			09/02/16 00:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*71 - 139*		*09/02/16 00:02*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 121*		*09/02/16 00:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*		*09/02/16 00:02*	*1*
Toluene-d8 (Surr)	*110*		*80 - 129*		*09/02/16 00:02*	*1*

Client Sample ID: PZ-212-SD
Date Collected: 08/24/16 13:26
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-4
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.18**		0.10	0.010	mg/L			09/07/16 11:35	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**75**		10	1.0	mg/L			09/07/16 11:50	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		40	4.0	mg/L			09/07/16 12:04	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:01	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 19:01	5
Barium	**210**	**J**	250	75	ug/L		09/09/16 11:13	09/14/16 19:01	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:01	5
Boron	ND		500	130	ug/L		09/09/16 11:13	09/14/16 19:01	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:01	5
CaHard	**270000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:01	5
Calcium	**110000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:01	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:01	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:01	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:01	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:01	5
Magnesium	**50**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:01	5
Manganese	**330**		75	13	ug/L		09/09/16 11:13	09/14/16 19:01	5
MgHard	**200000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:01	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:01	5
Phosphorus	**390**	**J**	1300	380	ug/L		09/09/16 11:13	09/14/16 19:01	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:01	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:01	5
Sodium	**49000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:01	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:01	5
Total Hardness	**480000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:01	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:01	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 19:01	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/07/16 11:14	09/08/16 10:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**720**		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	**0.065**		0.050	0.022	mg/L			09/08/16 16:32	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			09/07/16 19:27	1
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:58	08/31/16 14:03	1

Client Sample ID: PZ-212-SD

Lab Sample ID: 160-18778-4
Matrix: Water
Date Collected: 08/24/16 13:26
Date Received: 08/24/16 15:15

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-58.1	U	156	156	500	288	pCi/L	09/12/16 12:47	09/12/16 21:03	1

Client Sample ID: PZ-201A-SS

Lab Sample ID: 160-18778-5
Matrix: Water
Date Collected: 08/24/16 14:11
Date Received: 08/24/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/02/16 00:28	1
Acrylonitrile	ND		50	1.7	ug/L			09/02/16 00:28	1
Benzene	ND		5.0	0.25	ug/L			09/02/16 00:28	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/02/16 00:28	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/02/16 00:28	1
Bromoform	ND		5.0	0.37	ug/L			09/02/16 00:28	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/02/16 00:28	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/02/16 00:28	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/02/16 00:28	1
Chloroethane	ND		10	0.38	ug/L			09/02/16 00:28	1
Chloroform	ND		5.0	0.15	ug/L			09/02/16 00:28	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/02/16 00:28	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/02/16 00:28	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/02/16 00:28	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/02/16 00:28	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/02/16 00:28	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/02/16 00:28	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/02/16 00:28	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/02/16 00:28	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/02/16 00:28	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/02/16 00:28	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/02/16 00:28	1
Ethylbenzene	ND	F1	5.0	0.30	ug/L			09/02/16 00:28	1
2-Hexanone	ND		20	0.59	ug/L			09/02/16 00:28	1
Methyl bromide	ND		10	0.40	ug/L			09/02/16 00:28	1
Methyl chloride	ND		10	0.55	ug/L			09/02/16 00:28	1
Methylene bromide	ND		5.0	0.41	ug/L			09/02/16 00:28	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/02/16 00:28	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/02/16 00:28	1
Methyl iodide	ND		5.0	1.5	ug/L			09/02/16 00:28	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/02/16 00:28	1
Styrene	ND		5.0	0.35	ug/L			09/02/16 00:28	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/02/16 00:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/02/16 00:28	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/02/16 00:28	1
Toluene	ND		5.0	1.0	ug/L			09/02/16 00:28	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/02/16 00:28	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/02/16 00:28	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/02/16 00:28	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/02/16 00:28	1

Client Sample ID: PZ-201A-SS

Date Collected: 08/24/16 14:11
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/02/16 00:28	1
Trichloroethene	ND		5.0	0.29	ug/L			09/02/16 00:28	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/02/16 00:28	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/02/16 00:28	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/02/16 00:28	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/02/16 00:28	1
Xylenes, Total	ND		10	0.85	ug/L			09/02/16 00:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*71 - 139*		*09/02/16 00:28*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 121*		*09/02/16 00:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*76 - 121*		*09/02/16 00:28*	*1*
Toluene-d8 (Surr)	*110*		*80 - 129*		*09/02/16 00:28*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.26**		0.10	0.010	mg/L			09/07/16 12:19	1
Chloride	**3.1**		0.20	0.020	mg/L			09/07/16 12:19	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**61**		10	1.0	mg/L			09/07/16 12:33	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:05	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 19:05	5
Barium	**130**	**J**	250	75	ug/L		09/09/16 11:13	09/14/16 19:05	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:05	5
Boron	ND		500	130	ug/L		09/09/16 11:13	09/14/16 19:05	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:05	5
CaHard	**250000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:05	5
Calcium	**100000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:05	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:05	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:05	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:05	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:05	5
Magnesium	**47**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:05	5
Manganese	**21**	**J**	75	13	ug/L		09/09/16 11:13	09/14/16 19:05	5
MgHard	**190000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:05	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:05	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 19:05	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:05	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:05	5
Sodium	**11000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:05	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:05	5
Total Hardness	**440000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:05	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:05	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 19:05	5

Client Sample ID: PZ-201A-SS

Lab Sample ID: 160-18778-5
Date Collected: 08/24/16 14:11
Matrix: Water
Date Received: 08/24/16 15:15

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.079**	**J B**	0.20	0.060	ug/L		09/07/16 11:14	09/08/16 10:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**660**		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	**0.033**	**J**	0.050	0.022	mg/L			09/08/16 16:34	1
Nitrate/Nitrite	ND	^ F1	0.050	0.011	mg/L			09/07/16 19:36	1
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:59	08/31/16 14:03	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-99.5	U	153	153	500	291	pCi/L	09/12/16 12:47	09/12/16 21:26	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18778-6
Date Collected: 08/24/16 08:00
Matrix: Water
Date Received: 08/24/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 19:28	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 19:28	1
Benzene	ND		5.0	0.25	ug/L			09/01/16 19:28	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 19:28	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 19:28	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 19:28	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 19:28	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 19:28	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/01/16 19:28	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 19:28	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 19:28	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 19:28	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 19:28	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 19:28	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 19:28	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 19:28	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/01/16 19:28	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/01/16 19:28	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 19:28	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 19:28	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 19:28	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 19:28	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/01/16 19:28	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 19:28	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 19:28	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 19:28	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 19:28	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 19:28	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/01/16 19:28	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18778-1

Client Sample ID: TRIP BLANK
Date Collected: 08/24/16 08:00
Date Received: 08/24/16 15:15

Lab Sample ID: 160-18778-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 19:28	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 19:28	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 19:28	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 19:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 19:28	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 19:28	1
Toluene	ND		5.0	1.0	ug/L			09/01/16 19:28	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 19:28	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 19:28	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 19:28	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 19:28	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 19:28	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 19:28	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 19:28	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 19:28	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 19:28	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 19:28	1
Xylenes, Total	ND		10	0.85	ug/L			09/01/16 19:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*71 - 139*		*09/01/16 19:28*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 121*		*09/01/16 19:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/01/16 19:28*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/01/16 19:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-267786/7
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 18:38	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 18:38	1
Benzene	ND		5.0	0.25	ug/L			09/01/16 18:38	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 18:38	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 18:38	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 18:38	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 18:38	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 18:38	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/01/16 18:38	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 18:38	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 18:38	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 18:38	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 18:38	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 18:38	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 18:38	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 18:38	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/01/16 18:38	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/01/16 18:38	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 18:38	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 18:38	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 18:38	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 18:38	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/01/16 18:38	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 18:38	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 18:38	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 18:38	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 18:38	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 18:38	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/01/16 18:38	1
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 18:38	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 18:38	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 18:38	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 18:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 18:38	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 18:38	1
Toluene	ND		5.0	1.0	ug/L			09/01/16 18:38	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 18:38	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 18:38	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 18:38	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 18:38	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 18:38	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 18:38	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 18:38	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 18:38	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 18:38	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 18:38	1
Xylenes, Total	ND		10	0.85	ug/L			09/01/16 18:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-267786/7
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		71 - 139		09/01/16 18:38	1
Dibromofluoromethane (Surr)	95		80 - 121		09/01/16 18:38	1
1,2-Dichloroethane-d4 (Surr)	96		76 - 121		09/01/16 18:38	1
Toluene-d8 (Surr)	112		80 - 129		09/01/16 18:38	1

Lab Sample ID: LCS 160-267786/4
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	49.7		ug/L		99	63 - 131
Acrylonitrile	500	485		ug/L		97	81 - 117
Benzene	50.0	51.6		ug/L		103	80 - 120
Bromochloromethane	50.0	48.3		ug/L		97	80 - 120
Bromodichloromethane	50.0	48.7		ug/L		97	80 - 120
Bromoform	50.0	45.1		ug/L		90	80 - 120
Carbon disulfide	50.0	51.7		ug/L		103	79 - 126
Carbon tetrachloride	50.0	49.5		ug/L		99	73 - 123
Chlorobenzene	50.0	52.7		ug/L		105	80 - 120
Chloroethane	50.0	45.8		ug/L		92	52 - 140
Chloroform	50.0	49.4		ug/L		99	80 - 120
cis-1,2-Dichloroethene	50.0	48.2		ug/L		96	80 - 120
cis-1,3-Dichloropropene	50.0	46.9		ug/L		94	80 - 122
Dibromochloromethane	50.0	48.2		ug/L		96	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	44.8		ug/L		90	77 - 125
1,2-Dibromoethane (EDB)	50.0	45.7		ug/L		91	80 - 120
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	80 - 120
1,4-Dichlorobenzene	50.0	51.8		ug/L		104	80 - 120
1,1-Dichloroethane	50.0	49.8		ug/L		100	80 - 120
1,2-Dichloroethane	50.0	47.8		ug/L		96	69 - 124
1,1-Dichloroethene	50.0	48.7		ug/L		97	77 - 126
1,2-Dichloropropane	50.0	48.1		ug/L		96	80 - 120
Ethylbenzene	50.0	58.0		ug/L		116	80 - 120
2-Hexanone	50.0	46.1		ug/L		92	64 - 136
Methyl bromide	50.0	52.3		ug/L		105	57 - 139
Methyl chloride	50.0	49.9		ug/L		100	70 - 127
Methylene bromide	50.0	46.4		ug/L		93	78 - 120
Methylene Chloride	50.0	48.8		ug/L		98	80 - 120
Methyl Ethyl Ketone	50.0	47.4		ug/L		95	70 - 130
Methyl iodide	50.0	49.1		ug/L		98	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	50.2		ug/L		100	76 - 129
Styrene	50.0	53.3		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/L		89	80 - 120
Tetrachloroethene	50.0	48.0		ug/L		96	80 - 120
Toluene	50.0	52.6		ug/L		105	80 - 120
trans-1,4-Dichloro-2-butene	50.0	44.2		ug/L		88	75 - 127
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-267786/4
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	47.6		ug/L		95	80 - 130		
1,1,1-Trichloroethane			50.0	49.5		ug/L		99	76 - 120		
1,1,2-Trichloroethane			50.0	46.6		ug/L		93	80 - 120		
Trichloroethene			50.0	48.2		ug/L		96	73 - 120		
Trichlorofluoromethane			50.0	52.7		ug/L		105	74 - 130		
1,2,3-Trichloropropane			50.0	44.5		ug/L		89	80 - 120		
Vinyl acetate			50.0	48.5		ug/L		97	37 - 140		
Vinyl chloride			50.0	51.1		ug/L		102	51 - 140		
Xylenes, Total			100	108		ug/L		108	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*
Toluene-d8 (Surr)	*107*		*80 - 129*

Lab Sample ID: LCSD 160-267786/5
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	50.3		ug/L		101	63 - 131	1	20
Acrylonitrile			500	492		ug/L		98	81 - 117	1	20
Benzene			50.0	52.0		ug/L		104	80 - 120	1	20
Bromochloromethane			50.0	49.6		ug/L		99	80 - 120	3	20
Bromodichloromethane			50.0	49.3		ug/L		99	80 - 120	1	20
Bromoform			50.0	46.5		ug/L		93	80 - 120	3	20
Carbon disulfide			50.0	52.0		ug/L		104	79 - 126	1	20
Carbon tetrachloride			50.0	50.0		ug/L		100	73 - 123	1	20
Chlorobenzene			50.0	53.3		ug/L		107	80 - 120	1	20
Chloroethane			50.0	42.9		ug/L		86	52 - 140	6	20
Chloroform			50.0	49.7		ug/L		99	80 - 120	1	20
cis-1,2-Dichloroethene			50.0	48.9		ug/L		98	80 - 120	1	20
cis-1,3-Dichloropropene			50.0	48.7		ug/L		97	80 - 122	4	20
Dibromochloromethane			50.0	49.5		ug/L		99	80 - 120	3	20
1,2-Dibromo-3-Chloropropane			50.0	45.7		ug/L		91	77 - 125	2	20
1,2-Dibromoethane (EDB)			50.0	47.4		ug/L		95	80 - 120	4	20
1,2-Dichlorobenzene			50.0	50.4		ug/L		101	80 - 120	4	20
1,4-Dichlorobenzene			50.0	52.9		ug/L		106	80 - 120	2	20
1,1-Dichloroethane			50.0	50.7		ug/L		101	80 - 120	2	20
1,2-Dichloroethane			50.0	49.2		ug/L		98	69 - 124	3	20
1,1-Dichloroethene			50.0	49.9		ug/L		100	77 - 126	3	20
1,2-Dichloropropane			50.0	49.7		ug/L		99	80 - 120	3	20
Ethylbenzene			50.0	56.6		ug/L		113	80 - 120	2	20
2-Hexanone			50.0	46.9		ug/L		94	64 - 136	2	20
Methyl bromide			50.0	51.5		ug/L		103	57 - 139	2	20
Methyl chloride			50.0	50.2		ug/L		100	70 - 127	1	20
Methylene bromide			50.0	49.2		ug/L		98	78 - 120	6	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-267786/5
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	49.4		ug/L		99	80 - 120	1	20
Methyl Ethyl Ketone			50.0	48.0		ug/L		96	70 - 130	1	20
Methyl iodide			50.0	50.3		ug/L		101	73 - 125	3	20
4-Methyl-2-pentanone (MIBK)			50.0	49.8		ug/L		100	76 - 129	1	20
Styrene			50.0	53.6		ug/L		107	80 - 120	1	20
1,1,1,2-Tetrachloroethane			50.0	52.4		ug/L		105	80 - 120	3	20
1,1,2,2-Tetrachloroethane			50.0	45.4		ug/L		91	80 - 120	2	20
Tetrachloroethene			50.0	49.1		ug/L		98	80 - 120	2	20
Toluene			50.0	53.1		ug/L		106	80 - 120	1	20
trans-1,4-Dichloro-2-butene			50.0	46.1		ug/L		92	75 - 127	4	20
trans-1,2-Dichloroethene			50.0	49.2		ug/L		98	80 - 120	0	20
trans-1,3-Dichloropropene			50.0	50.0		ug/L		100	80 - 130	5	20
1,1,1-Trichloroethane			50.0	50.3		ug/L		101	76 - 120	2	20
1,1,2-Trichloroethane			50.0	47.7		ug/L		95	80 - 120	2	20
Trichloroethene			50.0	50.1		ug/L		100	73 - 120	4	20
Trichlorofluoromethane			50.0	50.7		ug/L		101	74 - 130	4	20
1,2,3-Trichloropropane			50.0	45.3		ug/L		91	80 - 120	2	20
Vinyl acetate			50.0	48.7		ug/L		97	37 - 140	0	20
Vinyl chloride			50.0	49.4		ug/L		99	51 - 140	3	20
Xylenes, Total			100	109		ug/L		109	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*71 - 139*
Dibromofluoromethane (Surr)	*98*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*
Toluene-d8 (Surr)	*108*		*80 - 129*

Lab Sample ID: 160-18778-5 MS
Matrix: Water
Analysis Batch: 267786

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	48.9		ug/L		98	52 - 138
Acrylonitrile	ND		500	536		ug/L		107	58 - 142
Benzene	ND		50.0	52.8		ug/L		106	80 - 120
Bromochloromethane	ND		50.0	49.1		ug/L		98	72 - 125
Bromodichloromethane	ND		50.0	50.3		ug/L		101	71 - 128
Bromoform	ND		50.0	44.5		ug/L		89	65 - 133
Carbon disulfide	ND		50.0	51.7		ug/L		103	69 - 139
Carbon tetrachloride	ND		50.0	47.9		ug/L		96	70 - 126
Chlorobenzene	ND		50.0	53.0		ug/L		106	80 - 120
Chloroethane	ND		50.0	47.4		ug/L		95	59 - 144
Chloroform	ND		50.0	50.6		ug/L		101	80 - 120
cis-1,2-Dichloroethene	ND		50.0	49.4		ug/L		99	80 - 124
cis-1,3-Dichloropropene	ND		50.0	48.8		ug/L		98	67 - 130
Dibromochloromethane	ND		50.0	48.8		ug/L		98	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	49.4		ug/L		99	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	47.6		ug/L		95	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18778-5 MS
Matrix: Water
Analysis Batch: 267786

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	50.1		ug/L		100	80 - 124
1,4-Dichlorobenzene	ND		50.0	51.7		ug/L		103	80 - 120
1,1-Dichloroethane	ND		50.0	50.2		ug/L		100	80 - 120
1,2-Dichloroethane	ND		50.0	50.2		ug/L		100	56 - 136
1,1-Dichloroethene	ND		50.0	47.9		ug/L		96	66 - 137
1,2-Dichloropropane	ND		50.0	49.4		ug/L		99	80 - 123
Ethylbenzene	ND	F1	50.0	58.3		ug/L		117	80 - 121
2-Hexanone	ND		50.0	47.4		ug/L		95	47 - 150
Methyl bromide	ND		50.0	55.1		ug/L		110	53 - 146
Methyl chloride	ND		50.0	48.7		ug/L		97	61 - 137
Methylene bromide	ND		50.0	50.4		ug/L		101	61 - 136
Methylene Chloride	ND		50.0	49.7		ug/L		99	80 - 120
Methyl Ethyl Ketone	ND		50.0	50.5		ug/L		101	58 - 143
Methyl iodide	ND		50.0	49.2		ug/L		98	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	51.7		ug/L		103	53 - 150
Styrene	ND		50.0	52.8		ug/L		106	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	50.9		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	48.7		ug/L		97	60 - 150
Tetrachloroethene	ND		50.0	46.3		ug/L		93	66 - 132
Toluene	ND		50.0	52.4		ug/L		105	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	38.7		ug/L		77	55 - 146
trans-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	79 - 121
trans-1,3-Dichloropropene	ND		50.0	49.1		ug/L		98	68 - 143
1,1,1-Trichloroethane	ND		50.0	49.5		ug/L		99	74 - 123
1,1,2-Trichloroethane	ND		50.0	47.8		ug/L		96	70 - 134
Trichloroethene	ND		50.0	48.4		ug/L		97	63 - 120
Trichlorofluoromethane	ND		50.0	51.6		ug/L		103	53 - 150
1,2,3-Trichloropropane	ND		50.0	48.8		ug/L		98	62 - 137
Vinyl acetate	ND		50.0	54.7		ug/L		109	63 - 150
Vinyl chloride	ND		50.0	51.5		ug/L		103	54 - 140
Xylenes, Total	ND		100	107		ug/L		107	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*99*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*
Toluene-d8 (Surr)	*105*		*80 - 129*

Lab Sample ID: 160-18778-5 MSD
Matrix: Water
Analysis Batch: 267786

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	47.8		ug/L		96	52 - 138	2	20
Acrylonitrile	ND		500	528		ug/L		106	58 - 142	2	20
Benzene	ND		50.0	54.1		ug/L		108	80 - 120	2	20
Bromochloromethane	ND		50.0	51.1		ug/L		102	72 - 125	4	20
Bromodichloromethane	ND		50.0	51.4		ug/L		103	71 - 128	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18778-5 MSD
Matrix: Water
Analysis Batch: 267786

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	46.6		ug/L		93	65 - 133	5	20
Carbon disulfide	ND		50.0	55.3		ug/L		111	69 - 139	7	20
Carbon tetrachloride	ND		50.0	51.8		ug/L		104	70 - 126	8	20
Chlorobenzene	ND		50.0	54.4		ug/L		109	80 - 120	3	20
Chloroethane	ND		50.0	47.4		ug/L		95	59 - 144	0	20
Chloroform	ND		50.0	52.5		ug/L		105	80 - 120	4	20
cis-1,2-Dichloroethene	ND		50.0	51.4		ug/L		103	80 - 124	4	20
cis-1,3-Dichloropropene	ND		50.0	48.5		ug/L		97	67 - 130	1	20
Dibromochloromethane	ND		50.0	49.8		ug/L		100	68 - 133	2	20
1,2-Dibromo-3-Chloropropane	ND		50.0	47.9		ug/L		96	58 - 148	3	20
1,2-Dibromoethane (EDB)	ND		50.0	46.9		ug/L		94	65 - 138	1	20
1,2-Dichlorobenzene	ND		50.0	51.8		ug/L		104	80 - 124	3	20
1,4-Dichlorobenzene	ND		50.0	53.8		ug/L		108	80 - 120	4	20
1,1-Dichloroethane	ND		50.0	52.5		ug/L		105	80 - 120	5	20
1,2-Dichloroethane	ND		50.0	50.8		ug/L		102	56 - 136	1	20
1,1-Dichloroethene	ND		50.0	51.7		ug/L		103	66 - 137	8	20
1,2-Dichloropropane	ND		50.0	50.1		ug/L		100	80 - 123	1	20
Ethylbenzene	ND	F1	50.0	60.9	F1	ug/L		122	80 - 121	4	20
2-Hexanone	ND		50.0	46.4		ug/L		93	47 - 150	2	20
Methyl bromide	ND		50.0	55.3		ug/L		111	53 - 146	0	20
Methyl chloride	ND		50.0	50.7		ug/L		101	61 - 137	4	20
Methylene bromide	ND		50.0	50.2		ug/L		100	61 - 136	0	20
Methylene Chloride	ND		50.0	52.2		ug/L		104	80 - 120	5	20
Methyl Ethyl Ketone	ND		50.0	47.9		ug/L		96	58 - 143	5	20
Methyl iodide	ND		50.0	52.4		ug/L		105	69 - 124	6	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	51.2		ug/L		102	53 - 150	1	20
Styrene	ND		50.0	54.1		ug/L		108	44 - 150	2	20
1,1,1,2-Tetrachloroethane	ND		50.0	54.1		ug/L		108	80 - 120	6	20
1,1,2,2-Tetrachloroethane	ND		50.0	49.1		ug/L		98	60 - 150	1	20
Tetrachloroethene	ND		50.0	49.1		ug/L		98	66 - 132	6	20
Toluene	ND		50.0	54.0		ug/L		108	75 - 134	3	20
trans-1,4-Dichloro-2-butene	ND		50.0	40.5		ug/L		81	55 - 146	4	20
trans-1,2-Dichloroethene	ND		50.0	51.9		ug/L		104	79 - 121	6	20
trans-1,3-Dichloropropene	ND		50.0	48.8		ug/L		98	68 - 143	1	20
1,1,1-Trichloroethane	ND		50.0	54.0		ug/L		108	74 - 123	9	20
1,1,2-Trichloroethane	ND		50.0	47.9		ug/L		96	70 - 134	0	20
Trichloroethene	ND		50.0	49.9		ug/L		100	63 - 120	3	20
Trichlorofluoromethane	ND		50.0	53.8		ug/L		108	53 - 150	4	20
1,2,3-Trichloropropane	ND		50.0	46.1		ug/L		92	62 - 137	6	20
Vinyl acetate	ND		50.0	54.0		ug/L		108	63 - 150	1	20
Vinyl chloride	ND		50.0	51.5		ug/L		103	54 - 140	0	20
Xylenes, Total	ND		100	111		ug/L		111	80 - 124	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*100*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*
Toluene-d8 (Surr)	*105*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-268208/18
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/06/16 17:01	1
Sulfate	ND		0.50	0.050	mg/L			09/06/16 17:01	1
Chloride	ND		0.20	0.020	mg/L			09/06/16 17:01	1

Lab Sample ID: LCS 160-268208/19
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	1.01		mg/L		101	90 - 110
Sulfate	8.00	7.67		mg/L		96	90 - 110
Chloride	2.00	1.95		mg/L		97	90 - 110

Lab Sample ID: 160-18778-5 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.26		2.00	2.13		mg/L		93	90 - 110
Chloride	3.1		2.00	5.09	E	mg/L		100	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18778-5 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate - DL	61		80.0	136		mg/L		93	90 - 110

Lab Sample ID: 160-18897-D-1 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride - DL	0.056	J F1	4.00	3.46	F1	mg/L		85	90 - 110
Sulfate - DL	1.8		8.00	9.27		mg/L		94	90 - 110

Lab Sample ID: 160-18897-D-1 DU
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride - DL	0.056	J F1	0.0641	J	mg/L		14	20
Sulfate - DL	1.8		1.71		mg/L		4	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-18897-D-1 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	980		1000	1940		mg/L		97	90 - 110

Lab Sample ID: 160-18897-D-1 DU
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	980		976		mg/L		0.2	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-268820/1-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Arsenic	ND		10	4.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Barium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Beryllium	ND		5.0	1.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
Boron	ND		100	25	ug/L		09/09/16 11:13	09/14/16 18:11	1
Cadmium	ND		5.0	1.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
CaHard	ND		2500	750	ug/L		09/09/16 11:13	09/14/16 18:11	1
Calcium	ND		1000	300	ug/L		09/09/16 11:13	09/14/16 18:11	1
Chromium	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Cobalt	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Copper	ND		25	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Lead	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Magnesium	ND		1.0	0.30	mg/L		09/09/16 11:13	09/14/16 18:11	1
Manganese	ND		15	2.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
MgHard	ND		4100	1200	ug/L		09/09/16 11:13	09/14/16 18:11	1
Nickel	ND		0.040	0.010	mg/L		09/09/16 11:13	09/14/16 18:11	1
Phosphorus	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:11	1
Selenium	ND		15	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Silver	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Sodium	ND		1000	300	ug/L		09/09/16 11:13	09/14/16 18:11	1
Thallium	ND	^	20	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Total Hardness	ND		6600	2000	ug/L		09/09/16 11:13	09/14/16 18:11	1
Vanadium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Zinc	ND		20	6.0	ug/L		09/09/16 11:13	09/14/16 18:11	1

Lab Sample ID: LCS 160-268820/2-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	523		ug/L		105	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-268820/2-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	1000	1020		ug/L		102	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Boron	2000	2050	E	ug/L		103	80 - 120
Cadmium	1000	1050		ug/L		105	80 - 120
Calcium	10000	10900		ug/L		109	80 - 120
Chromium	1000	1080		ug/L		108	80 - 120
Cobalt	1000	1090		ug/L		109	80 - 120
Copper	1000	1060		ug/L		106	80 - 120
Lead	1000	1100		ug/L		110	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Manganese	1000	1040		ug/L		104	80 - 120
Nickel	1.00	1.09		mg/L		109	80 - 120
Phosphorus	1000	1190		ug/L		119	80 - 120
Selenium	500	521		ug/L		104	80 - 120
Silver	200	210		ug/L		105	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120
Thallium	200	230	^	ug/L		115	80 - 120
Vanadium	1000	1020		ug/L		102	80 - 120
Zinc	1000	1040		ug/L		104	80 - 120

Lab Sample ID: 160-18778-1 MS
Matrix: Water
Analysis Batch: 269953

Client Sample ID: PZ-202-SS
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	507		ug/L		101	75 - 125
Arsenic	80	J	1000	1020		ug/L		94	75 - 125
Barium	2600		1000	3570		ug/L		96	75 - 125
Beryllium	ND		1000	983		ug/L		98	75 - 125
Boron	ND		2000	1920		ug/L		96	75 - 125
Cadmium	ND		1000	970		ug/L		97	75 - 125
Calcium	630000		10000	620000	4	ug/L		-137	75 - 125
Chromium	ND		1000	990		ug/L		99	75 - 125
Cobalt	ND		1000	1010		ug/L		101	75 - 125
Copper	ND		1000	989		ug/L		99	75 - 125
Lead	ND		1000	1010		ug/L		101	75 - 125
Magnesium	280		10.0	288	4	mg/L		50	75 - 125
Manganese	2300		1000	3300		ug/L		97	75 - 125
Nickel	ND		1.00	1.06		mg/L		106	75 - 125
Phosphorus	ND	F1	1000	1310	J F1	ug/L		131	75 - 125
Selenium	ND		500	503		ug/L		101	75 - 125
Silver	ND		200	187		ug/L		94	75 - 125
Sodium	190000		10000	193000	4	ug/L		72	75 - 125
Thallium	ND	^	200	242	^	ug/L		121	75 - 125
Vanadium	ND		1000	940		ug/L		94	75 - 125
Zinc	ND		1000	974		ug/L		97	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18778-1 MSD — **Client Sample ID: PZ-202-SS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269953 — **Prep Batch: 268820**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	508		ug/L		102	75 - 125	0	20
Arsenic	80	J	1000	1080		ug/L		100	75 - 125	6	20
Barium	2600		1000	3690		ug/L		108	75 - 125	3	20
Beryllium	ND		1000	1010		ug/L		101	75 - 125	3	20
Boron	ND		2000	1960		ug/L		98	75 - 125	2	20
Cadmium	ND		1000	1010		ug/L		101	75 - 125	4	20
Calcium	630000		10000	655000	4	ug/L		211	75 - 125	5	20
Chromium	ND		1000	1030		ug/L		103	75 - 125	4	20
Cobalt	ND		1000	1050		ug/L		105	75 - 125	3	20
Copper	ND		1000	1000		ug/L		100	75 - 125	1	20
Lead	ND		1000	1040		ug/L		104	75 - 125	3	20
Magnesium	280		10.0	302	4	mg/L		183	75 - 125	5	20
Manganese	2300		1000	3420		ug/L		109	75 - 125	4	20
Nickel	ND		1.00	1.11		mg/L		111	75 - 125	4	20
Phosphorus	ND	F1	1000	1400	J F1	ug/L		140	75 - 125	6	20
Selenium	ND		500	538		ug/L		108	75 - 125	7	20
Silver	ND		200	202		ug/L		101	75 - 125	8	20
Sodium	190000		10000	200000	4	ug/L		145	75 - 125	4	20
Thallium	ND	^	200	234	^	ug/L		117	75 - 125	3	20
Vanadium	ND		1000	964		ug/L		96	75 - 125	3	20
Zinc	ND		1000	1010		ug/L		101	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-268303/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268743 — **Prep Batch: 268303**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0721	J	0.20	0.060	ug/L		09/07/16 11:14	09/08/16 09:26	1

Lab Sample ID: LCS 160-268303/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268743 — **Prep Batch: 268303**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.49		ug/L		90	80 - 120

Lab Sample ID: 160-18762-L-1-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268743 — **Prep Batch: 268303**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.69		ug/L		94	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 160-18762-L-1-C MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268743 — **Prep Batch: 268303**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.84		ug/L		97	80 - 120	3	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-266765/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			08/26/16 10:27	1

Lab Sample ID: LCS 160-266765/2 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266765

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	515		mg/L		103	90 - 110

Lab Sample ID: 160-18758-D-3 DU — **Client Sample ID: Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266765

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	1400		1400		mg/L		1	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-268615/20 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/08/16 15:42	1

Lab Sample ID: LCS 160-268615/23 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.493		mg/L		99	90 - 110

Lab Sample ID: 160-18757-E-1 MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268615

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.57	F1	0.500	0.996	F1	mg/L		86	90 - 110

Method: 350.1 - Nitrogen, Ammonia (Continued)

Lab Sample ID: 160-18778-5 MS
Matrix: Water
Analysis Batch: 268615

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.033	J	0.500	0.555		mg/L		104	90 - 110

Lab Sample ID: 160-18757-E-1 DU
Matrix: Water
Analysis Batch: 268615

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia	0.57	F1	0.504		mg/L		12	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-268618/13
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050	0.011	mg/L			09/07/16 18:25	1

Lab Sample ID: LCS 160-268618/14
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.462		mg/L		92	90 - 110

Lab Sample ID: 160-18757-E-1 MS
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	ND	F1	0.500	ND	F1	mg/L		0	90 - 110

Lab Sample ID: 160-18778-5 MS
Matrix: Water
Analysis Batch: 268618

Client Sample ID: PZ-201A-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	ND	^ F1	0.500	ND	F1 ^	mg/L		0	90 - 110

Lab Sample ID: 160-18757-E-1 DU
Matrix: Water
Analysis Batch: 268618

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	ND	F1	ND		mg/L		NC	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: MB 160-271335/4
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0216	J	0.050	0.011	mg/L			09/22/16 21:30	1

Lab Sample ID: LCS 160-271335/5
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.460		mg/L		92	90 - 110

Lab Sample ID: 160-18807-E-1 MS
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.14	B F1	0.500	0.155	F1	mg/L		2	90 - 110

Lab Sample ID: 160-18807-E-1 DU
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.14	B F1	0.146		mg/L		0.8	20

Method: 410.4 - COD

Lab Sample ID: MB 160-267445/3-A
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267445

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		08/31/16 08:55	08/31/16 14:03	1

Lab Sample ID: LCS 160-267445/4-A
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	48.0		mg/L		96	90 - 110

Lab Sample ID: 160-18775-B-3-B MS
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	5.0		50.0	59.0		mg/L		108	90 - 110

Method: 410.4 - COD (Continued)

Lab Sample ID: 160-18756-C-4-B DU
Matrix: Water
Analysis Batch: 267574

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 267445

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	ND			ND		mg/L				NC	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-269161/1-A
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269161

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-53.15	U	155	155	500	285	pCi/L	09/12/16 12:47	09/12/16 19:10	1

Lab Sample ID: LCS 160-269161/2-A
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269161

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3030	2622		401	500	285	pCi/L	87	74 - 114		

Lab Sample ID: 160-18981-A-1-B MS
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269161

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	1640		3030	4361		557	500	287	pCi/L	90	67 - 130		

Lab Sample ID: 160-18978-A-1-B DU
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 269161

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	-95.5	U		5.856	U	166	500	298	pCi/L			0.32	1

GC/MS VOA

Analysis Batch: 267786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	8260C	
160-18778-2	PZ-104-SS	Total/NA	Water	8260C	
160-18778-3	PZ-104-SD	Total/NA	Water	8260C	
160-18778-3 - DL	PZ-104-SD	Total/NA	Water	8260C	
160-18778-4	PZ-212-SD	Total/NA	Water	8260C	
160-18778-5	PZ-201A-SS	Total/NA	Water	8260C	
160-18778-6	TRIP BLANK	Total/NA	Water	8260C	
MB 160-267786/7	Method Blank	Total/NA	Water	8260C	
LCS 160-267786/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-267786/5	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18778-5 MS	PZ-201A-SS	Total/NA	Water	8260C	
160-18778-5 MSD	PZ-201A-SS	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 268208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1 - DL	PZ-202-SS	Total/NA	Water	300.0	
160-18778-1 - DL2	PZ-202-SS	Total/NA	Water	300.0	
160-18778-2	PZ-104-SS	Total/NA	Water	300.0	
160-18778-3 - DL	PZ-104-SD	Total/NA	Water	300.0	
160-18778-3 - DL2	PZ-104-SD	Total/NA	Water	300.0	
160-18778-4	PZ-212-SD	Total/NA	Water	300.0	
160-18778-4 - DL	PZ-212-SD	Total/NA	Water	300.0	
160-18778-4 - DL2	PZ-212-SD	Total/NA	Water	300.0	
160-18778-5	PZ-201A-SS	Total/NA	Water	300.0	
160-18778-5 - DL	PZ-201A-SS	Total/NA	Water	300.0	
MB 160-268208/18	Method Blank	Total/NA	Water	300.0	
LCS 160-268208/19	Lab Control Sample	Total/NA	Water	300.0	
160-18778-5 MS	PZ-201A-SS	Total/NA	Water	300.0	
160-18778-5 MS - DL	PZ-201A-SS	Total/NA	Water	300.0	
160-18897-D-1 MS - DL	Matrix Spike	Total/NA	Water	300.0	
160-18897-D-1 MS - DL2	Matrix Spike	Total/NA	Water	300.0	
160-18897-D-1 DU - DL	Duplicate	Total/NA	Water	300.0	
160-18897-D-1 DU - DL2	Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 268303

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	7470A	
160-18778-2	PZ-104-SS	Total/NA	Water	7470A	
160-18778-3	PZ-104-SD	Total/NA	Water	7470A	
160-18778-4	PZ-212-SD	Total/NA	Water	7470A	
160-18778-5	PZ-201A-SS	Total/NA	Water	7470A	
MB 160-268303/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-268303/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18762-L-1-B MS	Matrix Spike	Total/NA	Water	7470A	
160-18762-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Metals (Continued)

Analysis Batch: 268743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	7470A	268303
160-18778-2	PZ-104-SS	Total/NA	Water	7470A	268303
160-18778-3	PZ-104-SD	Total/NA	Water	7470A	268303
160-18778-4	PZ-212-SD	Total/NA	Water	7470A	268303
160-18778-5	PZ-201A-SS	Total/NA	Water	7470A	268303
MB 160-268303/1-A	Method Blank	Total/NA	Water	7470A	268303
LCS 160-268303/2-A	Lab Control Sample	Total/NA	Water	7470A	268303
160-18762-L-1-B MS	Matrix Spike	Total/NA	Water	7470A	268303
160-18762-L-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	268303

Prep Batch: 268820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	3010A	
160-18778-2	PZ-104-SS	Total/NA	Water	3010A	
160-18778-3	PZ-104-SD	Total/NA	Water	3010A	
160-18778-4	PZ-212-SD	Total/NA	Water	3010A	
160-18778-5	PZ-201A-SS	Total/NA	Water	3010A	
MB 160-268820/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-268820/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18778-1 MS	PZ-202-SS	Total/NA	Water	3010A	
160-18778-1 MSD	PZ-202-SS	Total/NA	Water	3010A	

Analysis Batch: 269953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	6010C	268820
160-18778-2	PZ-104-SS	Total/NA	Water	6010C	268820
160-18778-3	PZ-104-SD	Total/NA	Water	6010C	268820
160-18778-4	PZ-212-SD	Total/NA	Water	6010C	268820
160-18778-5	PZ-201A-SS	Total/NA	Water	6010C	268820
MB 160-268820/1-A	Method Blank	Total/NA	Water	6010C	268820
LCS 160-268820/2-A	Lab Control Sample	Total/NA	Water	6010C	268820
160-18778-1 MS	PZ-202-SS	Total/NA	Water	6010C	268820
160-18778-1 MSD	PZ-202-SS	Total/NA	Water	6010C	268820

General Chemistry

Analysis Batch: 266765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	160.1	
160-18778-2	PZ-104-SS	Total/NA	Water	160.1	
160-18778-3	PZ-104-SD	Total/NA	Water	160.1	
160-18778-4	PZ-212-SD	Total/NA	Water	160.1	
160-18778-5	PZ-201A-SS	Total/NA	Water	160.1	
MB 160-266765/1	Method Blank	Total/NA	Water	160.1	
LCS 160-266765/2	Lab Control Sample	Total/NA	Water	160.1	
160-18758-D-3 DU	Duplicate	Total/NA	Water	160.1	

Prep Batch: 267445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1 - DL	PZ-202-SS	Total/NA	Water	410.4	

General Chemistry (Continued)

Prep Batch: 267445 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-2	PZ-104-SS	Total/NA	Water	410.4	
160-18778-3 - DL	PZ-104-SD	Total/NA	Water	410.4	
160-18778-4	PZ-212-SD	Total/NA	Water	410.4	
160-18778-5	PZ-201A-SS	Total/NA	Water	410.4	
MB 160-267445/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-267445/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18775-B-3-B MS	Matrix Spike	Total/NA	Water	410.4	
160-18756-C-4-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 267574

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1 - DL	PZ-202-SS	Total/NA	Water	410.4	267445
160-18778-2	PZ-104-SS	Total/NA	Water	410.4	267445
160-18778-3 - DL	PZ-104-SD	Total/NA	Water	410.4	267445
160-18778-4	PZ-212-SD	Total/NA	Water	410.4	267445
160-18778-5	PZ-201A-SS	Total/NA	Water	410.4	267445
MB 160-267445/3-A	Method Blank	Total/NA	Water	410.4	267445
LCS 160-267445/4-A	Lab Control Sample	Total/NA	Water	410.4	267445
160-18775-B-3-B MS	Matrix Spike	Total/NA	Water	410.4	267445
160-18756-C-4-B DU	Duplicate	Total/NA	Water	410.4	267445

Analysis Batch: 268615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	350.1	
160-18778-2	PZ-104-SS	Total/NA	Water	350.1	
160-18778-3 - DL	PZ-104-SD	Total/NA	Water	350.1	
160-18778-4	PZ-212-SD	Total/NA	Water	350.1	
160-18778-5	PZ-201A-SS	Total/NA	Water	350.1	
MB 160-268615/20	Method Blank	Total/NA	Water	350.1	
LCS 160-268615/23	Lab Control Sample	Total/NA	Water	350.1	
160-18757-E-1 MS	Matrix Spike	Total/NA	Water	350.1	
160-18778-5 MS	PZ-201A-SS	Total/NA	Water	350.1	
160-18757-E-1 DU	Duplicate	Total/NA	Water	350.1	

Analysis Batch: 268618

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-2	PZ-104-SS	Total/NA	Water	353.1 Preserved	
160-18778-4	PZ-212-SD	Total/NA	Water	353.1 Preserved	
160-18778-5	PZ-201A-SS	Total/NA	Water	353.1 Preserved	
MB 160-268618/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-268618/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18757-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18778-5 MS	PZ-201A-SS	Total/NA	Water	353.1 Preserved	
160-18757-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

Analysis Batch: 271335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	353.1 Preserved	
160-18778-3	PZ-104-SD	Total/NA	Water	353.1 Preserved	
MB 160-271335/4	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-271335/5	Lab Control Sample	Total/NA	Water	353.1 Preserved	

General Chemistry (Continued)

Analysis Batch: 271335 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18807-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 269161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18778-1	PZ-202-SS	Total/NA	Water	LSC_Dist_Susp	
160-18778-2	PZ-104-SS	Total/NA	Water	LSC_Dist_Susp	
160-18778-3	PZ-104-SD	Total/NA	Water	LSC_Dist_Susp	
160-18778-4	PZ-212-SD	Total/NA	Water	LSC_Dist_Susp	
160-18778-5	PZ-201A-SS	Total/NA	Water	LSC_Dist_Susp	
MB 160-269161/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-269161/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-18981-A-1-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
160-18978-A-1-B DU	Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18778-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18778-1	PZ-202-SS	105	100	93	104
160-18778-2	PZ-104-SS	111	108	107	119
160-18778-3	PZ-104-SD	117	102	104	114
160-18778-3 - DL	PZ-104-SD	109	95	94	111
160-18778-4	PZ-212-SD	106	99	100	110
160-18778-5	PZ-201A-SS	107	97	99	110
160-18778-5 MS	PZ-201A-SS	94	99	104	105
160-18778-5 MSD	PZ-201A-SS	94	100	102	105
160-18778-6	TRIP BLANK	108	95	96	109
LCS 160-267786/4	Lab Control Sample	94	95	97	107
LCSD 160-267786/5	Lab Control Sample Dup	97	98	100	108
MB 160-267786/7	Method Blank	109	95	96	112

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18807-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
9/23/2016 4:51:48 PM

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
chenise.lambert-sykes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18807-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18807-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/25/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 16.8 C.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4), PZ-102R-SS (160-18807-5) and TRIP BLANK (160-18807-6) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/01/2016 and 09/02/2016.

Analytical Batch: 267786

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-267786: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-267786/3)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 160-267786 were outside control limits. Sample matrix interference is suspected because the associated laboratory control samples' (LCS/LCSD) recoveries were within acceptance limits. 160-18778-B-5 MSD)

Job ID: 160-18807-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Samples were analyzed outside the 7 day, unpreserved, holding time. PZ-207-AS (160-18807-1) and D-87 (160-18807-2)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/09/2016 and analyzed on 09/14/2016.

Analytical Batch: 269953

The initial calibration verification (ICV) result for batch analytical batch 160-269953 was above the upper control limit for Thallium. Sample results were non-detects, and have been reported as qualified data. (ICV 160-269953/14)

The following sample(s) was diluted due to the nature of the sample matrix. Samples are high in salts: PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4), PZ-102R-SS (160-18807-5), (160-18778-G-1-B ^10), (160-18778-G-1-C MS ^), (160-18778-G-1-D MSD) and (160-18778-G-1-B SD ^). Elevated reporting limits (RLs) are provided.

The LCS is above the linear range check (LRC) for Boron. The LCS is within acceptable QC limits. (LCS 160-268820/2-A)

Due to the high concentration of Calcium, Sodium, and Magnesium the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-268820 and analytical batch 160-269953 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details. (160-18778-G-1-C MS ^) and (160-18778-G-1-D MSD)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-268820 and analytical batch 160-269953 were outside control limits for Phosphorous. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (160-18778-G-1-C MS ^) and (160-18778-G-1-D MSD)

The serial dilution performed for the following sample associated with batch 160-269953 was outside control limits for Manganese indicating matrix interference: (160-18778-G-1-B SD ^)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 08/26/2016.

Analytical Batch: 266765

The following samples in TDS batch 160-266765 were diluted to bring the concentrations of the target analyte within the calibration range: PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3) and PZ-101-SS (160-18807-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Job ID: 160-18807-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/16/2016.

Analytical Batch: 270305
The following samples in Anion batch 160-270305 were analyzed at dilution to start (2x), due to high sample conductivities that made undiluted analysis inadvisable: PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5). As a result, some anions are reported non-detect (ND) below the adjusted reporting limit (RL) at the initial dilution, while other anions are reported detect at the initial dilution and/or subsequent dilutions.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA
Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/22/2016.

Analytical Batch: 271200
The following samples in NH3 analytical batch 160-271200 were diluted to bring the concentration of the target analyte within the calibration range: PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3) and PZ-101-SS (160-18807-4). Elevated reporting limits (RLs) are provided.

Due to the high concentration of NH3, the following matrix spike (MS) for analytical batch 160-271200 could not be evaluated for accuracy: (160-18807-E-1 MS ^10). The concentration of ammonia spiked into the sample was diluted below reliable detection limits. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE
Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 09/22/2016.

Analytical Batch: 271335
Nitrate/Nitrite was detected in method blank MB 160-271335/4 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

The following matrix spike (MS) recoveries for NO3-NO2 analytical batch 160-271335 were outside control limits: (160-18807-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, as well as the historically low MS recoveries for this client.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND
Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 09/01/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)
Samples PZ-207-AS (160-18807-1), D-87 (160-18807-2), LR-103 (160-18807-3), PZ-101-SS (160-18807-4) and PZ-102R-SS (160-18807-5) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.3
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 3 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days): Standard			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide								Total Number of containers	Special Instructions/Note:
Preservation Code:							N	S	N	D	A	CB										
PZ-207-AS	8/25/16	0917	G	Water	N	N	✓	✓	✓	✓	✓										4	
D-87	8/25/16	1017	G	Water	N	N	✓	✓	✓	✓	✓										4	
LR-103	8/25/16	1141	G	Water	N	N	✓	✓	✓	✓	✓										4	
PZ-101-SS	8/25/16	1318	G	Water	N	N	✓	✓	✓	✓	✓										4	
PZ-107R-SS	8/25/16	1427	G	Water	N	N	✓	✓	✓	✓	✓										4	
TRIPBLANK	8/25/16	0800	G	Water	N	N					✓										2	
				Water																		
				Water																		
				Water																		
				Water																		
				Water																		

160-18807 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Brenna McDonald	8/25/16 1525			8/25/16 1525	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks:

9/23/2016

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18807-1

Login Number: 18807
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18807-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18807-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18807-1	PZ-207-AS	Water	08/25/16 09:17	08/25/16 15:25
160-18807-2	D-87	Water	08/25/16 10:17	08/25/16 15:25
160-18807-3	LR-103	Water	08/25/16 11:41	08/25/16 15:25
160-18807-4	PZ-101-SS	Water	08/25/16 13:18	08/25/16 15:25
160-18807-5	PZ-102R-SS	Water	08/25/16 14:27	08/25/16 15:25
160-18807-6	TRIP BLANK	Water	08/25/16 08:00	08/25/16 15:25

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18807-1

Client Sample ID: PZ-207-AS
Date Collected: 08/25/16 09:17
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**7.8**	**J H**	20	6.7	ug/L			09/02/16 02:08	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/02/16 02:08	1
Benzene	**1.9**	**J H**	5.0	0.25	ug/L			09/02/16 02:08	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/02/16 02:08	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/02/16 02:08	1
Bromoform	ND	H	5.0	0.37	ug/L			09/02/16 02:08	1
Carbon disulfide	ND	H	5.0	0.37	ug/L			09/02/16 02:08	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/02/16 02:08	1
Chlorobenzene	**14**	**H**	5.0	0.38	ug/L			09/02/16 02:08	1
Chloroethane	ND	H	10	0.38	ug/L			09/02/16 02:08	1
Chloroform	ND	H	5.0	0.15	ug/L			09/02/16 02:08	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/02/16 02:08	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/02/16 02:08	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/02/16 02:08	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/02/16 02:08	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/02/16 02:08	1
1,2-Dichlorobenzene	**0.67**	**J H**	5.0	0.28	ug/L			09/02/16 02:08	1
1,4-Dichlorobenzene	**3.5**	**J H**	5.0	0.35	ug/L			09/02/16 02:08	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/02/16 02:08	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/02/16 02:08	1
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/02/16 02:08	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/02/16 02:08	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/02/16 02:08	1
2-Hexanone	ND	H	20	0.59	ug/L			09/02/16 02:08	1
Methyl bromide	ND	H	10	0.40	ug/L			09/02/16 02:08	1
Methyl chloride	ND	H	10	0.55	ug/L			09/02/16 02:08	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/02/16 02:08	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/02/16 02:08	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/02/16 02:08	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/02/16 02:08	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/02/16 02:08	1
Styrene	ND	H	5.0	0.35	ug/L			09/02/16 02:08	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/02/16 02:08	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/02/16 02:08	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/02/16 02:08	1
Toluene	ND	H	5.0	1.0	ug/L			09/02/16 02:08	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/02/16 02:08	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/02/16 02:08	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/02/16 02:08	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/02/16 02:08	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/02/16 02:08	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/02/16 02:08	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/02/16 02:08	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/02/16 02:08	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/02/16 02:08	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/02/16 02:08	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/02/16 02:08	1

Client Sample ID: PZ-207-AS

Date Collected: 08/25/16 09:17
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*71 - 139*		*09/02/16 02:08*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 121*		*09/02/16 02:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*		*09/02/16 02:08*	*1*
Toluene-d8 (Surr)	*112*		*80 - 129*		*09/02/16 02:08*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.17**	**J**	0.20	0.020	mg/L			09/16/16 18:55	2
Sulfate	**1.0**		1.0	0.10	mg/L			09/16/16 18:55	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**180**		10	1.0	mg/L			09/16/16 19:12	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:10	5
Arsenic	**24**	**J**	50	20	ug/L		09/09/16 11:13	09/14/16 19:10	5
Barium	**550**		250	75	ug/L		09/09/16 11:13	09/14/16 19:10	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:10	5
Boron	**900**		500	130	ug/L		09/09/16 11:13	09/14/16 19:10	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:10	5
CaHard	**320000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:10	5
Calcium	**130000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:10	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:10	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:10	5
Copper	**26**	**J**	130	25	ug/L		09/09/16 11:13	09/14/16 19:10	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:10	5
Magnesium	**61**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:10	5
Manganese	**92**		75	13	ug/L		09/09/16 11:13	09/14/16 19:10	5
MgHard	**250000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:10	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:10	5
Phosphorus	**740**	**J**	1300	380	ug/L		09/09/16 11:13	09/14/16 19:10	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:10	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:10	5
Sodium	**190000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:10	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:10	5
Total Hardness	**570000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:10	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:10	5
Zinc	**86**	**J**	100	30	ug/L		09/09/16 11:13	09/14/16 19:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**	**J**	0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1200**		10	7.0	mg/L			08/26/16 10:27	1
Nitrate/Nitrite	**0.14**	**B F1**	0.050	0.011	mg/L			09/22/16 21:42	1
Chemical Oxygen Demand	**100**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Client Sample ID: PZ-207-AS

Lab Sample ID: 160-18807-1
Matrix: Water
Date Collected: 08/25/16 09:17
Date Received: 08/25/16 15:25

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**95**		5.0	2.2	mg/L			09/22/16 13:57	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-69.8	U	151	151	500	280	pCi/L	09/12/16 12:47	09/12/16 22:11	1

Client Sample ID: D-87

Lab Sample ID: 160-18807-2
Matrix: Water
Date Collected: 08/25/16 10:17
Date Received: 08/25/16 15:25

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**9.2**	**J H**	20	6.7	ug/L			09/02/16 02:34	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/02/16 02:34	1
Benzene	ND	H	5.0	0.25	ug/L			09/02/16 02:34	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/02/16 02:34	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/02/16 02:34	1
Bromoform	ND	H	5.0	0.37	ug/L			09/02/16 02:34	1
Carbon disulfide	ND	H	5.0	0.37	ug/L			09/02/16 02:34	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/02/16 02:34	1
Chlorobenzene	ND	H	5.0	0.38	ug/L			09/02/16 02:34	1
Chloroethane	ND	H	10	0.38	ug/L			09/02/16 02:34	1
Chloroform	ND	H	5.0	0.15	ug/L			09/02/16 02:34	1
cis-1,2-Dichloroethene	**0.48**	**J H**	5.0	0.16	ug/L			09/02/16 02:34	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/02/16 02:34	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/02/16 02:34	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/02/16 02:34	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/02/16 02:34	1
1,2-Dichlorobenzene	ND	H	5.0	0.28	ug/L			09/02/16 02:34	1
1,4-Dichlorobenzene	ND	H	5.0	0.35	ug/L			09/02/16 02:34	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/02/16 02:34	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/02/16 02:34	1
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/02/16 02:34	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/02/16 02:34	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/02/16 02:34	1
2-Hexanone	ND	H	20	0.59	ug/L			09/02/16 02:34	1
Methyl bromide	ND	H	10	0.40	ug/L			09/02/16 02:34	1
Methyl chloride	ND	H	10	0.55	ug/L			09/02/16 02:34	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/02/16 02:34	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/02/16 02:34	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/02/16 02:34	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/02/16 02:34	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/02/16 02:34	1
Styrene	ND	H	5.0	0.35	ug/L			09/02/16 02:34	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/02/16 02:34	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/02/16 02:34	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/02/16 02:34	1
Toluene	ND	H	5.0	1.0	ug/L			09/02/16 02:34	1

Client Sample ID: D-87
Date Collected: 08/25/16 10:17
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/02/16 02:34	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/02/16 02:34	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/02/16 02:34	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/02/16 02:34	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/02/16 02:34	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/02/16 02:34	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/02/16 02:34	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/02/16 02:34	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/02/16 02:34	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/02/16 02:34	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/02/16 02:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*71 - 139*		*09/02/16 02:34*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 121*		*09/02/16 02:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*99*		*76 - 121*		*09/02/16 02:34*	*1*
Toluene-d8 (Surr)	*112*		*80 - 129*		*09/02/16 02:34*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.17**	**J**	0.20	0.020	mg/L			09/16/16 20:34	2
Sulfate	**4.3**		1.0	0.10	mg/L			09/16/16 20:34	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**410**		20	2.0	mg/L			09/16/16 20:50	100

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:15	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 19:15	5
Barium	**2400**		250	75	ug/L		09/09/16 11:13	09/14/16 19:15	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:15	5
Boron	**1500**		500	130	ug/L		09/09/16 11:13	09/14/16 19:15	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:15	5
CaHard	**750000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:15	5
Calcium	**300000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:15	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:15	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:15	5
Copper	**75**	**J**	130	25	ug/L		09/09/16 11:13	09/14/16 19:15	5
Lead	**64**		50	15	ug/L		09/09/16 11:13	09/14/16 19:15	5
Magnesium	**79**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:15	5
Manganese	**660**		75	13	ug/L		09/09/16 11:13	09/14/16 19:15	5
MgHard	**330000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:15	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:15	5
Phosphorus	**1200**	**J**	1300	380	ug/L		09/09/16 11:13	09/14/16 19:15	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:15	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:15	5
Sodium	**320000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:15	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:15	5

Client Sample ID: D-87

Date Collected: 08/25/16 10:17
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-2

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	**1100000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:15	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:15	5
Zinc	**110**		100	30	ug/L		09/09/16 11:13	09/14/16 19:15	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1900**		25	17	mg/L			08/26/16 10:27	1
Nitrate/Nitrite	**0.23**	**B**	0.050	0.011	mg/L			09/22/16 21:52	1
Chemical Oxygen Demand	**130**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**14**		0.50	0.22	mg/L			09/22/16 14:09	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-75.2	U	155	155	500	291	pCi/L	09/12/16 12:47	09/12/16 22:34	1

Client Sample ID: LR-103

Date Collected: 08/25/16 11:41
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-3

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/02/16 02:59	1
Acrylonitrile	ND		50	1.7	ug/L			09/02/16 02:59	1
Benzene	ND		5.0	0.25	ug/L			09/02/16 02:59	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/02/16 02:59	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/02/16 02:59	1
Bromoform	ND		5.0	0.37	ug/L			09/02/16 02:59	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/02/16 02:59	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/02/16 02:59	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/02/16 02:59	1
Chloroethane	ND		10	0.38	ug/L			09/02/16 02:59	1
Chloroform	ND		5.0	0.15	ug/L			09/02/16 02:59	1
cis-1,2-Dichloroethene	**0.28**	**J**	5.0	0.16	ug/L			09/02/16 02:59	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/02/16 02:59	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/02/16 02:59	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/02/16 02:59	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/02/16 02:59	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/02/16 02:59	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/02/16 02:59	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/02/16 02:59	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/02/16 02:59	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/02/16 02:59	1

Client Sample ID: LR-103
Date Collected: 08/25/16 11:41
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/02/16 02:59	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/02/16 02:59	1
2-Hexanone	ND		20	0.59	ug/L			09/02/16 02:59	1
Methyl bromide	ND		10	0.40	ug/L			09/02/16 02:59	1
Methyl chloride	ND		10	0.55	ug/L			09/02/16 02:59	1
Methylene bromide	ND		5.0	0.41	ug/L			09/02/16 02:59	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/02/16 02:59	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/02/16 02:59	1
Methyl iodide	ND		5.0	1.5	ug/L			09/02/16 02:59	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/02/16 02:59	1
Styrene	ND		5.0	0.35	ug/L			09/02/16 02:59	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/02/16 02:59	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/02/16 02:59	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/02/16 02:59	1
Toluene	ND		5.0	1.0	ug/L			09/02/16 02:59	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/02/16 02:59	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/02/16 02:59	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/02/16 02:59	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/02/16 02:59	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/02/16 02:59	1
Trichloroethene	ND		5.0	0.29	ug/L			09/02/16 02:59	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/02/16 02:59	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/02/16 02:59	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/02/16 02:59	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/02/16 02:59	1
Xylenes, Total	ND		10	0.85	ug/L			09/02/16 02:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*71 - 139*		*09/02/16 02:59*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 121*		*09/02/16 02:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/02/16 02:59*	*1*
Toluene-d8 (Surr)	*112*		*80 - 129*		*09/02/16 02:59*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.24**		0.20	0.020	mg/L			09/16/16 21:07	2
Sulfate	**0.48**	**J**	1.0	0.10	mg/L			09/16/16 21:07	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		10	1.0	mg/L			09/16/16 21:23	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:19	5
Arsenic	**120**		50	20	ug/L		09/09/16 11:13	09/14/16 19:19	5
Barium	**1100**		250	75	ug/L		09/09/16 11:13	09/14/16 19:19	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:19	5
Boron	**170**	**J**	500	130	ug/L		09/09/16 11:13	09/14/16 19:19	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:19	5

Client Sample ID: LR-103

Date Collected: 08/25/16 11:41
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-3

Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
CaHard	660000		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:19	5
Calcium	260000		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:19	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:19	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:19	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:19	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:19	5
Magnesium	70		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:19	5
Manganese	810		75	13	ug/L		09/09/16 11:13	09/14/16 19:19	5
MgHard	290000		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:19	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:19	5
Phosphorus	540	J	1300	380	ug/L		09/09/16 11:13	09/14/16 19:19	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:19	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:19	5
Sodium	63000		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:19	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:19	5
Total Hardness	950000		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:19	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:19	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 19:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	1200		10	7.0	mg/L			08/26/16 10:27	1
Nitrate/Nitrite	0.24	B	0.050	0.011	mg/L			09/22/16 21:55	1
Chemical Oxygen Demand	43		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	2.2		0.50	0.22	mg/L			09/22/16 14:11	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-96.8	U	151	151	500	287	pCi/L	09/12/16 12:47	09/12/16 22:57	1

Client Sample ID: PZ-101-SS

Date Collected: 08/25/16 13:18
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/02/16 03:24	1
Acrylonitrile	ND		50	1.7	ug/L			09/02/16 03:24	1
Benzene	ND		5.0	0.25	ug/L			09/02/16 03:24	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/02/16 03:24	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/02/16 03:24	1
Bromoform	ND		5.0	0.37	ug/L			09/02/16 03:24	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18807-1

Client Sample ID: PZ-101-SS
Date Collected: 08/25/16 13:18
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND		5.0	0.37	ug/L			09/02/16 03:24	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/02/16 03:24	1
Chlorobenzene	**9.8**		5.0	0.38	ug/L			09/02/16 03:24	1
Chloroethane	ND		10	0.38	ug/L			09/02/16 03:24	1
Chloroform	ND		5.0	0.15	ug/L			09/02/16 03:24	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/02/16 03:24	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/02/16 03:24	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/02/16 03:24	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/02/16 03:24	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/02/16 03:24	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/02/16 03:24	1
1,4-Dichlorobenzene	**1.0**	**J**	5.0	0.35	ug/L			09/02/16 03:24	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/02/16 03:24	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/02/16 03:24	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/02/16 03:24	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/02/16 03:24	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/02/16 03:24	1
2-Hexanone	ND		20	0.59	ug/L			09/02/16 03:24	1
Methyl bromide	ND		10	0.40	ug/L			09/02/16 03:24	1
Methyl chloride	ND		10	0.55	ug/L			09/02/16 03:24	1
Methylene bromide	ND		5.0	0.41	ug/L			09/02/16 03:24	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/02/16 03:24	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/02/16 03:24	1
Methyl iodide	ND		5.0	1.5	ug/L			09/02/16 03:24	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/02/16 03:24	1
Styrene	ND		5.0	0.35	ug/L			09/02/16 03:24	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/02/16 03:24	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/02/16 03:24	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/02/16 03:24	1
Toluene	ND		5.0	1.0	ug/L			09/02/16 03:24	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/02/16 03:24	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/02/16 03:24	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/02/16 03:24	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/02/16 03:24	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/02/16 03:24	1
Trichloroethene	ND		5.0	0.29	ug/L			09/02/16 03:24	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/02/16 03:24	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/02/16 03:24	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/02/16 03:24	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/02/16 03:24	1
Xylenes, Total	ND		10	0.85	ug/L			09/02/16 03:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*71 - 139*		*09/02/16 03:24*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 121*		*09/02/16 03:24*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*		*09/02/16 03:24*	*1*
Toluene-d8 (Surr)	*116*		*80 - 129*		*09/02/16 03:24*	*1*

Client Sample ID: PZ-101-SS

Date Collected: 08/25/16 13:18
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.2**		0.20	0.020	mg/L			09/16/16 22:12	2
Sulfate	**1.5**		1.0	0.10	mg/L			09/16/16 22:12	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**230**		20	2.0	mg/L			09/16/16 22:29	100

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:24	5
Arsenic	**75**		50	20	ug/L		09/09/16 11:13	09/14/16 19:24	5
Barium	**550**		250	75	ug/L		09/09/16 11:13	09/14/16 19:24	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:24	5
Boron	**690**		500	130	ug/L		09/09/16 11:13	09/14/16 19:24	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:24	5
CaHard	**440000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:24	5
Calcium	**180000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:24	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:24	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:24	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:24	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:24	5
Magnesium	**96**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:24	5
Manganese	**140**		75	13	ug/L		09/09/16 11:13	09/14/16 19:24	5
MgHard	**390000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:24	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:24	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 19:24	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:24	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:24	5
Sodium	**90000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:24	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:24	5
Total Hardness	**840000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:24	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:24	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 19:24	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1300**		10	7.0	mg/L			08/26/16 10:27	1
Nitrate/Nitrite	**0.022**	**J B**	0.050	0.011	mg/L			09/22/16 21:58	1
Chemical Oxygen Demand	**100**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**12**		0.50	0.22	mg/L			09/22/16 14:13	10

Client Sample ID: PZ-101-SS

Lab Sample ID: 160-18807-4
Date Collected: 08/25/16 13:18
Matrix: Water
Date Received: 08/25/16 15:25

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	5130		434	626	500	288	pCi/L	09/12/16 12:47	09/12/16 23:20	1

Client Sample ID: PZ-102R-SS

Lab Sample ID: 160-18807-5
Date Collected: 08/25/16 14:27
Matrix: Water
Date Received: 08/25/16 15:25

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/02/16 03:49	1
Acrylonitrile	ND		50	1.7	ug/L			09/02/16 03:49	1
Benzene	ND		5.0	0.25	ug/L			09/02/16 03:49	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/02/16 03:49	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/02/16 03:49	1
Bromoform	ND		5.0	0.37	ug/L			09/02/16 03:49	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/02/16 03:49	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/02/16 03:49	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/02/16 03:49	1
Chloroethane	ND		10	0.38	ug/L			09/02/16 03:49	1
Chloroform	ND		5.0	0.15	ug/L			09/02/16 03:49	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/02/16 03:49	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/02/16 03:49	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/02/16 03:49	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/02/16 03:49	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/02/16 03:49	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/02/16 03:49	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/02/16 03:49	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/02/16 03:49	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/02/16 03:49	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/02/16 03:49	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/02/16 03:49	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/02/16 03:49	1
2-Hexanone	ND		20	0.59	ug/L			09/02/16 03:49	1
Methyl bromide	ND		10	0.40	ug/L			09/02/16 03:49	1
Methyl chloride	ND		10	0.55	ug/L			09/02/16 03:49	1
Methylene bromide	ND		5.0	0.41	ug/L			09/02/16 03:49	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/02/16 03:49	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/02/16 03:49	1
Methyl iodide	ND		5.0	1.5	ug/L			09/02/16 03:49	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/02/16 03:49	1
Styrene	ND		5.0	0.35	ug/L			09/02/16 03:49	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/02/16 03:49	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/02/16 03:49	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/02/16 03:49	1
Toluene	ND		5.0	1.0	ug/L			09/02/16 03:49	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/02/16 03:49	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/02/16 03:49	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/02/16 03:49	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/02/16 03:49	1

Client Sample ID: PZ-102R-SS

Date Collected: 08/25/16 14:27
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/02/16 03:49	1
Trichloroethene	ND		5.0	0.29	ug/L			09/02/16 03:49	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/02/16 03:49	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/02/16 03:49	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/02/16 03:49	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/02/16 03:49	1
Xylenes, Total	ND		10	0.85	ug/L			09/02/16 03:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*71 - 139*		*09/02/16 03:49*	*1*
Dibromofluoromethane (Surr)	*93*		*80 - 121*		*09/02/16 03:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/02/16 03:49*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/02/16 03:49*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.52**		0.10	0.010	mg/L			09/16/16 22:45	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**58**		5.0	0.50	mg/L			09/16/16 23:02	10
Chloride	**6.8**		2.0	0.20	mg/L			09/16/16 23:02	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:28	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 19:28	5
Barium	**81**	**J**	250	75	ug/L		09/09/16 11:13	09/14/16 19:28	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:28	5
Boron	ND		500	130	ug/L		09/09/16 11:13	09/14/16 19:28	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:28	5
CaHard	**300000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:28	5
Calcium	**120000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:28	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:28	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:28	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:28	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:28	5
Magnesium	**43**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:28	5
Manganese	**120**		75	13	ug/L		09/09/16 11:13	09/14/16 19:28	5
MgHard	**180000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:28	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:28	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 19:28	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:28	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:28	5
Sodium	**21000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:28	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:28	5
Total Hardness	**470000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:28	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:28	5
Zinc	**35**	**J**	100	30	ug/L		09/09/16 11:13	09/14/16 19:28	5

Client Sample ID: PZ-102R-SS

Lab Sample ID: 160-18807-5
Date Collected: 08/25/16 14:27
Matrix: Water
Date Received: 08/25/16 15:25

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	550		5.0	3.5	mg/L			08/26/16 10:27	1
Ammonia	0.15		0.050	0.022	mg/L			09/22/16 14:16	1
Nitrate/Nitrite	0.017	J B	0.050	0.011	mg/L			09/22/16 22:07	1
Chemical Oxygen Demand	27		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-154	U	146	146	500	288	pCi/L	09/12/16 12:47	09/12/16 23:42	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18807-6
Date Collected: 08/25/16 08:00
Matrix: Water
Date Received: 08/25/16 15:25

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 19:03	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 19:03	1
Benzene	ND		5.0	0.25	ug/L			09/01/16 19:03	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 19:03	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 19:03	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 19:03	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 19:03	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 19:03	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/01/16 19:03	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 19:03	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 19:03	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 19:03	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 19:03	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 19:03	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 19:03	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 19:03	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/01/16 19:03	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/01/16 19:03	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 19:03	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 19:03	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 19:03	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 19:03	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/01/16 19:03	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 19:03	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 19:03	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 19:03	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 19:03	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 19:03	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/01/16 19:03	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18807-1

Client Sample ID: TRIP BLANK
Date Collected: 08/25/16 08:00
Date Received: 08/25/16 15:25

Lab Sample ID: 160-18807-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 19:03	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 19:03	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 19:03	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 19:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 19:03	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 19:03	1
Toluene	ND		5.0	1.0	ug/L			09/01/16 19:03	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 19:03	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 19:03	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 19:03	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 19:03	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 19:03	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 19:03	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 19:03	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 19:03	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 19:03	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 19:03	1
Xylenes, Total	ND		10	0.85	ug/L			09/01/16 19:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*71 - 139*		*09/01/16 19:03*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 121*		*09/01/16 19:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*		*09/01/16 19:03*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/01/16 19:03*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-267786/7
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/01/16 18:38	1
Acrylonitrile	ND		50	1.7	ug/L			09/01/16 18:38	1
Benzene	ND		5.0	0.25	ug/L			09/01/16 18:38	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/01/16 18:38	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/01/16 18:38	1
Bromoform	ND		5.0	0.37	ug/L			09/01/16 18:38	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/01/16 18:38	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/01/16 18:38	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/01/16 18:38	1
Chloroethane	ND		10	0.38	ug/L			09/01/16 18:38	1
Chloroform	ND		5.0	0.15	ug/L			09/01/16 18:38	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/01/16 18:38	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/01/16 18:38	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/01/16 18:38	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/01/16 18:38	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/01/16 18:38	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/01/16 18:38	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/01/16 18:38	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/01/16 18:38	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/01/16 18:38	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/01/16 18:38	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/01/16 18:38	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/01/16 18:38	1
2-Hexanone	ND		20	0.59	ug/L			09/01/16 18:38	1
Methyl bromide	ND		10	0.40	ug/L			09/01/16 18:38	1
Methyl chloride	ND		10	0.55	ug/L			09/01/16 18:38	1
Methylene bromide	ND		5.0	0.41	ug/L			09/01/16 18:38	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/01/16 18:38	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/01/16 18:38	1
Methyl iodide	ND		5.0	1.5	ug/L			09/01/16 18:38	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/01/16 18:38	1
Styrene	ND		5.0	0.35	ug/L			09/01/16 18:38	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/01/16 18:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/01/16 18:38	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/01/16 18:38	1
Toluene	ND		5.0	1.0	ug/L			09/01/16 18:38	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/01/16 18:38	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/01/16 18:38	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/01/16 18:38	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/01/16 18:38	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/01/16 18:38	1
Trichloroethene	ND		5.0	0.29	ug/L			09/01/16 18:38	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/01/16 18:38	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/01/16 18:38	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/01/16 18:38	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/01/16 18:38	1
Xylenes, Total	ND		10	0.85	ug/L			09/01/16 18:38	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-267786/7
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		71 - 139		09/01/16 18:38	1
Dibromofluoromethane (Surr)	95		80 - 121		09/01/16 18:38	1
1,2-Dichloroethane-d4 (Surr)	96		76 - 121		09/01/16 18:38	1
Toluene-d8 (Surr)	112		80 - 129		09/01/16 18:38	1

Lab Sample ID: LCS 160-267786/4
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	49.7		ug/L		99	63 - 131
Acrylonitrile	500	485		ug/L		97	81 - 117
Benzene	50.0	51.6		ug/L		103	80 - 120
Bromochloromethane	50.0	48.3		ug/L		97	80 - 120
Bromodichloromethane	50.0	48.7		ug/L		97	80 - 120
Bromoform	50.0	45.1		ug/L		90	80 - 120
Carbon disulfide	50.0	51.7		ug/L		103	79 - 126
Carbon tetrachloride	50.0	49.5		ug/L		99	73 - 123
Chlorobenzene	50.0	52.7		ug/L		105	80 - 120
Chloroethane	50.0	45.8		ug/L		92	52 - 140
Chloroform	50.0	49.4		ug/L		99	80 - 120
cis-1,2-Dichloroethene	50.0	48.2		ug/L		96	80 - 120
cis-1,3-Dichloropropene	50.0	46.9		ug/L		94	80 - 122
Dibromochloromethane	50.0	48.2		ug/L		96	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	44.8		ug/L		90	77 - 125
1,2-Dibromoethane (EDB)	50.0	45.7		ug/L		91	80 - 120
1,2-Dichlorobenzene	50.0	48.4		ug/L		97	80 - 120
1,4-Dichlorobenzene	50.0	51.8		ug/L		104	80 - 120
1,1-Dichloroethane	50.0	49.8		ug/L		100	80 - 120
1,2-Dichloroethane	50.0	47.8		ug/L		96	69 - 124
1,1-Dichloroethene	50.0	48.7		ug/L		97	77 - 126
1,2-Dichloropropane	50.0	48.1		ug/L		96	80 - 120
Ethylbenzene	50.0	58.0		ug/L		116	80 - 120
2-Hexanone	50.0	46.1		ug/L		92	64 - 136
Methyl bromide	50.0	52.3		ug/L		105	57 - 139
Methyl chloride	50.0	49.9		ug/L		100	70 - 127
Methylene bromide	50.0	46.4		ug/L		93	78 - 120
Methylene Chloride	50.0	48.8		ug/L		98	80 - 120
Methyl Ethyl Ketone	50.0	47.4		ug/L		95	70 - 130
Methyl iodide	50.0	49.1		ug/L		98	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	50.2		ug/L		100	76 - 129
Styrene	50.0	53.3		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	50.0	50.9		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	50.0	44.5		ug/L		89	80 - 120
Tetrachloroethene	50.0	48.0		ug/L		96	80 - 120
Toluene	50.0	52.6		ug/L		105	80 - 120
trans-1,4-Dichloro-2-butene	50.0	44.2		ug/L		88	75 - 127
trans-1,2-Dichloroethene	50.0	49.1		ug/L		98	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-267786/4
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	47.6		ug/L		95	80 - 130		
1,1,1-Trichloroethane			50.0	49.5		ug/L		99	76 - 120		
1,1,2-Trichloroethane			50.0	46.6		ug/L		93	80 - 120		
Trichloroethene			50.0	48.2		ug/L		96	73 - 120		
Trichlorofluoromethane			50.0	52.7		ug/L		105	74 - 130		
1,2,3-Trichloropropane			50.0	44.5		ug/L		89	80 - 120		
Vinyl acetate			50.0	48.5		ug/L		97	37 - 140		
Vinyl chloride			50.0	51.1		ug/L		102	51 - 140		
Xylenes, Total			100	108		ug/L		108	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*
Toluene-d8 (Surr)	*107*		*80 - 129*

Lab Sample ID: LCSD 160-267786/5
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	50.3		ug/L		101	63 - 131	1	20
Acrylonitrile			500	492		ug/L		98	81 - 117	1	20
Benzene			50.0	52.0		ug/L		104	80 - 120	1	20
Bromochloromethane			50.0	49.6		ug/L		99	80 - 120	3	20
Bromodichloromethane			50.0	49.3		ug/L		99	80 - 120	1	20
Bromoform			50.0	46.5		ug/L		93	80 - 120	3	20
Carbon disulfide			50.0	52.0		ug/L		104	79 - 126	1	20
Carbon tetrachloride			50.0	50.0		ug/L		100	73 - 123	1	20
Chlorobenzene			50.0	53.3		ug/L		107	80 - 120	1	20
Chloroethane			50.0	42.9		ug/L		86	52 - 140	6	20
Chloroform			50.0	49.7		ug/L		99	80 - 120	1	20
cis-1,2-Dichloroethene			50.0	48.9		ug/L		98	80 - 120	1	20
cis-1,3-Dichloropropene			50.0	48.7		ug/L		97	80 - 122	4	20
Dibromochloromethane			50.0	49.5		ug/L		99	80 - 120	3	20
1,2-Dibromo-3-Chloropropane			50.0	45.7		ug/L		91	77 - 125	2	20
1,2-Dibromoethane (EDB)			50.0	47.4		ug/L		95	80 - 120	4	20
1,2-Dichlorobenzene			50.0	50.4		ug/L		101	80 - 120	4	20
1,4-Dichlorobenzene			50.0	52.9		ug/L		106	80 - 120	2	20
1,1-Dichloroethane			50.0	50.7		ug/L		101	80 - 120	2	20
1,2-Dichloroethane			50.0	49.2		ug/L		98	69 - 124	3	20
1,1-Dichloroethene			50.0	49.9		ug/L		100	77 - 126	3	20
1,2-Dichloropropane			50.0	49.7		ug/L		99	80 - 120	3	20
Ethylbenzene			50.0	56.6		ug/L		113	80 - 120	2	20
2-Hexanone			50.0	46.9		ug/L		94	64 - 136	2	20
Methyl bromide			50.0	51.5		ug/L		103	57 - 139	2	20
Methyl chloride			50.0	50.2		ug/L		100	70 - 127	1	20
Methylene bromide			50.0	49.2		ug/L		98	78 - 120	6	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-267786/5
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	49.4		ug/L		99	80 - 120	1	20
Methyl Ethyl Ketone			50.0	48.0		ug/L		96	70 - 130	1	20
Methyl iodide			50.0	50.3		ug/L		101	73 - 125	3	20
4-Methyl-2-pentanone (MIBK)			50.0	49.8		ug/L		100	76 - 129	1	20
Styrene			50.0	53.6		ug/L		107	80 - 120	1	20
1,1,1,2-Tetrachloroethane			50.0	52.4		ug/L		105	80 - 120	3	20
1,1,2,2-Tetrachloroethane			50.0	45.4		ug/L		91	80 - 120	2	20
Tetrachloroethene			50.0	49.1		ug/L		98	80 - 120	2	20
Toluene			50.0	53.1		ug/L		106	80 - 120	1	20
trans-1,4-Dichloro-2-butene			50.0	46.1		ug/L		92	75 - 127	4	20
trans-1,2-Dichloroethene			50.0	49.2		ug/L		98	80 - 120	0	20
trans-1,3-Dichloropropene			50.0	50.0		ug/L		100	80 - 130	5	20
1,1,1-Trichloroethane			50.0	50.3		ug/L		101	76 - 120	2	20
1,1,2-Trichloroethane			50.0	47.7		ug/L		95	80 - 120	2	20
Trichloroethene			50.0	50.1		ug/L		100	73 - 120	4	20
Trichlorofluoromethane			50.0	50.7		ug/L		101	74 - 130	4	20
1,2,3-Trichloropropane			50.0	45.3		ug/L		91	80 - 120	2	20
Vinyl acetate			50.0	48.7		ug/L		97	37 - 140	0	20
Vinyl chloride			50.0	49.4		ug/L		99	51 - 140	3	20
Xylenes, Total			100	109		ug/L		109	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*97*		*71 - 139*
Dibromofluoromethane (Surr)	*98*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*
Toluene-d8 (Surr)	*108*		*80 - 129*

Lab Sample ID: 160-18778-B-5 MS
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	48.9		ug/L		98	52 - 138
Acrylonitrile	ND		500	536		ug/L		107	58 - 142
Benzene	ND		50.0	52.8		ug/L		106	80 - 120
Bromochloromethane	ND		50.0	49.1		ug/L		98	72 - 125
Bromodichloromethane	ND		50.0	50.3		ug/L		101	71 - 128
Bromoform	ND		50.0	44.5		ug/L		89	65 - 133
Carbon disulfide	ND		50.0	51.7		ug/L		103	69 - 139
Carbon tetrachloride	ND		50.0	47.9		ug/L		96	70 - 126
Chlorobenzene	ND		50.0	53.0		ug/L		106	80 - 120
Chloroethane	ND		50.0	47.4		ug/L		95	59 - 144
Chloroform	ND		50.0	50.6		ug/L		101	80 - 120
cis-1,2-Dichloroethene	ND		50.0	49.4		ug/L		99	80 - 124
cis-1,3-Dichloropropene	ND		50.0	48.8		ug/L		98	67 - 130
Dibromochloromethane	ND		50.0	48.8		ug/L		98	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	49.4		ug/L		99	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	47.6		ug/L		95	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18778-B-5 MS
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	50.1		ug/L		100	80 - 124
1,4-Dichlorobenzene	ND		50.0	51.7		ug/L		103	80 - 120
1,1-Dichloroethane	ND		50.0	50.2		ug/L		100	80 - 120
1,2-Dichloroethane	ND		50.0	50.2		ug/L		100	56 - 136
1,1-Dichloroethene	ND		50.0	47.9		ug/L		96	66 - 137
1,2-Dichloropropane	ND		50.0	49.4		ug/L		99	80 - 123
Ethylbenzene	ND	F1	50.0	58.3		ug/L		117	80 - 121
2-Hexanone	ND		50.0	47.4		ug/L		95	47 - 150
Methyl bromide	ND		50.0	55.1		ug/L		110	53 - 146
Methyl chloride	ND		50.0	48.7		ug/L		97	61 - 137
Methylene bromide	ND		50.0	50.4		ug/L		101	61 - 136
Methylene Chloride	ND		50.0	49.7		ug/L		99	80 - 120
Methyl Ethyl Ketone	ND		50.0	50.5		ug/L		101	58 - 143
Methyl iodide	ND		50.0	49.2		ug/L		98	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	51.7		ug/L		103	53 - 150
Styrene	ND		50.0	52.8		ug/L		106	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	50.9		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	48.7		ug/L		97	60 - 150
Tetrachloroethene	ND		50.0	46.3		ug/L		93	66 - 132
Toluene	ND		50.0	52.4		ug/L		105	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	38.7		ug/L		77	55 - 146
trans-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	79 - 121
trans-1,3-Dichloropropene	ND		50.0	49.1		ug/L		98	68 - 143
1,1,1-Trichloroethane	ND		50.0	49.5		ug/L		99	74 - 123
1,1,2-Trichloroethane	ND		50.0	47.8		ug/L		96	70 - 134
Trichloroethene	ND		50.0	48.4		ug/L		97	63 - 120
Trichlorofluoromethane	ND		50.0	51.6		ug/L		103	53 - 150
1,2,3-Trichloropropane	ND		50.0	48.8		ug/L		98	62 - 137
Vinyl acetate	ND		50.0	54.7		ug/L		109	63 - 150
Vinyl chloride	ND		50.0	51.5		ug/L		103	54 - 140
Xylenes, Total	ND		100	107		ug/L		107	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*99*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*
Toluene-d8 (Surr)	*105*		*80 - 129*

Lab Sample ID: 160-18778-B-5 MSD
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	47.8		ug/L		96	52 - 138	2	20
Acrylonitrile	ND		500	528		ug/L		106	58 - 142	2	20
Benzene	ND		50.0	54.1		ug/L		108	80 - 120	2	20
Bromochloromethane	ND		50.0	51.1		ug/L		102	72 - 125	4	20
Bromodichloromethane	ND		50.0	51.4		ug/L		103	71 - 128	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18778-B-5 MSD
Matrix: Water
Analysis Batch: 267786

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	46.6		ug/L		93	65 - 133	5	20
Carbon disulfide	ND		50.0	55.3		ug/L		111	69 - 139	7	20
Carbon tetrachloride	ND		50.0	51.8		ug/L		104	70 - 126	8	20
Chlorobenzene	ND		50.0	54.4		ug/L		109	80 - 120	3	20
Chloroethane	ND		50.0	47.4		ug/L		95	59 - 144	0	20
Chloroform	ND		50.0	52.5		ug/L		105	80 - 120	4	20
cis-1,2-Dichloroethene	ND		50.0	51.4		ug/L		103	80 - 124	4	20
cis-1,3-Dichloropropene	ND		50.0	48.5		ug/L		97	67 - 130	1	20
Dibromochloromethane	ND		50.0	49.8		ug/L		100	68 - 133	2	20
1,2-Dibromo-3-Chloropropane	ND		50.0	47.9		ug/L		96	58 - 148	3	20
1,2-Dibromoethane (EDB)	ND		50.0	46.9		ug/L		94	65 - 138	1	20
1,2-Dichlorobenzene	ND		50.0	51.8		ug/L		104	80 - 124	3	20
1,4-Dichlorobenzene	ND		50.0	53.8		ug/L		108	80 - 120	4	20
1,1-Dichloroethane	ND		50.0	52.5		ug/L		105	80 - 120	5	20
1,2-Dichloroethane	ND		50.0	50.8		ug/L		102	56 - 136	1	20
1,1-Dichloroethene	ND		50.0	51.7		ug/L		103	66 - 137	8	20
1,2-Dichloropropane	ND		50.0	50.1		ug/L		100	80 - 123	1	20
Ethylbenzene	ND	F1	50.0	60.9	F1	ug/L		122	80 - 121	4	20
2-Hexanone	ND		50.0	46.4		ug/L		93	47 - 150	2	20
Methyl bromide	ND		50.0	55.3		ug/L		111	53 - 146	0	20
Methyl chloride	ND		50.0	50.7		ug/L		101	61 - 137	4	20
Methylene bromide	ND		50.0	50.2		ug/L		100	61 - 136	0	20
Methylene Chloride	ND		50.0	52.2		ug/L		104	80 - 120	5	20
Methyl Ethyl Ketone	ND		50.0	47.9		ug/L		96	58 - 143	5	20
Methyl iodide	ND		50.0	52.4		ug/L		105	69 - 124	6	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	51.2		ug/L		102	53 - 150	1	20
Styrene	ND		50.0	54.1		ug/L		108	44 - 150	2	20
1,1,1,2-Tetrachloroethane	ND		50.0	54.1		ug/L		108	80 - 120	6	20
1,1,2,2-Tetrachloroethane	ND		50.0	49.1		ug/L		98	60 - 150	1	20
Tetrachloroethene	ND		50.0	49.1		ug/L		98	66 - 132	6	20
Toluene	ND		50.0	54.0		ug/L		108	75 - 134	3	20
trans-1,4-Dichloro-2-butene	ND		50.0	40.5		ug/L		81	55 - 146	4	20
trans-1,2-Dichloroethene	ND		50.0	51.9		ug/L		104	79 - 121	6	20
trans-1,3-Dichloropropene	ND		50.0	48.8		ug/L		98	68 - 143	1	20
1,1,1-Trichloroethane	ND		50.0	54.0		ug/L		108	74 - 123	9	20
1,1,2-Trichloroethane	ND		50.0	47.9		ug/L		96	70 - 134	0	20
Trichloroethene	ND		50.0	49.9		ug/L		100	63 - 120	3	20
Trichlorofluoromethane	ND		50.0	53.8		ug/L		108	53 - 150	4	20
1,2,3-Trichloropropane	ND		50.0	46.1		ug/L		92	62 - 137	6	20
Vinyl acetate	ND		50.0	54.0		ug/L		108	63 - 150	1	20
Vinyl chloride	ND		50.0	51.5		ug/L		103	54 - 140	0	20
Xylenes, Total	ND		100	111		ug/L		111	80 - 124	4	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*100*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*
Toluene-d8 (Surr)	*105*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-270305/9
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/16/16 14:54	1
Sulfate	ND		0.50	0.050	mg/L			09/16/16 14:54	1
Chloride	ND		0.20	0.020	mg/L			09/16/16 14:54	1

Lab Sample ID: LCS 160-270305/10
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	1.01		mg/L		101	90 - 110
Sulfate	8.00	7.67		mg/L		96	90 - 110
Chloride	2.00	1.96		mg/L		98	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18807-1 MS
Matrix: Water
Analysis Batch: 270305

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride - DL	0.17	J	4.00	3.92		mg/L		94	90 - 110
Sulfate - DL	1.0		8.00	8.32		mg/L		91	90 - 110

Lab Sample ID: 160-18807-1 DU
Matrix: Water
Analysis Batch: 270305

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride - DL	0.17	J	0.173	J	mg/L		2	20
Sulfate - DL	1.0		1.01		mg/L		1	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-18807-1 MS
Matrix: Water
Analysis Batch: 270305

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	180		100	274	E	mg/L		95	90 - 110

Lab Sample ID: 160-18807-1 DU
Matrix: Water
Analysis Batch: 270305

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	180		181		mg/L		0.5	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-268820/1-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Arsenic	ND		10	4.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Barium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Beryllium	ND		5.0	1.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
Boron	ND		100	25	ug/L		09/09/16 11:13	09/14/16 18:11	1
Cadmium	ND		5.0	1.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
CaHard	ND		2500	750	ug/L		09/09/16 11:13	09/14/16 18:11	1
Calcium	ND		1000	300	ug/L		09/09/16 11:13	09/14/16 18:11	1
Chromium	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Cobalt	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Copper	ND		25	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Lead	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Magnesium	ND		1.0	0.30	mg/L		09/09/16 11:13	09/14/16 18:11	1
Manganese	ND		15	2.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
MgHard	ND		4100	1200	ug/L		09/09/16 11:13	09/14/16 18:11	1
Nickel	ND		0.040	0.010	mg/L		09/09/16 11:13	09/14/16 18:11	1
Phosphorus	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:11	1
Selenium	ND		15	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Silver	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Sodium	ND		1000	300	ug/L		09/09/16 11:13	09/14/16 18:11	1
Thallium	ND	^	20	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Total Hardness	ND		6600	2000	ug/L		09/09/16 11:13	09/14/16 18:11	1
Vanadium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Zinc	ND		20	6.0	ug/L		09/09/16 11:13	09/14/16 18:11	1

Lab Sample ID: LCS 160-268820/2-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	523		ug/L		105	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120
Barium	1000	1020		ug/L		102	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Boron	2000	2050	E	ug/L		103	80 - 120
Cadmium	1000	1050		ug/L		105	80 - 120
Calcium	10000	10900		ug/L		109	80 - 120
Chromium	1000	1080		ug/L		108	80 - 120
Cobalt	1000	1090		ug/L		109	80 - 120
Copper	1000	1060		ug/L		106	80 - 120
Lead	1000	1100		ug/L		110	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Manganese	1000	1040		ug/L		104	80 - 120
Nickel	1.00	1.09		mg/L		109	80 - 120
Phosphorus	1000	1190		ug/L		119	80 - 120
Selenium	500	521		ug/L		104	80 - 120
Silver	200	210		ug/L		105	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-268820/2-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	230	^	ug/L		115	80 - 120
Vanadium	1000	1020		ug/L		102	80 - 120
Zinc	1000	1040		ug/L		104	80 - 120

Lab Sample ID: 160-18778-G-1-C MS ^10
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	507		ug/L		101	75 - 125
Arsenic	80	J	1000	1020		ug/L		94	75 - 125
Barium	2600		1000	3570		ug/L		96	75 - 125
Beryllium	ND		1000	983		ug/L		98	75 - 125
Boron	ND		2000	1920		ug/L		96	75 - 125
Cadmium	ND		1000	970		ug/L		97	75 - 125
Calcium	630000		10000	620000	4	ug/L		-137	75 - 125
Chromium	ND		1000	990		ug/L		99	75 - 125
Cobalt	ND		1000	1010		ug/L		101	75 - 125
Copper	ND		1000	989		ug/L		99	75 - 125
Lead	ND		1000	1010		ug/L		101	75 - 125
Magnesium	280		10.0	288	4	mg/L		50	75 - 125
Manganese	2300		1000	3300		ug/L		97	75 - 125
Nickel	ND		1.00	1.06		mg/L		106	75 - 125
Phosphorus	ND	F1	1000	1310	J F1	ug/L		131	75 - 125
Selenium	ND		500	503		ug/L		101	75 - 125
Silver	ND		200	187		ug/L		94	75 - 125
Sodium	190000		10000	193000	4	ug/L		72	75 - 125
Thallium	ND	^	200	242	^	ug/L		121	75 - 125
Vanadium	ND		1000	940		ug/L		94	75 - 125
Zinc	ND		1000	974		ug/L		97	75 - 125

Lab Sample ID: 160-18778-G-1-D MSD ^10
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	508		ug/L		102	75 - 125	0	20
Arsenic	80	J	1000	1080		ug/L		100	75 - 125	6	20
Barium	2600		1000	3690		ug/L		108	75 - 125	3	20
Beryllium	ND		1000	1010		ug/L		101	75 - 125	3	20
Boron	ND		2000	1960		ug/L		98	75 - 125	2	20
Cadmium	ND		1000	1010		ug/L		101	75 - 125	4	20
Calcium	630000		10000	655000	4	ug/L		211	75 - 125	5	20
Chromium	ND		1000	1030		ug/L		103	75 - 125	4	20
Cobalt	ND		1000	1050		ug/L		105	75 - 125	3	20
Copper	ND		1000	1000		ug/L		100	75 - 125	1	20
Lead	ND		1000	1040		ug/L		104	75 - 125	3	20
Magnesium	280		10.0	302	4	mg/L		183	75 - 125	5	20
Manganese	2300		1000	3420		ug/L		109	75 - 125	4	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18778-G-1-D MSD ^10 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269953 — **Prep Batch: 268820**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	ND		1.00	1.11		mg/L		111	75 - 125	4	20
Phosphorus	ND	F1	1000	1400	J F1	ug/L		140	75 - 125	6	20
Selenium	ND		500	538		ug/L		108	75 - 125	7	20
Silver	ND		200	202		ug/L		101	75 - 125	8	20
Sodium	190000		10000	200000	4	ug/L		145	75 - 125	4	20
Thallium	ND	^	200	234	^	ug/L		117	75 - 125	3	20
Vanadium	ND		1000	964		ug/L		96	75 - 125	3	20
Zinc	ND		1000	1010		ug/L		101	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-269108/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:34	1

Lab Sample ID: LCS 160-269108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.22		ug/L		84	80 - 120

Lab Sample ID: 160-18807-1 MS — **Client Sample ID: PZ-207-AS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.11	J	5.00	4.78		ug/L		93	80 - 120

Lab Sample ID: 160-18807-1 MSD — **Client Sample ID: PZ-207-AS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11	J	5.00	4.71		ug/L		92	80 - 120	1	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-266765/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 266765

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			08/26/16 10:27	1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 160-266765/2
Matrix: Water
Analysis Batch: 266765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	515		mg/L		103	90 - 110

Lab Sample ID: 160-18807-2 DU
Matrix: Water
Analysis Batch: 266765

Client Sample ID: D-87
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	1900		1790		mg/L		4	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-271200/12
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/22/16 13:44	1

Lab Sample ID: LCS 160-271200/13
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.489		mg/L		98	90 - 110

Method: 350.1 - Nitrogen, Ammonia - DL

Lab Sample ID: 160-18807-1 MS
Matrix: Water
Analysis Batch: 271200

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia - DL	95		0.500	86.9	4	mg/L		-1596	90 - 110

Lab Sample ID: 160-18807-1 DU
Matrix: Water
Analysis Batch: 271200

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia - DL	95		93.6		mg/L		1	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-271335/4
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0216	J	0.050	0.011	mg/L			09/22/16 21:30	1

Lab Sample ID: LCS 160-271335/5
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.460		mg/L		92	90 - 110

Lab Sample ID: 160-18807-1 MS
Matrix: Water
Analysis Batch: 271335

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.14	B F1	0.500	0.155	F1	mg/L		2	90 - 110

Lab Sample ID: 160-18807-1 DU
Matrix: Water
Analysis Batch: 271335

Client Sample ID: PZ-207-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.14	B F1	0.146		mg/L		0.8	20

Method: 410.4 - COD

Lab Sample ID: MB 160-267630/3-A
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267630

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Lab Sample ID: LCS 160-267630/4-A
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: 160-18807-3 MS
Matrix: Water
Analysis Batch: 267771

Client Sample ID: LR-103
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	43		50.0	93.0		mg/L		100	90 - 110

Method: 410.4 - COD (Continued)

Lab Sample ID: 160-18807-3 DU
Matrix: Water
Analysis Batch: 267771

Client Sample ID: LR-103
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	43			38.0		mg/L				12	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-269161/1-A
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269161

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-53.15	U	155	155	500	285	pCi/L	09/12/16 12:47	09/12/16 19:10	1

Lab Sample ID: LCS 160-269161/2-A
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269161

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3030	2622		401	500	285	pCi/L	87	74 - 114		

Lab Sample ID: 160-18981-A-1-B MS
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269161

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	1640		3030	4361		557	500	287	pCi/L	90	67 - 130		

Lab Sample ID: 160-18978-A-1-B DU
Matrix: Water
Analysis Batch: 269339

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 269161

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	-95.5	U		5.856	U	166	500	298	pCi/L			0.32	1

GC/MS VOA

Analysis Batch: 267786

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	8260C	
160-18807-2	D-87	Total/NA	Water	8260C	
160-18807-3	LR-103	Total/NA	Water	8260C	
160-18807-4	PZ-101-SS	Total/NA	Water	8260C	
160-18807-5	PZ-102R-SS	Total/NA	Water	8260C	
160-18807-6	TRIP BLANK	Total/NA	Water	8260C	
MB 160-267786/7	Method Blank	Total/NA	Water	8260C	
LCS 160-267786/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-267786/5	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18778-B-5 MS	Matrix Spike	Total/NA	Water	8260C	
160-18778-B-5 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 270305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1 - DL	PZ-207-AS	Total/NA	Water	300.0	
160-18807-1 - DL2	PZ-207-AS	Total/NA	Water	300.0	
160-18807-2 - DL	D-87	Total/NA	Water	300.0	
160-18807-2 - DL2	D-87	Total/NA	Water	300.0	
160-18807-3 - DL	LR-103	Total/NA	Water	300.0	
160-18807-3 - DL2	LR-103	Total/NA	Water	300.0	
160-18807-4 - DL	PZ-101-SS	Total/NA	Water	300.0	
160-18807-4 - DL2	PZ-101-SS	Total/NA	Water	300.0	
160-18807-5	PZ-102R-SS	Total/NA	Water	300.0	
160-18807-5 - DL	PZ-102R-SS	Total/NA	Water	300.0	
MB 160-270305/9	Method Blank	Total/NA	Water	300.0	
LCS 160-270305/10	Lab Control Sample	Total/NA	Water	300.0	
160-18807-1 MS - DL	PZ-207-AS	Total/NA	Water	300.0	
160-18807-1 MS - DL2	PZ-207-AS	Total/NA	Water	300.0	
160-18807-1 DU - DL	PZ-207-AS	Total/NA	Water	300.0	
160-18807-1 DU - DL2	PZ-207-AS	Total/NA	Water	300.0	

Metals

Prep Batch: 268820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	3010A	
160-18807-2	D-87	Total/NA	Water	3010A	
160-18807-3	LR-103	Total/NA	Water	3010A	
160-18807-4	PZ-101-SS	Total/NA	Water	3010A	
160-18807-5	PZ-102R-SS	Total/NA	Water	3010A	
MB 160-268820/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-268820/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18778-G-1-C MS ^10	Matrix Spike	Total/NA	Water	3010A	
160-18778-G-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Water	3010A	

Prep Batch: 269108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 269108 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-2	D-87	Total/NA	Water	7470A	
160-18807-3	LR-103	Total/NA	Water	7470A	
160-18807-4	PZ-101-SS	Total/NA	Water	7470A	
160-18807-5	PZ-102R-SS	Total/NA	Water	7470A	
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18807-1 MS	PZ-207-AS	Total/NA	Water	7470A	
160-18807-1 MSD	PZ-207-AS	Total/NA	Water	7470A	

Analysis Batch: 269210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	7470A	269108
160-18807-2	D-87	Total/NA	Water	7470A	269108
160-18807-3	LR-103	Total/NA	Water	7470A	269108
160-18807-4	PZ-101-SS	Total/NA	Water	7470A	269108
160-18807-5	PZ-102R-SS	Total/NA	Water	7470A	269108
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	269108
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	269108
160-18807-1 MS	PZ-207-AS	Total/NA	Water	7470A	269108
160-18807-1 MSD	PZ-207-AS	Total/NA	Water	7470A	269108

Analysis Batch: 269953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	6010C	268820
160-18807-2	D-87	Total/NA	Water	6010C	268820
160-18807-3	LR-103	Total/NA	Water	6010C	268820
160-18807-4	PZ-101-SS	Total/NA	Water	6010C	268820
160-18807-5	PZ-102R-SS	Total/NA	Water	6010C	268820
MB 160-268820/1-A	Method Blank	Total/NA	Water	6010C	268820
LCS 160-268820/2-A	Lab Control Sample	Total/NA	Water	6010C	268820
160-18778-G-1-C MS ^10	Matrix Spike	Total/NA	Water	6010C	268820
160-18778-G-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Water	6010C	268820

General Chemistry

Analysis Batch: 266765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	160.1	
160-18807-2	D-87	Total/NA	Water	160.1	
160-18807-3	LR-103	Total/NA	Water	160.1	
160-18807-4	PZ-101-SS	Total/NA	Water	160.1	
160-18807-5	PZ-102R-SS	Total/NA	Water	160.1	
MB 160-266765/1	Method Blank	Total/NA	Water	160.1	
LCS 160-266765/2	Lab Control Sample	Total/NA	Water	160.1	
160-18807-2 DU	D-87	Total/NA	Water	160.1	

Prep Batch: 267630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	410.4	
160-18807-2	D-87	Total/NA	Water	410.4	

General Chemistry (Continued)

Prep Batch: 267630 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-3	LR-103	Total/NA	Water	410.4	
160-18807-4	PZ-101-SS	Total/NA	Water	410.4	
160-18807-5	PZ-102R-SS	Total/NA	Water	410.4	
MB 160-267630/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-267630/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18807-3 MS	LR-103	Total/NA	Water	410.4	
160-18807-3 DU	LR-103	Total/NA	Water	410.4	

Analysis Batch: 267771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	410.4	267630
160-18807-2	D-87	Total/NA	Water	410.4	267630
160-18807-3	LR-103	Total/NA	Water	410.4	267630
160-18807-4	PZ-101-SS	Total/NA	Water	410.4	267630
160-18807-5	PZ-102R-SS	Total/NA	Water	410.4	267630
MB 160-267630/3-A	Method Blank	Total/NA	Water	410.4	267630
LCS 160-267630/4-A	Lab Control Sample	Total/NA	Water	410.4	267630
160-18807-3 MS	LR-103	Total/NA	Water	410.4	267630
160-18807-3 DU	LR-103	Total/NA	Water	410.4	267630

Analysis Batch: 271200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1 - DL	PZ-207-AS	Total/NA	Water	350.1	
160-18807-2 - DL	D-87	Total/NA	Water	350.1	
160-18807-3 - DL	LR-103	Total/NA	Water	350.1	
160-18807-4 - DL	PZ-101-SS	Total/NA	Water	350.1	
160-18807-5	PZ-102R-SS	Total/NA	Water	350.1	
MB 160-271200/12	Method Blank	Total/NA	Water	350.1	
LCS 160-271200/13	Lab Control Sample	Total/NA	Water	350.1	
160-18807-1 MS - DL	PZ-207-AS	Total/NA	Water	350.1	
160-18807-1 DU - DL	PZ-207-AS	Total/NA	Water	350.1	

Analysis Batch: 271335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	353.1 Preserved	
160-18807-2	D-87	Total/NA	Water	353.1 Preserved	
160-18807-3	LR-103	Total/NA	Water	353.1 Preserved	
160-18807-4	PZ-101-SS	Total/NA	Water	353.1 Preserved	
160-18807-5	PZ-102R-SS	Total/NA	Water	353.1 Preserved	
MB 160-271335/4	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-271335/5	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18807-1 MS	PZ-207-AS	Total/NA	Water	353.1 Preserved	
160-18807-1 DU	PZ-207-AS	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 269161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-1	PZ-207-AS	Total/NA	Water	LSC_Dist_Susp	
160-18807-2	D-87	Total/NA	Water	LSC_Dist_Susp	

Rad (Continued)

Prep Batch: 269161 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-3	LR-103	Total/NA	Water	LSC_Dist_Susp	
160-18807-4	PZ-101-SS	Total/NA	Water	LSC_Dist_Susp	
160-18807-5	PZ-102R-SS	Total/NA	Water	LSC_Dist_Susp	
MB 160-269161/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-269161/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-18981-A-1-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
160-18978-A-1-B DU	Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18807-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18778-B-5 MS	Matrix Spike	94	99	104	105
160-18778-B-5 MSD	Matrix Spike Duplicate	94	100	102	105
160-18807-1	PZ-207-AS	110	98	100	112
160-18807-2	D-87	108	98	99	112
160-18807-3	LR-103	104	96	96	112
160-18807-4	PZ-101-SS	109	103	100	116
160-18807-5	PZ-102R-SS	105	93	96	109
160-18807-6	TRIP BLANK	111	95	97	109
LCS 160-267786/4	Lab Control Sample	94	95	97	107
LCSD 160-267786/5	Lab Control Sample Dup	97	98	100	108
MB 160-267786/7	Method Blank	109	95	96	112

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18839-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Rhonda Ridenhower

Authorized for release by:
9/23/2016 4:41:09 PM
Rhonda Ridenhower, Manager of Project Management
rhonda.ridenhower@testamericainc.com

Designee for

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
chenise.lambert-sykes@testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18839-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18839-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/26/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the cooler at receipt was 11.2º C, samples were collected prior to receipt at the lab.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5), PZ-200-SS (160-18839-6) and TRIP BLANK (160-18839-7) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/09/2016.

Batch 268602

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-268602: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-268602/3)

The continuing calibration verification (CCV) associated with batch 160-268602 recovered above the upper control limit for Methyl bromide.

Job ID: 160-18839-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.(CCVIS 160-268602/3)

According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Samples were analyzed outside the 7 day, unpreserved, holding time.PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3) and PZ-302-AI (160-18839-5)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/09/2016 and analyzed on 09/14/2016.

Batch 269953
The initial calibration verification (ICV) result for batch analytical batch 160-269953 was above the upper control limit for Thallium. Sample results were non-detects, and have been reported as qualified data.(ICV 160-269953/14)

The LCS is above the linear range check (LRC) for Boron. The LCS is within acceptable QC limits.(LCS 160-268820/2-A)

Due to the high concentration of Calcium, Sodium, and Magnesium the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-268820 and analytical batch 160-269953 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.(160-18778-G-1-C MS ^) and (160-18778-G-1-D MSD)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-268820 and analytical batch 160-269953 were outside control limits for Phosphorous. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(160-18778-G-1-C MS ^) and (160-18778-G-1-D MSD)

The serial dilution performed for the following sample associated with batch 160-269953 was outside control limits for Manganese indicating matrix interference: (160-18778-G-1-B SD ^)

The following sample(s) was diluted due to the nature of the sample matrix. Samples are high in salts: PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5), PZ-200-SS (160-18839-6), (160-18778-G-1-B ^10), (160-18778-G-1-C MS ^), (160-18778-G-1-D MSD) and (160-18778-G-1-B SD ^). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 09/01/2016.

The following samples in TDS batch 160-267627 were analyzed using a reduced aliquot, due to high concentrations of the target analyte: PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3) and PZ-200-SS (160-18839-6). As a result, the reporting limits (RLs) have been adjusted for the reduced aliquot.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 160-18839-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

ANIONS, ION CHROMATOGRAPHY

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/16/2016 and 09/17/2016.

The following samples in Anion batch 160-270305 were analyzed at dilution to start (2x), due to high sample conductivities that made undiluted analysis inadvisable: PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6). As a result, some anions are reported non-detect (ND) below the adjusted reporting limit (RL) at the initial dilution, while other anions are reported detect at the initial dilution and/or subsequent dilutions.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/22/2016.

The following samples in NH3 analytical batch 160-271200 were diluted to bring the concentration of the target analyte within the calibration range: PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2) and (160-18807-E-1 ^100). Elevated reporting limits (RLs) are provided.

Due to the high concentration of NH3, the following matrix spike (MS) for analytical batch 160-271200 could not be evaluated for accuracy: (160-18807-E-1 MS ^10). The concentration of ammonia spiked into the sample was diluted below reliable detection limits. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 09/22/2016.

The following matrix spike (MS) recoveries for NO3-NO2 analytical batch 160-271335 were outside control limits: (160-18807-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, as well as the historically low MS recoveries for this client.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 09/01/2016.

The following samples in COD batch 160-267771 were diluted to bring the concentration of target analytes within the calibration range: PZ-304-AS (160-18839-1). Elevated reporting limits (RLs) are provided.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)

Samples PZ-304-AS (160-18839-1), PZ-304-AI (160-18839-2), MW-104 (160-18839-3), D-81 (160-18839-4), PZ-302-AI (160-18839-5) and PZ-200-SS (160-18839-6) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/20/2016 and analyzed on 09/21/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.4
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 4 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days): Standard			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide - MW sample	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	D	A	CB		
PZ-304-AS	8/26/16	0833	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-304-AI	8/26/16	0924	G	Water	N	N	✓	✓	✓	✓	✓		7	
MW-104	8/26/16	1009	G	Water	N	N	✓	✓	✓	✓	✓		7	
D-81	8/26/16	1058	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-302-AI	8/26/16	1224	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-200-SS	8/26/16	1427	G	Water	N	N	✓	✓	✓	✓	✓		7	
Trip Blank	8/26/16	0800	G	Water	N	N	✓				✓		2	
				Water			NO							
				Water										
				Water										
				Water										

160-18839 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Brenna McDonald	8/26/16 1515			8.26.16 1515	TAStL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

9/23/2016

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18839-1

Login Number: 18839
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Refer to Job Narrative for details.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18839-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18839-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18839-1	PZ-304-AS	Water	08/26/16 08:33	08/26/16 15:15
160-18839-2	PZ-304-AI	Water	08/26/16 09:24	08/26/16 15:15
160-18839-3	MW-104	Water	08/26/16 10:09	08/26/16 15:15
160-18839-4	D-81	Water	08/26/16 10:58	08/26/16 15:15
160-18839-5	PZ-302-AI	Water	08/26/16 12:24	08/26/16 15:15
160-18839-6	PZ-200-SS	Water	08/26/16 14:27	08/26/16 15:15
160-18839-7	TRIP BLANK	Water	08/26/16 08:00	08/26/16 15:15

Client Sample ID: PZ-304-AS

Date Collected: 08/26/16 08:33
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	H	20	6.7	ug/L			09/09/16 03:27	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/09/16 03:27	1
Benzene	**10**	**H**	5.0	0.25	ug/L			09/09/16 03:27	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/09/16 03:27	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/09/16 03:27	1
Bromoform	ND	H	5.0	0.37	ug/L			09/09/16 03:27	1
Carbon disulfide	**6.1**	**H**	5.0	0.37	ug/L			09/09/16 03:27	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/09/16 03:27	1
Chlorobenzene	**65**	**H**	5.0	0.38	ug/L			09/09/16 03:27	1
Chloroethane	ND	H	10	0.38	ug/L			09/09/16 03:27	1
Chloroform	ND	H	5.0	0.15	ug/L			09/09/16 03:27	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/09/16 03:27	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/09/16 03:27	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/09/16 03:27	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/09/16 03:27	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/09/16 03:27	1
1,2-Dichlorobenzene	**0.58**	**J H**	5.0	0.28	ug/L			09/09/16 03:27	1
1,4-Dichlorobenzene	**16**	**H**	5.0	0.35	ug/L			09/09/16 03:27	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/09/16 03:27	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/09/16 03:27	1
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/09/16 03:27	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/09/16 03:27	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/09/16 03:27	1
2-Hexanone	ND	H	20	0.59	ug/L			09/09/16 03:27	1
Methyl bromide	ND	H	10	0.40	ug/L			09/09/16 03:27	1
Methyl chloride	ND	H	10	0.55	ug/L			09/09/16 03:27	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/09/16 03:27	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/09/16 03:27	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/09/16 03:27	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/09/16 03:27	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/09/16 03:27	1
Styrene	ND	H	5.0	0.35	ug/L			09/09/16 03:27	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/09/16 03:27	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/09/16 03:27	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/09/16 03:27	1
Toluene	ND	H	5.0	1.0	ug/L			09/09/16 03:27	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/09/16 03:27	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/09/16 03:27	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/09/16 03:27	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/09/16 03:27	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/09/16 03:27	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/09/16 03:27	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/09/16 03:27	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/09/16 03:27	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/09/16 03:27	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/09/16 03:27	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/09/16 03:27	1

Client Sample ID: PZ-304-AS

Date Collected: 08/26/16 08:33
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*106*		*71 - 139*		*09/09/16 03:27*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 121*		*09/09/16 03:27*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*		*09/09/16 03:27*	*1*
Toluene-d8 (Surr)	*106*		*80 - 129*		*09/09/16 03:27*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.59**		0.20	0.020	mg/L			09/16/16 23:18	2
Sulfate	**0.59**	**J**	1.0	0.10	mg/L			09/16/16 23:18	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**420**		20	2.0	mg/L			09/16/16 23:35	100

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:46	5
Arsenic	**260**		50	20	ug/L		09/09/16 11:13	09/14/16 19:46	5
Barium	**3500**		250	75	ug/L		09/09/16 11:13	09/14/16 19:46	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:46	5
Boron	**2200**		500	130	ug/L		09/09/16 11:13	09/14/16 19:46	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:46	5
CaHard	**280000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:46	5
Calcium	**110000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:46	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:46	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:46	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:46	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:46	5
Magnesium	**66**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:46	5
Manganese	**120**		75	13	ug/L		09/09/16 11:13	09/14/16 19:46	5
MgHard	**270000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:46	5
Nickel	**0.076**	**J**	0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:46	5
Phosphorus	**2900**		1300	380	ug/L		09/09/16 11:13	09/14/16 19:46	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:46	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:46	5
Sodium	**450000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:46	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:46	5
Total Hardness	**550000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:46	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:46	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 19:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**2000**		25	17	mg/L			09/01/16 09:30	1
Nitrate/Nitrite	**0.19**	**B**	0.050	0.011	mg/L			09/22/16 22:11	1

Client Sample ID: PZ-304-AS

Lab Sample ID: 160-18839-1
Matrix: Water
Date Collected: 08/26/16 08:33
Date Received: 08/26/16 15:15

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**150**		5.0	2.2	mg/L			09/22/16 14:18	100
Chemical Oxygen Demand	**360**		50	11	mg/L		09/01/16 09:36	09/01/16 14:22	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	144	U	195	196	500	330	pCi/L	09/20/16 14:24	09/21/16 00:10	1

Client Sample ID: PZ-304-AI

Lab Sample ID: 160-18839-2
Matrix: Water
Date Collected: 08/26/16 09:24
Date Received: 08/26/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	H	20	6.7	ug/L			09/09/16 00:37	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/09/16 00:37	1
Benzene	**5.0**	**H**	5.0	0.25	ug/L			09/09/16 00:37	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/09/16 00:37	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/09/16 00:37	1
Bromoform	ND	H	5.0	0.37	ug/L			09/09/16 00:37	1
Carbon disulfide	ND	H	5.0	0.37	ug/L			09/09/16 00:37	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/09/16 00:37	1
Chlorobenzene	**42**	**H**	5.0	0.38	ug/L			09/09/16 00:37	1
Chloroethane	ND	H	10	0.38	ug/L			09/09/16 00:37	1
Chloroform	ND	H	5.0	0.15	ug/L			09/09/16 00:37	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/09/16 00:37	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/09/16 00:37	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/09/16 00:37	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/09/16 00:37	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/09/16 00:37	1
1,2-Dichlorobenzene	ND	H	5.0	0.28	ug/L			09/09/16 00:37	1
1,4-Dichlorobenzene	**4.1**	**J H**	5.0	0.35	ug/L			09/09/16 00:37	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/09/16 00:37	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/09/16 00:37	1
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/09/16 00:37	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/09/16 00:37	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/09/16 00:37	1
2-Hexanone	ND	H	20	0.59	ug/L			09/09/16 00:37	1
Methyl bromide	ND	H	10	0.40	ug/L			09/09/16 00:37	1
Methyl chloride	ND	H	10	0.55	ug/L			09/09/16 00:37	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/09/16 00:37	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/09/16 00:37	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/09/16 00:37	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/09/16 00:37	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/09/16 00:37	1
Styrene	ND	H	5.0	0.35	ug/L			09/09/16 00:37	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/09/16 00:37	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/09/16 00:37	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/09/16 00:37	1

Client Sample ID: PZ-304-AI

Date Collected: 08/26/16 09:24
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND	H	5.0	1.0	ug/L			09/09/16 00:37	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/09/16 00:37	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/09/16 00:37	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/09/16 00:37	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/09/16 00:37	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/09/16 00:37	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/09/16 00:37	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/09/16 00:37	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/09/16 00:37	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/09/16 00:37	1
Vinyl chloride	**0.52**	**J H**	5.0	0.43	ug/L			09/09/16 00:37	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/09/16 00:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*71 - 139*		*09/09/16 00:37*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 121*		*09/09/16 00:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*76 - 121*		*09/09/16 00:37*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*		*09/09/16 00:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.29**		0.20	0.020	mg/L			09/16/16 23:51	2
Sulfate	**4.2**		1.0	0.10	mg/L			09/16/16 23:51	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**320**		20	2.0	mg/L			09/17/16 00:07	100

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:51	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 19:51	5
Barium	**1500**		250	75	ug/L		09/09/16 11:13	09/14/16 19:51	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:51	5
Boron	**1300**		500	130	ug/L		09/09/16 11:13	09/14/16 19:51	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:51	5
CaHard	**560000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:51	5
Calcium	**220000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:51	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:51	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:51	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:51	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:51	5
Magnesium	**77**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:51	5
Manganese	**1100**		75	13	ug/L		09/09/16 11:13	09/14/16 19:51	5
MgHard	**320000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:51	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:51	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 19:51	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:51	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:51	5
Sodium	**260000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:51	5

Client Sample ID: PZ-304-AI

Date Collected: 08/26/16 09:24
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:51	5
Total Hardness	**880000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:51	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:51	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 19:51	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1600**		25	17	mg/L			09/01/16 09:30	1
Nitrate/Nitrite	**0.15**	**B**	0.050	0.011	mg/L			09/22/16 22:14	1
Chemical Oxygen Demand	**130**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**39**		5.0	2.2	mg/L			09/22/16 14:20	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	18.0	U	185	185	500	333	pCi/L	09/20/16 14:24	09/21/16 00:30	1

Client Sample ID: MW-104

Date Collected: 08/26/16 10:09
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**23**	**H**	20	6.7	ug/L			09/09/16 01:01	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/09/16 01:01	1
Benzene	**1.9**	**J H**	5.0	0.25	ug/L			09/09/16 01:01	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/09/16 01:01	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/09/16 01:01	1
Bromoform	ND	H	5.0	0.37	ug/L			09/09/16 01:01	1
Carbon disulfide	ND	H	5.0	0.37	ug/L			09/09/16 01:01	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/09/16 01:01	1
Chlorobenzene	ND	H	5.0	0.38	ug/L			09/09/16 01:01	1
Chloroethane	ND	H	10	0.38	ug/L			09/09/16 01:01	1
Chloroform	ND	H	5.0	0.15	ug/L			09/09/16 01:01	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/09/16 01:01	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/09/16 01:01	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/09/16 01:01	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/09/16 01:01	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/09/16 01:01	1
1,2-Dichlorobenzene	ND	H	5.0	0.28	ug/L			09/09/16 01:01	1
1,4-Dichlorobenzene	ND	H	5.0	0.35	ug/L			09/09/16 01:01	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/09/16 01:01	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/09/16 01:01	1

Client Sample ID: MW-104
Date Collected: 08/26/16 10:09
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/09/16 01:01	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/09/16 01:01	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/09/16 01:01	1
2-Hexanone	ND	H	20	0.59	ug/L			09/09/16 01:01	1
Methyl bromide	ND	H	10	0.40	ug/L			09/09/16 01:01	1
Methyl chloride	ND	H	10	0.55	ug/L			09/09/16 01:01	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/09/16 01:01	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/09/16 01:01	1
Methyl Ethyl Ketone	**55**	**H**	20	0.39	ug/L			09/09/16 01:01	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/09/16 01:01	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/09/16 01:01	1
Styrene	ND	H	5.0	0.35	ug/L			09/09/16 01:01	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/09/16 01:01	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/09/16 01:01	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/09/16 01:01	1
Toluene	ND	H	5.0	1.0	ug/L			09/09/16 01:01	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/09/16 01:01	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/09/16 01:01	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/09/16 01:01	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/09/16 01:01	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/09/16 01:01	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/09/16 01:01	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/09/16 01:01	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/09/16 01:01	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/09/16 01:01	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/09/16 01:01	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/09/16 01:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*71 - 139*		*09/09/16 01:01*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 121*		*09/09/16 01:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*		*09/09/16 01:01*	*1*
Toluene-d8 (Surr)	*113*		*80 - 129*		*09/09/16 01:01*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.43**		0.20	0.020	mg/L			09/17/16 00:24	2
Sulfate	**0.80**	**J**	1.0	0.10	mg/L			09/17/16 00:24	2
Chloride	**5.1**		0.40	0.040	mg/L			09/17/16 00:24	2

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:55	5
Arsenic	**110**		50	20	ug/L		09/09/16 11:13	09/14/16 19:55	5
Barium	**760**		250	75	ug/L		09/09/16 11:13	09/14/16 19:55	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:55	5
Boron	ND		500	130	ug/L		09/09/16 11:13	09/14/16 19:55	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 19:55	5
CaHard	**740000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 19:55	5
Calcium	**300000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:55	5

Client Sample ID: MW-104

Date Collected: 08/26/16 10:09
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-3
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:55	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:55	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 19:55	5
Lead	**39**	**J**	50	15	ug/L		09/09/16 11:13	09/14/16 19:55	5
Magnesium	**100**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 19:55	5
Manganese	**4300**		75	13	ug/L		09/09/16 11:13	09/14/16 19:55	5
MgHard	**410000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 19:55	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 19:55	5
Phosphorus	**1400**		1300	380	ug/L		09/09/16 11:13	09/14/16 19:55	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 19:55	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 19:55	5
Sodium	**13000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 19:55	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 19:55	5
Total Hardness	**1200000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 19:55	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 19:55	5
Zinc	**140**		100	30	ug/L		09/09/16 11:13	09/14/16 19:55	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1200**		10	7.0	mg/L			09/01/16 09:30	1
Ammonia	**0.63**		0.050	0.022	mg/L			09/22/16 14:22	1
Nitrate/Nitrite	**0.40**	**B**	0.050	0.011	mg/L			09/22/16 22:17	1
Chemical Oxygen Demand	**54**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	76.6	U	187	187	500	325	pCi/L	09/20/16 14:24	09/21/16 00:51	1

Client Sample ID: D-81

Date Collected: 08/26/16 10:58
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/09/16 01:46	1
Acrylonitrile	ND		50	1.7	ug/L			09/09/16 01:46	1
Benzene	ND		5.0	0.25	ug/L			09/09/16 01:46	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/09/16 01:46	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/09/16 01:46	1
Bromoform	ND		5.0	0.37	ug/L			09/09/16 01:46	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/09/16 01:46	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/09/16 01:46	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/09/16 01:46	1
Chloroethane	ND		10	0.38	ug/L			09/09/16 01:46	1

Client Sample ID: D-81
Date Collected: 08/26/16 10:58
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	ND		5.0	0.15	ug/L			09/09/16 01:46	1
cis-1,2-Dichloroethene	**1.0**	**J**	5.0	0.16	ug/L			09/09/16 01:46	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/09/16 01:46	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/09/16 01:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/09/16 01:46	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/09/16 01:46	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/09/16 01:46	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/09/16 01:46	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/09/16 01:46	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/09/16 01:46	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/09/16 01:46	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/09/16 01:46	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/09/16 01:46	1
2-Hexanone	ND		20	0.59	ug/L			09/09/16 01:46	1
Methyl bromide	ND		10	0.40	ug/L			09/09/16 01:46	1
Methyl chloride	ND		10	0.55	ug/L			09/09/16 01:46	1
Methylene bromide	ND		5.0	0.41	ug/L			09/09/16 01:46	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/09/16 01:46	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/09/16 01:46	1
Methyl iodide	ND		5.0	1.5	ug/L			09/09/16 01:46	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/09/16 01:46	1
Styrene	ND		5.0	0.35	ug/L			09/09/16 01:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/09/16 01:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/09/16 01:46	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/09/16 01:46	1
Toluene	ND		5.0	1.0	ug/L			09/09/16 01:46	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/09/16 01:46	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/09/16 01:46	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/09/16 01:46	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/09/16 01:46	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/09/16 01:46	1
Trichloroethene	ND		5.0	0.29	ug/L			09/09/16 01:46	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/09/16 01:46	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/09/16 01:46	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/09/16 01:46	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/09/16 01:46	1
Xylenes, Total	ND		10	0.85	ug/L			09/09/16 01:46	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*71 - 139*		*09/09/16 01:46*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 121*		*09/09/16 01:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/09/16 01:46*	*1*
Toluene-d8 (Surr)	*110*		*80 - 129*		*09/09/16 01:46*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.16**	**J**	0.20	0.020	mg/L			09/17/16 01:29	2
Sulfate	**21**		1.0	0.10	mg/L			09/17/16 01:29	2
Chloride	**7.1**		0.40	0.040	mg/L			09/17/16 01:29	2

Client Sample ID: D-81

Lab Sample ID: 160-18839-4

Date Collected: 08/26/16 10:58

Matrix: Water

Date Received: 08/26/16 15:15

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:00	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 20:00	5
Barium	**450**		250	75	ug/L		09/09/16 11:13	09/14/16 20:00	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 20:00	5
Boron	**140**	**J**	500	130	ug/L		09/09/16 11:13	09/14/16 20:00	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 20:00	5
CaHard	**630000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 20:00	5
Calcium	**250000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 20:00	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:00	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 20:00	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 20:00	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:00	5
Magnesium	**59**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 20:00	5
Manganese	**960**		75	13	ug/L		09/09/16 11:13	09/14/16 20:00	5
MgHard	**240000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 20:00	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 20:00	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 20:00	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 20:00	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:00	5
Sodium	**14000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 20:00	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 20:00	5
Total Hardness	**880000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 20:00	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 20:00	5
Zinc	**34**	**J**	100	30	ug/L		09/09/16 11:13	09/14/16 20:00	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**910**		5.0	3.5	mg/L			09/01/16 09:30	1
Ammonia	**0.41**		0.050	0.022	mg/L			09/22/16 14:25	1
Nitrate/Nitrite	**0.14**	**B**	0.050	0.011	mg/L			09/22/16 22:20	1
Chemical Oxygen Demand	**9.0**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	54.1	U	185	185	500	324	pCi/L	09/20/16 14:24	09/21/16 01:12	1

Client Sample ID: PZ-302-AI

Lab Sample ID: 160-18839-5

Date Collected: 08/26/16 12:24

Matrix: Water

Date Received: 08/26/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	H	20	6.7	ug/L			09/09/16 02:12	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/09/16 02:12	1

Client Sample ID: PZ-302-AI
Date Collected: 08/26/16 12:24
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	ND	H	5.0	0.25	ug/L			09/09/16 02:12	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/09/16 02:12	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/09/16 02:12	1
Bromoform	ND	H	5.0	0.37	ug/L			09/09/16 02:12	1
Carbon disulfide	ND	H	5.0	0.37	ug/L			09/09/16 02:12	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/09/16 02:12	1
Chlorobenzene	**1.3**	**J H**	5.0	0.38	ug/L			09/09/16 02:12	1
Chloroethane	ND	H	10	0.38	ug/L			09/09/16 02:12	1
Chloroform	ND	H	5.0	0.15	ug/L			09/09/16 02:12	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/09/16 02:12	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/09/16 02:12	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/09/16 02:12	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/09/16 02:12	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/09/16 02:12	1
1,2-Dichlorobenzene	ND	H	5.0	0.28	ug/L			09/09/16 02:12	1
1,4-Dichlorobenzene	ND	H	5.0	0.35	ug/L			09/09/16 02:12	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/09/16 02:12	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/09/16 02:12	1
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/09/16 02:12	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/09/16 02:12	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/09/16 02:12	1
2-Hexanone	ND	H	20	0.59	ug/L			09/09/16 02:12	1
Methyl bromide	ND	H	10	0.40	ug/L			09/09/16 02:12	1
Methyl chloride	ND	H	10	0.55	ug/L			09/09/16 02:12	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/09/16 02:12	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/09/16 02:12	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/09/16 02:12	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/09/16 02:12	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/09/16 02:12	1
Styrene	ND	H	5.0	0.35	ug/L			09/09/16 02:12	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/09/16 02:12	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/09/16 02:12	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/09/16 02:12	1
Toluene	ND	H	5.0	1.0	ug/L			09/09/16 02:12	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/09/16 02:12	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/09/16 02:12	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/09/16 02:12	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/09/16 02:12	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/09/16 02:12	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/09/16 02:12	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/09/16 02:12	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/09/16 02:12	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/09/16 02:12	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/09/16 02:12	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/09/16 02:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*71 - 139*		*09/09/16 02:12*	*1*
Dibromofluoromethane (Surr)	*100*		*80 - 121*		*09/09/16 02:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*		*09/09/16 02:12*	*1*

Client Sample ID: PZ-302-AI

Date Collected: 08/26/16 12:24
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 129*		*09/09/16 02:12*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.21**		0.20	0.020	mg/L			09/17/16 02:02	2
Sulfate	**21**		1.0	0.10	mg/L			09/17/16 02:02	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**35**		2.0	0.20	mg/L			09/17/16 02:19	10

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:05	5
Arsenic	ND		50	20	ug/L		09/09/16 11:13	09/14/16 20:05	5
Barium	**430**		250	75	ug/L		09/09/16 11:13	09/14/16 20:05	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 20:05	5
Boron	**320**	**J**	500	130	ug/L		09/09/16 11:13	09/14/16 20:05	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 20:05	5
CaHard	**560000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 20:05	5
Calcium	**220000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 20:05	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:05	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 20:05	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 20:05	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:05	5
Magnesium	**61**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 20:05	5
Manganese	**410**		75	13	ug/L		09/09/16 11:13	09/14/16 20:05	5
MgHard	**250000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 20:05	5
Nickel	ND		0.20	0.050	mg/L		09/09/16 11:13	09/14/16 20:05	5
Phosphorus	ND		1300	380	ug/L		09/09/16 11:13	09/14/16 20:05	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 20:05	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:05	5
Sodium	**62000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 20:05	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 20:05	5
Total Hardness	**810000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 20:05	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 20:05	5
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 20:05	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**970**		5.0	3.5	mg/L			09/01/16 09:30	1
Ammonia	**0.069**		0.050	0.022	mg/L			09/22/16 14:27	1
Nitrate/Nitrite	**0.016**	**J B**	0.050	0.011	mg/L			09/22/16 22:23	1
Chemical Oxygen Demand	**16**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Client Sample ID: PZ-302-AI

Lab Sample ID: 160-18839-5
Date Collected: 08/26/16 12:24
Matrix: Water
Date Received: 08/26/16 15:15

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	18.0	U	177	177	500	314	pCi/L	09/20/16 14:24	09/21/16 01:33	1

Client Sample ID: PZ-200-SS

Lab Sample ID: 160-18839-6
Date Collected: 08/26/16 14:27
Matrix: Water
Date Received: 08/26/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/09/16 02:37	1
Acrylonitrile	ND		50	1.7	ug/L			09/09/16 02:37	1
Benzene	ND		5.0	0.25	ug/L			09/09/16 02:37	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/09/16 02:37	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/09/16 02:37	1
Bromoform	ND		5.0	0.37	ug/L			09/09/16 02:37	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/09/16 02:37	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/09/16 02:37	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/09/16 02:37	1
Chloroethane	ND		10	0.38	ug/L			09/09/16 02:37	1
Chloroform	ND		5.0	0.15	ug/L			09/09/16 02:37	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/09/16 02:37	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/09/16 02:37	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/09/16 02:37	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/09/16 02:37	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/09/16 02:37	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/09/16 02:37	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/09/16 02:37	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/09/16 02:37	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/09/16 02:37	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/09/16 02:37	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/09/16 02:37	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/09/16 02:37	1
2-Hexanone	ND		20	0.59	ug/L			09/09/16 02:37	1
Methyl bromide	ND		10	0.40	ug/L			09/09/16 02:37	1
Methyl chloride	ND		10	0.55	ug/L			09/09/16 02:37	1
Methylene bromide	ND		5.0	0.41	ug/L			09/09/16 02:37	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/09/16 02:37	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/09/16 02:37	1
Methyl iodide	ND		5.0	1.5	ug/L			09/09/16 02:37	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/09/16 02:37	1
Styrene	ND		5.0	0.35	ug/L			09/09/16 02:37	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/09/16 02:37	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/09/16 02:37	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/09/16 02:37	1
Toluene	ND		5.0	1.0	ug/L			09/09/16 02:37	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/09/16 02:37	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/09/16 02:37	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/09/16 02:37	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/09/16 02:37	1

Client Sample ID: PZ-200-SS

Date Collected: 08/26/16 14:27
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/09/16 02:37	1
Trichloroethene	ND		5.0	0.29	ug/L			09/09/16 02:37	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/09/16 02:37	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/09/16 02:37	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/09/16 02:37	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/09/16 02:37	1
Xylenes, Total	ND		10	0.85	ug/L			09/09/16 02:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*71 - 139*		*09/09/16 02:37*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 121*		*09/09/16 02:37*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*		*09/09/16 02:37*	*1*
Toluene-d8 (Surr)	*108*		*80 - 129*		*09/09/16 02:37*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.13**	**J**	0.20	0.020	mg/L			09/17/16 02:35	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**43**		10	1.0	mg/L			09/17/16 02:52	20

Method: 300.0 - Anions, Ion Chromatography - DL3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**700**		40	4.0	mg/L			09/17/16 03:08	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:09	5
Arsenic	**110**		50	20	ug/L		09/09/16 11:13	09/14/16 20:09	5
Barium	**310**		250	75	ug/L		09/09/16 11:13	09/14/16 20:09	5
Beryllium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 20:09	5
Boron	ND		500	130	ug/L		09/09/16 11:13	09/14/16 20:09	5
Cadmium	ND		25	7.5	ug/L		09/09/16 11:13	09/14/16 20:09	5
CaHard	**680000**		12000	3700	ug/L		09/09/16 11:13	09/14/16 20:09	5
Calcium	**270000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 20:09	5
Chromium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:09	5
Cobalt	ND		250	75	ug/L		09/09/16 11:13	09/14/16 20:09	5
Copper	ND		130	25	ug/L		09/09/16 11:13	09/14/16 20:09	5
Lead	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:09	5
Magnesium	**96**		5.0	1.5	mg/L		09/09/16 11:13	09/14/16 20:09	5
Manganese	**3300**		75	13	ug/L		09/09/16 11:13	09/14/16 20:09	5
MgHard	**390000**		21000	6200	ug/L		09/09/16 11:13	09/14/16 20:09	5
Nickel	**0.12**	**J**	0.20	0.050	mg/L		09/09/16 11:13	09/14/16 20:09	5
Phosphorus	**1400**		1300	380	ug/L		09/09/16 11:13	09/14/16 20:09	5
Selenium	ND		75	25	ug/L		09/09/16 11:13	09/14/16 20:09	5
Silver	ND		50	15	ug/L		09/09/16 11:13	09/14/16 20:09	5
Sodium	**120000**		5000	1500	ug/L		09/09/16 11:13	09/14/16 20:09	5
Thallium	ND	^	100	25	ug/L		09/09/16 11:13	09/14/16 20:09	5
Total Hardness	**1100000**		33000	9900	ug/L		09/09/16 11:13	09/14/16 20:09	5
Vanadium	ND		250	75	ug/L		09/09/16 11:13	09/14/16 20:09	5

Client Sample ID: PZ-200-SS

Lab Sample ID: 160-18839-6
Matrix: Water
Date Collected: 08/26/16 14:27
Date Received: 08/26/16 15:15

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		100	30	ug/L		09/09/16 11:13	09/14/16 20:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.069**	**J**	0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:10	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**2100**		10	7.0	mg/L			09/01/16 09:30	1
Ammonia	**0.88**		0.050	0.022	mg/L			09/22/16 14:29	1
Nitrate/Nitrite	**0.19**	**B**	0.050	0.011	mg/L			09/22/16 22:26	1
Chemical Oxygen Demand	**29**		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	49.5	U	186	187	500	329	pCi/L	09/20/16 14:24	09/21/16 01:54	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18839-7
Matrix: Water
Date Collected: 08/26/16 08:00
Date Received: 08/26/16 15:15

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/09/16 03:02	1
Acrylonitrile	ND		50	1.7	ug/L			09/09/16 03:02	1
Benzene	ND		5.0	0.25	ug/L			09/09/16 03:02	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/09/16 03:02	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/09/16 03:02	1
Bromoform	ND		5.0	0.37	ug/L			09/09/16 03:02	1
Carbon disulfide	**17**		5.0	0.37	ug/L			09/09/16 03:02	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/09/16 03:02	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/09/16 03:02	1
Chloroethane	ND		10	0.38	ug/L			09/09/16 03:02	1
Chloroform	ND		5.0	0.15	ug/L			09/09/16 03:02	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/09/16 03:02	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/09/16 03:02	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/09/16 03:02	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/09/16 03:02	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/09/16 03:02	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/09/16 03:02	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/09/16 03:02	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/09/16 03:02	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/09/16 03:02	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/09/16 03:02	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/09/16 03:02	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/09/16 03:02	1
2-Hexanone	ND		20	0.59	ug/L			09/09/16 03:02	1
Methyl bromide	ND		10	0.40	ug/L			09/09/16 03:02	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18839-1

Client Sample ID: TRIP BLANK
Date Collected: 08/26/16 08:00
Date Received: 08/26/16 15:15

Lab Sample ID: 160-18839-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl chloride	ND		10	0.55	ug/L			09/09/16 03:02	1
Methylene bromide	ND		5.0	0.41	ug/L			09/09/16 03:02	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/09/16 03:02	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/09/16 03:02	1
Methyl iodide	ND		5.0	1.5	ug/L			09/09/16 03:02	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/09/16 03:02	1
Styrene	ND		5.0	0.35	ug/L			09/09/16 03:02	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/09/16 03:02	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/09/16 03:02	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/09/16 03:02	1
Toluene	ND		5.0	1.0	ug/L			09/09/16 03:02	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/09/16 03:02	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/09/16 03:02	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/09/16 03:02	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/09/16 03:02	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/09/16 03:02	1
Trichloroethene	ND		5.0	0.29	ug/L			09/09/16 03:02	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/09/16 03:02	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/09/16 03:02	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/09/16 03:02	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/09/16 03:02	1
Xylenes, Total	ND		10	0.85	ug/L			09/09/16 03:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*71 - 139*		*09/09/16 03:02*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 121*		*09/09/16 03:02*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*76 - 121*		*09/09/16 03:02*	*1*
Toluene-d8 (Surr)	*113*		*80 - 129*		*09/09/16 03:02*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-268602/7
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 18:22	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 18:22	1
Benzene	ND		5.0	0.25	ug/L			09/08/16 18:22	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 18:22	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 18:22	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 18:22	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 18:22	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 18:22	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/08/16 18:22	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 18:22	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 18:22	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 18:22	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 18:22	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 18:22	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 18:22	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 18:22	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 18:22	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/08/16 18:22	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 18:22	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 18:22	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 18:22	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 18:22	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 18:22	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 18:22	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 18:22	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 18:22	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 18:22	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 18:22	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 18:22	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 18:22	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 18:22	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 18:22	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 18:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 18:22	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 18:22	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 18:22	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 18:22	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 18:22	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 18:22	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 18:22	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 18:22	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 18:22	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 18:22	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 18:22	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 18:22	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 18:22	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 18:22	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-268602/7
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		71 - 139		09/08/16 18:22	1
Dibromofluoromethane (Surr)	96		80 - 121		09/08/16 18:22	1
1,2-Dichloroethane-d4 (Surr)	92		76 - 121		09/08/16 18:22	1
Toluene-d8 (Surr)	107		80 - 129		09/08/16 18:22	1

Lab Sample ID: LCS 160-268602/4
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	49.1		ug/L		98	63 - 131
Acrylonitrile	500	460		ug/L		92	81 - 117
Benzene	50.0	50.7		ug/L		101	80 - 120
Bromochloromethane	50.0	45.7		ug/L		91	80 - 120
Bromodichloromethane	50.0	48.8		ug/L		98	80 - 120
Bromoform	50.0	46.0		ug/L		92	80 - 120
Carbon disulfide	50.0	48.1		ug/L		96	79 - 126
Carbon tetrachloride	50.0	45.6		ug/L		91	73 - 123
Chlorobenzene	50.0	50.1		ug/L		100	80 - 120
Chloroethane	50.0	51.7		ug/L		103	52 - 140
Chloroform	50.0	46.1		ug/L		92	80 - 120
cis-1,2-Dichloroethene	50.0	46.2		ug/L		92	80 - 120
cis-1,3-Dichloropropene	50.0	49.9		ug/L		100	80 - 122
Dibromochloromethane	50.0	49.0		ug/L		98	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.4		ug/L		87	77 - 125
1,2-Dibromoethane (EDB)	50.0	47.8		ug/L		96	80 - 120
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	80 - 120
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	80 - 120
1,1-Dichloroethane	50.0	46.9		ug/L		94	80 - 120
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 124
1,1-Dichloroethene	50.0	46.4		ug/L		93	77 - 126
1,2-Dichloropropane	50.0	48.3		ug/L		97	80 - 120
Ethylbenzene	50.0	47.4		ug/L		95	80 - 120
2-Hexanone	50.0	48.3		ug/L		97	64 - 136
Methyl bromide	50.0	53.8		ug/L		108	57 - 139
Methyl chloride	50.0	46.5		ug/L		93	70 - 127
Methylene bromide	50.0	48.3		ug/L		97	78 - 120
Methylene Chloride	50.0	45.9		ug/L		92	80 - 120
Methyl Ethyl Ketone	50.0	49.8		ug/L		100	70 - 130
Methyl iodide	50.0	45.8		ug/L		92	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	49.5		ug/L		99	76 - 129
Styrene	50.0	52.1		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/L		95	80 - 120
1,1,2,2-Tetrachloroethane	50.0	44.3		ug/L		89	80 - 120
Tetrachloroethene	50.0	46.8		ug/L		94	80 - 120
Toluene	50.0	49.6		ug/L		99	80 - 120
trans-1,4-Dichloro-2-butene	50.0	45.6		ug/L		91	75 - 127
trans-1,2-Dichloroethene	50.0	46.7		ug/L		93	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-268602/4
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	50.0		ug/L		100	80 - 130		
1,1,1-Trichloroethane			50.0	46.4		ug/L		93	76 - 120		
1,1,2-Trichloroethane			50.0	47.5		ug/L		95	80 - 120		
Trichloroethene			50.0	49.6		ug/L		99	73 - 120		
Trichlorofluoromethane			50.0	48.7		ug/L		97	74 - 130		
1,2,3-Trichloropropane			50.0	44.3		ug/L		89	80 - 120		
Vinyl acetate			50.0	48.6		ug/L		97	37 - 140		
Vinyl chloride			50.0	50.1		ug/L		100	51 - 140		
Xylenes, Total			100	90.7		ug/L		91	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*94*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*
Toluene-d8 (Surr)	*98*		*80 - 129*

Lab Sample ID: LCSD 160-268602/5
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	49.1		ug/L		98	63 - 131	0	20
Acrylonitrile			500	470		ug/L		94	81 - 117	2	20
Benzene			50.0	51.8		ug/L		104	80 - 120	2	20
Bromochloromethane			50.0	46.3		ug/L		93	80 - 120	1	20
Bromodichloromethane			50.0	50.3		ug/L		101	80 - 120	3	20
Bromoform			50.0	47.8		ug/L		96	80 - 120	4	20
Carbon disulfide			50.0	48.5		ug/L		97	79 - 126	1	20
Carbon tetrachloride			50.0	47.3		ug/L		95	73 - 123	4	20
Chlorobenzene			50.0	52.0		ug/L		104	80 - 120	4	20
Chloroethane			50.0	50.0		ug/L		100	52 - 140	3	20
Chloroform			50.0	46.8		ug/L		94	80 - 120	2	20
cis-1,2-Dichloroethene			50.0	47.3		ug/L		95	80 - 120	2	20
cis-1,3-Dichloropropene			50.0	52.1		ug/L		104	80 - 122	4	20
Dibromochloromethane			50.0	50.5		ug/L		101	80 - 120	3	20
1,2-Dibromo-3-Chloropropane			50.0	43.6		ug/L		87	77 - 125	0	20
1,2-Dibromoethane (EDB)			50.0	49.8		ug/L		100	80 - 120	4	20
1,2-Dichlorobenzene			50.0	48.4		ug/L		97	80 - 120	0	20
1,4-Dichlorobenzene			50.0	54.5		ug/L		109	80 - 120	3	20
1,1-Dichloroethane			50.0	47.6		ug/L		95	80 - 120	1	20
1,2-Dichloroethane			50.0	47.9		ug/L		96	69 - 124	2	20
1,1-Dichloroethene			50.0	47.4		ug/L		95	77 - 126	2	20
1,2-Dichloropropane			50.0	49.2		ug/L		98	80 - 120	2	20
Ethylbenzene			50.0	48.1		ug/L		96	80 - 120	1	20
2-Hexanone			50.0	49.7		ug/L		99	64 - 136	3	20
Methyl bromide			50.0	49.8		ug/L		100	57 - 139	8	20
Methyl chloride			50.0	47.0		ug/L		94	70 - 127	1	20
Methylene bromide			50.0	48.7		ug/L		97	78 - 120	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-268602/5
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	46.7		ug/L		93	80 - 120	2	20
Methyl Ethyl Ketone			50.0	50.7		ug/L		101	70 - 130	2	20
Methyl iodide			50.0	46.4		ug/L		93	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)			50.0	50.5		ug/L		101	76 - 129	2	20
Styrene			50.0	54.5		ug/L		109	80 - 120	4	20
1,1,1,2-Tetrachloroethane			50.0	48.6		ug/L		97	80 - 120	2	20
1,1,2,2-Tetrachloroethane			50.0	45.9		ug/L		92	80 - 120	4	20
Tetrachloroethene			50.0	48.5		ug/L		97	80 - 120	4	20
Toluene			50.0	50.4		ug/L		101	80 - 120	2	20
trans-1,4-Dichloro-2-butene			50.0	46.7		ug/L		93	75 - 127	2	20
trans-1,2-Dichloroethene			50.0	47.3		ug/L		95	80 - 120	1	20
trans-1,3-Dichloropropene			50.0	52.6		ug/L		105	80 - 130	5	20
1,1,1-Trichloroethane			50.0	46.7		ug/L		93	76 - 120	1	20
1,1,2-Trichloroethane			50.0	49.5		ug/L		99	80 - 120	4	20
Trichloroethene			50.0	50.5		ug/L		101	73 - 120	2	20
Trichlorofluoromethane			50.0	47.8		ug/L		96	74 - 130	2	20
1,2,3-Trichloropropane			50.0	45.8		ug/L		92	80 - 120	3	20
Vinyl acetate			50.0	49.0		ug/L		98	37 - 140	1	20
Vinyl chloride			50.0	48.6		ug/L		97	51 - 140	3	20
Xylenes, Total			100	93.4		ug/L		93	80 - 121	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*95*		*76 - 121*
Toluene-d8 (Surr)	*99*		*80 - 129*

Lab Sample ID: 160-18907-A-3 MS
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	41.2		ug/L		82	52 - 138
Acrylonitrile	ND		500	438		ug/L		88	58 - 142
Benzene	ND		50.0	50.4		ug/L		101	80 - 120
Bromochloromethane	ND		50.0	45.2		ug/L		90	72 - 125
Bromodichloromethane	ND		50.0	46.5		ug/L		93	71 - 128
Bromoform	ND		50.0	42.4		ug/L		85	65 - 133
Carbon disulfide	ND		50.0	48.8		ug/L		98	69 - 139
Carbon tetrachloride	ND		50.0	46.1		ug/L		92	70 - 126
Chlorobenzene	1.1	J	50.0	50.0		ug/L		98	80 - 120
Chloroethane	ND		50.0	61.3		ug/L		123	59 - 144
Chloroform	ND		50.0	45.5		ug/L		91	80 - 120
cis-1,2-Dichloroethene	ND		50.0	45.9		ug/L		92	80 - 124
cis-1,3-Dichloropropene	ND		50.0	48.0		ug/L		96	67 - 130
Dibromochloromethane	ND		50.0	45.9		ug/L		92	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	42.3		ug/L		85	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	44.5		ug/L		89	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18907-A-3 MS
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	48.0		ug/L		96	80 - 124
1,4-Dichlorobenzene	ND		50.0	53.4		ug/L		107	80 - 120
1,1-Dichloroethane	ND		50.0	46.7		ug/L		93	80 - 120
1,2-Dichloroethane	ND		50.0	44.4		ug/L		89	56 - 136
1,1-Dichloroethene	ND		50.0	46.9		ug/L		94	66 - 137
1,2-Dichloropropane	ND		50.0	46.7		ug/L		93	80 - 123
Ethylbenzene	ND		50.0	48.4		ug/L		97	80 - 121
2-Hexanone	ND		50.0	41.2		ug/L		82	47 - 150
Methyl bromide	ND		50.0	58.3		ug/L		117	53 - 146
Methyl chloride	ND		50.0	47.9		ug/L		96	61 - 137
Methylene bromide	ND		50.0	43.8		ug/L		88	61 - 136
Methylene Chloride	ND		50.0	45.5		ug/L		91	80 - 120
Methyl Ethyl Ketone	ND		50.0	43.8		ug/L		88	58 - 143
Methyl iodide	ND		50.0	45.6		ug/L		91	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	45.3		ug/L		91	53 - 150
Styrene	ND		50.0	52.1		ug/L		104	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	46.6		ug/L		93	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	43.2		ug/L		86	60 - 150
Tetrachloroethene	ND		50.0	47.0		ug/L		94	66 - 132
Toluene	ND		50.0	49.1		ug/L		98	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	42.4		ug/L		85	55 - 146
trans-1,2-Dichloroethene	ND		50.0	46.8		ug/L		94	79 - 121
trans-1,3-Dichloropropene	ND		50.0	46.6		ug/L		93	68 - 143
1,1,1-Trichloroethane	ND		50.0	46.9		ug/L		94	74 - 123
1,1,2-Trichloroethane	ND		50.0	46.3		ug/L		93	70 - 134
Trichloroethene	ND		50.0	48.3		ug/L		97	63 - 120
Trichlorofluoromethane	ND		50.0	54.6		ug/L		109	53 - 150
1,2,3-Trichloropropane	ND		50.0	40.8		ug/L		82	62 - 137
Vinyl acetate	ND		50.0	47.3		ug/L		95	63 - 150
Vinyl chloride	ND		50.0	58.2		ug/L		116	54 - 140
Xylenes, Total	ND		100	92.3		ug/L		92	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*71 - 139*
Dibromofluoromethane (Surr)	*93*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*93*		*76 - 121*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: 160-18907-A-3 MSD
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	44.7		ug/L		89	52 - 138	8	20
Acrylonitrile	ND		500	460		ug/L		92	58 - 142	5	20
Benzene	ND		50.0	51.9		ug/L		104	80 - 120	3	20
Bromochloromethane	ND		50.0	46.3		ug/L		93	72 - 125	2	20
Bromodichloromethane	ND		50.0	49.1		ug/L		98	71 - 128	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18907-A-3 MSD
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	45.1		ug/L		90	65 - 133	6	20
Carbon disulfide	ND		50.0	49.2		ug/L		98	69 - 139	1	20
Carbon tetrachloride	ND		50.0	47.4		ug/L		95	70 - 126	3	20
Chlorobenzene	1.1	J	50.0	51.7		ug/L		101	80 - 120	3	20
Chloroethane	ND		50.0	56.4		ug/L		113	59 - 144	8	20
Chloroform	ND		50.0	47.3		ug/L		95	80 - 120	4	20
cis-1,2-Dichloroethene	ND		50.0	47.4		ug/L		95	80 - 124	3	20
cis-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	67 - 130	5	20
Dibromochloromethane	ND		50.0	49.1		ug/L		98	68 - 133	7	20
1,2-Dibromo-3-Chloropropane	ND		50.0	44.2		ug/L		88	58 - 148	4	20
1,2-Dibromoethane (EDB)	ND		50.0	48.4		ug/L		97	65 - 138	8	20
1,2-Dichlorobenzene	ND		50.0	48.5		ug/L		97	80 - 124	1	20
1,4-Dichlorobenzene	ND		50.0	54.4		ug/L		109	80 - 120	2	20
1,1-Dichloroethane	ND		50.0	48.0		ug/L		96	80 - 120	3	20
1,2-Dichloroethane	ND		50.0	47.9		ug/L		96	56 - 136	8	20
1,1-Dichloroethene	ND		50.0	47.3		ug/L		95	66 - 137	1	20
1,2-Dichloropropane	ND		50.0	48.8		ug/L		98	80 - 123	4	20
Ethylbenzene	ND		50.0	49.0		ug/L		98	80 - 121	1	20
2-Hexanone	ND		50.0	46.9		ug/L		94	47 - 150	13	20
Methyl bromide	ND		50.0	55.1		ug/L		110	53 - 146	6	20
Methyl chloride	ND		50.0	48.5		ug/L		97	61 - 137	1	20
Methylene bromide	ND		50.0	47.3		ug/L		95	61 - 136	8	20
Methylene Chloride	ND		50.0	46.5		ug/L		93	80 - 120	2	20
Methyl Ethyl Ketone	ND		50.0	46.7		ug/L		93	58 - 143	6	20
Methyl iodide	ND		50.0	46.3		ug/L		93	69 - 124	2	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	48.8		ug/L		98	53 - 150	7	20
Styrene	ND		50.0	53.7		ug/L		107	44 - 150	3	20
1,1,1,2-Tetrachloroethane	ND		50.0	48.8		ug/L		98	80 - 120	5	20
1,1,2,2-Tetrachloroethane	ND		50.0	45.9		ug/L		92	60 - 150	6	20
Tetrachloroethene	ND		50.0	47.6		ug/L		95	66 - 132	1	20
Toluene	ND		50.0	49.7		ug/L		99	75 - 134	1	20
trans-1,4-Dichloro-2-butene	ND		50.0	45.1		ug/L		90	55 - 146	6	20
trans-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	79 - 121	3	20
trans-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	68 - 143	8	20
1,1,1-Trichloroethane	ND		50.0	47.8		ug/L		96	74 - 123	2	20
1,1,2-Trichloroethane	ND		50.0	47.7		ug/L		95	70 - 134	3	20
Trichloroethene	ND		50.0	50.1		ug/L		100	63 - 120	4	20
Trichlorofluoromethane	ND		50.0	52.5		ug/L		105	53 - 150	4	20
1,2,3-Trichloropropane	ND		50.0	43.3		ug/L		87	62 - 137	6	20
Vinyl acetate	ND		50.0	51.1		ug/L		102	63 - 150	8	20
Vinyl chloride	ND		50.0	53.9		ug/L		108	54 - 140	8	20
Xylenes, Total	ND		100	94.5		ug/L		95	80 - 124	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*96*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*
Toluene-d8 (Surr)	*99*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-270305/9
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/16/16 14:54	1
Sulfate	ND		0.50	0.050	mg/L			09/16/16 14:54	1
Chloride	ND		0.20	0.020	mg/L			09/16/16 14:54	1

Lab Sample ID: LCS 160-270305/10
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	1.01		mg/L		101	90 - 110
Sulfate	8.00	7.67		mg/L		96	90 - 110
Chloride	2.00	1.96		mg/L		98	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18807-D-1 MS
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride - DL	0.17	J	4.00	3.92		mg/L		94	90 - 110
Sulfate - DL	1.0		8.00	8.32		mg/L		91	90 - 110

Lab Sample ID: 160-18807-D-1 DU
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride - DL	0.17	J	0.173	J	mg/L		2	20
Sulfate - DL	1.0		1.01		mg/L		1	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-18807-D-1 MS
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	180		100	274	E	mg/L		95	90 - 110

Lab Sample ID: 160-18807-D-1 DU
Matrix: Water
Analysis Batch: 270305

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	180		181		mg/L		0.5	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-268820/1-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268820

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Arsenic	ND		10	4.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Barium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Beryllium	ND		5.0	1.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
Boron	ND		100	25	ug/L		09/09/16 11:13	09/14/16 18:11	1
Cadmium	ND		5.0	1.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
CaHard	ND		2500	750	ug/L		09/09/16 11:13	09/14/16 18:11	1
Calcium	ND		1000	300	ug/L		09/09/16 11:13	09/14/16 18:11	1
Chromium	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Cobalt	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Copper	ND		25	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Lead	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Magnesium	ND		1.0	0.30	mg/L		09/09/16 11:13	09/14/16 18:11	1
Manganese	ND		15	2.5	ug/L		09/09/16 11:13	09/14/16 18:11	1
MgHard	ND		4100	1200	ug/L		09/09/16 11:13	09/14/16 18:11	1
Nickel	ND		0.040	0.010	mg/L		09/09/16 11:13	09/14/16 18:11	1
Phosphorus	ND		250	75	ug/L		09/09/16 11:13	09/14/16 18:11	1
Selenium	ND		15	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Silver	ND		10	3.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Sodium	ND		1000	300	ug/L		09/09/16 11:13	09/14/16 18:11	1
Thallium	ND	^	20	5.0	ug/L		09/09/16 11:13	09/14/16 18:11	1
Total Hardness	ND		6600	2000	ug/L		09/09/16 11:13	09/14/16 18:11	1
Vanadium	ND		50	15	ug/L		09/09/16 11:13	09/14/16 18:11	1
Zinc	ND		20	6.0	ug/L		09/09/16 11:13	09/14/16 18:11	1

Lab Sample ID: LCS 160-268820/2-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	523		ug/L		105	80 - 120
Arsenic	1000	1030		ug/L		103	80 - 120
Barium	1000	1020		ug/L		102	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Boron	2000	2050	E	ug/L		103	80 - 120
Cadmium	1000	1050		ug/L		105	80 - 120
Calcium	10000	10900		ug/L		109	80 - 120
Chromium	1000	1080		ug/L		108	80 - 120
Cobalt	1000	1090		ug/L		109	80 - 120
Copper	1000	1060		ug/L		106	80 - 120
Lead	1000	1100		ug/L		110	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Manganese	1000	1040		ug/L		104	80 - 120
Nickel	1.00	1.09		mg/L		109	80 - 120
Phosphorus	1000	1190		ug/L		119	80 - 120
Selenium	500	521		ug/L		104	80 - 120
Silver	200	210		ug/L		105	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-268820/2-A
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	230	^	ug/L		115	80 - 120
Vanadium	1000	1020		ug/L		102	80 - 120
Zinc	1000	1040		ug/L		104	80 - 120

Lab Sample ID: 160-18778-G-1-C MS ^10
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	507		ug/L		101	75 - 125
Arsenic	80	J	1000	1020		ug/L		94	75 - 125
Barium	2600		1000	3570		ug/L		96	75 - 125
Beryllium	ND		1000	983		ug/L		98	75 - 125
Boron	ND		2000	1920		ug/L		96	75 - 125
Cadmium	ND		1000	970		ug/L		97	75 - 125
Calcium	630000		10000	620000	4	ug/L		-137	75 - 125
Chromium	ND		1000	990		ug/L		99	75 - 125
Cobalt	ND		1000	1010		ug/L		101	75 - 125
Copper	ND		1000	989		ug/L		99	75 - 125
Lead	ND		1000	1010		ug/L		101	75 - 125
Magnesium	280		10.0	288	4	mg/L		50	75 - 125
Manganese	2300		1000	3300		ug/L		97	75 - 125
Nickel	ND		1.00	1.06		mg/L		106	75 - 125
Phosphorus	ND	F1	1000	1310	J F1	ug/L		131	75 - 125
Selenium	ND		500	503		ug/L		101	75 - 125
Silver	ND		200	187		ug/L		94	75 - 125
Sodium	190000		10000	193000	4	ug/L		72	75 - 125
Thallium	ND	^	200	242	^	ug/L		121	75 - 125
Vanadium	ND		1000	940		ug/L		94	75 - 125
Zinc	ND		1000	974		ug/L		97	75 - 125

Lab Sample ID: 160-18778-G-1-D MSD ^10
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	508		ug/L		102	75 - 125	0	20
Arsenic	80	J	1000	1080		ug/L		100	75 - 125	6	20
Barium	2600		1000	3690		ug/L		108	75 - 125	3	20
Beryllium	ND		1000	1010		ug/L		101	75 - 125	3	20
Boron	ND		2000	1960		ug/L		98	75 - 125	2	20
Cadmium	ND		1000	1010		ug/L		101	75 - 125	4	20
Calcium	630000		10000	655000	4	ug/L		211	75 - 125	5	20
Chromium	ND		1000	1030		ug/L		103	75 - 125	4	20
Cobalt	ND		1000	1050		ug/L		105	75 - 125	3	20
Copper	ND		1000	1000		ug/L		100	75 - 125	1	20
Lead	ND		1000	1040		ug/L		104	75 - 125	3	20
Magnesium	280		10.0	302	4	mg/L		183	75 - 125	5	20
Manganese	2300		1000	3420		ug/L		109	75 - 125	4	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18778-G-1-D MSD ^10
Matrix: Water
Analysis Batch: 269953

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 268820

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	ND		1.00	1.11		mg/L		111	75 - 125	4	20
Phosphorus	ND	F1	1000	1400	J F1	ug/L		140	75 - 125	6	20
Selenium	ND		500	538		ug/L		108	75 - 125	7	20
Silver	ND		200	202		ug/L		101	75 - 125	8	20
Sodium	190000		10000	200000	4	ug/L		145	75 - 125	4	20
Thallium	ND	^	200	234	^	ug/L		117	75 - 125	3	20
Vanadium	ND		1000	964		ug/L		96	75 - 125	3	20
Zinc	ND		1000	1010		ug/L		101	75 - 125	3	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-269108/1-A
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:34	1

Lab Sample ID: LCS 160-269108/2-A
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.22		ug/L		84	80 - 120

Lab Sample ID: 160-18807-G-1-C MS
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.11	J	5.00	4.78		ug/L		93	80 - 120

Lab Sample ID: 160-18807-G-1-D MSD
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 269108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11	J	5.00	4.71		ug/L		92	80 - 120	1	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-267627/1
Matrix: Water
Analysis Batch: 267627

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			09/01/16 09:30	1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 160-267627/2
Matrix: Water
Analysis Batch: 267627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Dissolved Solids (TDS)			500	505		mg/L		101	90 - 110		

Lab Sample ID: 160-18839-1 DU
Matrix: Water
Analysis Batch: 267627

Client Sample ID: PZ-304-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Total Dissolved Solids (TDS)	2000			2010		mg/L				2	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-271200/12
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/22/16 13:44	1

Lab Sample ID: LCS 160-271200/13
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			0.500	0.489		mg/L		98	90 - 110		

Method: 350.1 - Nitrogen, Ammonia - DL

Lab Sample ID: 160-18807-E-1 MS ^100
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia - DL	95		0.500	86.9	4	mg/L		-1596	90 - 110		

Lab Sample ID: 160-18807-E-1 DU ^100
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia - DL	95			93.6		mg/L				1	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-271335/4
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0216	J	0.050	0.011	mg/L			09/22/16 21:30	1

Lab Sample ID: LCS 160-271335/5
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.460		mg/L		92	90 - 110

Lab Sample ID: 160-18807-E-1 MS
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.14	B F1	0.500	0.155	F1	mg/L		2	90 - 110

Lab Sample ID: 160-18807-E-1 DU
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.14	B F1	0.146		mg/L		0.8	20

Method: 410.4 - COD

Lab Sample ID: MB 160-267630/3-A
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267630

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Lab Sample ID: LCS 160-267630/4-A
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: 160-18839-5 MS
Matrix: Water
Analysis Batch: 267771

Client Sample ID: PZ-302-AI
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	16		50.0	70.0		mg/L		108	90 - 110

Method: 410.4 - COD (Continued)

Lab Sample ID: 160-18807-E-3-B DU
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	43			38.0		mg/L				12	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-270734/1-A
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270734

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-49.10	U	173	173	500	319	pCi/L	09/20/16 14:24	09/20/16 23:28	1

Lab Sample ID: LCS 160-270734/2-A
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270734

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3020	2995		452	500	322	pCi/L	99	74 - 114		

Lab Sample ID: 280-87757-C-6-B MS
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	892		3020	4225		566	500	329	pCi/L	110	67 - 130		

Lab Sample ID: 280-87757-C-5-B DU
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	1650			1829		350	500	329	pCi/L			0.26	1

GC/MS VOA

Analysis Batch: 268602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	8260C	
160-18839-2	PZ-304-AI	Total/NA	Water	8260C	
160-18839-3	MW-104	Total/NA	Water	8260C	
160-18839-4	D-81	Total/NA	Water	8260C	
160-18839-5	PZ-302-AI	Total/NA	Water	8260C	
160-18839-6	PZ-200-SS	Total/NA	Water	8260C	
160-18839-7	TRIP BLANK	Total/NA	Water	8260C	
MB 160-268602/7	Method Blank	Total/NA	Water	8260C	
LCS 160-268602/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-268602/5	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18907-A-3 MS	Matrix Spike	Total/NA	Water	8260C	
160-18907-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 270305

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1 - DL	PZ-304-AS	Total/NA	Water	300.0	
160-18839-1 - DL2	PZ-304-AS	Total/NA	Water	300.0	
160-18839-2 - DL	PZ-304-AI	Total/NA	Water	300.0	
160-18839-2 - DL2	PZ-304-AI	Total/NA	Water	300.0	
160-18839-3 - DL	MW-104	Total/NA	Water	300.0	
160-18839-4 - DL	D-81	Total/NA	Water	300.0	
160-18839-5 - DL	PZ-302-AI	Total/NA	Water	300.0	
160-18839-5 - DL2	PZ-302-AI	Total/NA	Water	300.0	
160-18839-6 - DL	PZ-200-SS	Total/NA	Water	300.0	
160-18839-6 - DL2	PZ-200-SS	Total/NA	Water	300.0	
160-18839-6 - DL3	PZ-200-SS	Total/NA	Water	300.0	
MB 160-270305/9	Method Blank	Total/NA	Water	300.0	
LCS 160-270305/10	Lab Control Sample	Total/NA	Water	300.0	
160-18807-D-1 MS - DL	Matrix Spike	Total/NA	Water	300.0	
160-18807-D-1 MS - DL2	Matrix Spike	Total/NA	Water	300.0	
160-18807-D-1 DU - DL	Duplicate	Total/NA	Water	300.0	
160-18807-D-1 DU - DL2	Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 268820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	3010A	
160-18839-2	PZ-304-AI	Total/NA	Water	3010A	
160-18839-3	MW-104	Total/NA	Water	3010A	
160-18839-4	D-81	Total/NA	Water	3010A	
160-18839-5	PZ-302-AI	Total/NA	Water	3010A	
160-18839-6	PZ-200-SS	Total/NA	Water	3010A	
MB 160-268820/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-268820/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18778-G-1-C MS ^10	Matrix Spike	Total/NA	Water	3010A	
160-18778-G-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 269108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	7470A	
160-18839-2	PZ-304-AI	Total/NA	Water	7470A	
160-18839-3	MW-104	Total/NA	Water	7470A	
160-18839-4	D-81	Total/NA	Water	7470A	
160-18839-5	PZ-302-AI	Total/NA	Water	7470A	
160-18839-6	PZ-200-SS	Total/NA	Water	7470A	
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18807-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	
160-18807-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 269210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	7470A	269108
160-18839-2	PZ-304-AI	Total/NA	Water	7470A	269108
160-18839-3	MW-104	Total/NA	Water	7470A	269108
160-18839-4	D-81	Total/NA	Water	7470A	269108
160-18839-5	PZ-302-AI	Total/NA	Water	7470A	269108
160-18839-6	PZ-200-SS	Total/NA	Water	7470A	269108
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	269108
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	269108
160-18807-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	269108
160-18807-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	269108

Analysis Batch: 269953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	6010C	268820
160-18839-2	PZ-304-AI	Total/NA	Water	6010C	268820
160-18839-3	MW-104	Total/NA	Water	6010C	268820
160-18839-4	D-81	Total/NA	Water	6010C	268820
160-18839-5	PZ-302-AI	Total/NA	Water	6010C	268820
160-18839-6	PZ-200-SS	Total/NA	Water	6010C	268820
MB 160-268820/1-A	Method Blank	Total/NA	Water	6010C	268820
LCS 160-268820/2-A	Lab Control Sample	Total/NA	Water	6010C	268820
160-18778-G-1-C MS ^10	Matrix Spike	Total/NA	Water	6010C	268820
160-18778-G-1-D MSD ^10	Matrix Spike Duplicate	Total/NA	Water	6010C	268820

General Chemistry

Analysis Batch: 267627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	160.1	
160-18839-2	PZ-304-AI	Total/NA	Water	160.1	
160-18839-3	MW-104	Total/NA	Water	160.1	
160-18839-4	D-81	Total/NA	Water	160.1	
160-18839-5	PZ-302-AI	Total/NA	Water	160.1	
160-18839-6	PZ-200-SS	Total/NA	Water	160.1	
MB 160-267627/1	Method Blank	Total/NA	Water	160.1	
LCS 160-267627/2	Lab Control Sample	Total/NA	Water	160.1	
160-18839-1 DU	PZ-304-AS	Total/NA	Water	160.1	

General Chemistry (Continued)

Prep Batch: 267630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1 - DL	PZ-304-AS	Total/NA	Water	410.4	
160-18839-2	PZ-304-AI	Total/NA	Water	410.4	
160-18839-3	MW-104	Total/NA	Water	410.4	
160-18839-4	D-81	Total/NA	Water	410.4	
160-18839-5	PZ-302-AI	Total/NA	Water	410.4	
160-18839-6	PZ-200-SS	Total/NA	Water	410.4	
MB 160-267630/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-267630/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18839-5 MS	PZ-302-AI	Total/NA	Water	410.4	
160-18807-E-3-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 267771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1 - DL	PZ-304-AS	Total/NA	Water	410.4	267630
160-18839-2	PZ-304-AI	Total/NA	Water	410.4	267630
160-18839-3	MW-104	Total/NA	Water	410.4	267630
160-18839-4	D-81	Total/NA	Water	410.4	267630
160-18839-5	PZ-302-AI	Total/NA	Water	410.4	267630
160-18839-6	PZ-200-SS	Total/NA	Water	410.4	267630
MB 160-267630/3-A	Method Blank	Total/NA	Water	410.4	267630
LCS 160-267630/4-A	Lab Control Sample	Total/NA	Water	410.4	267630
160-18839-5 MS	PZ-302-AI	Total/NA	Water	410.4	267630
160-18807-E-3-B DU	Duplicate	Total/NA	Water	410.4	267630

Analysis Batch: 271200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1 - DL	PZ-304-AS	Total/NA	Water	350.1	
160-18839-2 - DL	PZ-304-AI	Total/NA	Water	350.1	
160-18839-3	MW-104	Total/NA	Water	350.1	
160-18839-4	D-81	Total/NA	Water	350.1	
160-18839-5	PZ-302-AI	Total/NA	Water	350.1	
160-18839-6	PZ-200-SS	Total/NA	Water	350.1	
MB 160-271200/12	Method Blank	Total/NA	Water	350.1	
LCS 160-271200/13	Lab Control Sample	Total/NA	Water	350.1	
160-18807-E-1 MS ^100 - DL	Matrix Spike	Total/NA	Water	350.1	
160-18807-E-1 DU ^100 - DL	Duplicate	Total/NA	Water	350.1	

Analysis Batch: 271335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	353.1 Preserved	
160-18839-2	PZ-304-AI	Total/NA	Water	353.1 Preserved	
160-18839-3	MW-104	Total/NA	Water	353.1 Preserved	
160-18839-4	D-81	Total/NA	Water	353.1 Preserved	
160-18839-5	PZ-302-AI	Total/NA	Water	353.1 Preserved	
160-18839-6	PZ-200-SS	Total/NA	Water	353.1 Preserved	
MB 160-271335/4	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-271335/5	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18807-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18807-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

QC Association Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18839-1

Rad

Prep Batch: 270734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18839-1	PZ-304-AS	Total/NA	Water	LSC_Dist_Susp	
160-18839-2	PZ-304-AI	Total/NA	Water	LSC_Dist_Susp	
160-18839-3	MW-104	Total/NA	Water	LSC_Dist_Susp	
160-18839-4	D-81	Total/NA	Water	LSC_Dist_Susp	
160-18839-5	PZ-302-AI	Total/NA	Water	LSC_Dist_Susp	
160-18839-6	PZ-200-SS	Total/NA	Water	LSC_Dist_Susp	
MB 160-270734/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-270734/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
280-87757-C-6-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
280-87757-C-5-B DU	Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18839-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18839-1	PZ-304-AS	106	98	100	106
160-18839-2	PZ-304-AI	111	96	92	107
160-18839-3	MW-104	115	98	97	113
160-18839-4	D-81	109	97	96	110
160-18839-5	PZ-302-AI	110	100	97	110
160-18839-6	PZ-200-SS	113	97	97	108
160-18839-7	TRIP BLANK	114	102	103	113
160-18907-A-3 MS	Matrix Spike	92	93	93	100
160-18907-A-3 MSD	Matrix Spike Duplicate	93	96	97	99
LCS 160-268602/4	Lab Control Sample	93	94	96	98
LCSD 160-268602/5	Lab Control Sample Dup	95	95	95	99
MB 160-268602/7	Method Blank	109	96	92	107

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18857-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Rhonda Ridenhower

Authorized for release by:
9/23/2016 5:28:09 PM
Rhonda Ridenhower, Manager of Project Management
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Designee for

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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18857-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18857-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/29/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 12.6 C, samples were collected prior to receipt at the lab.

Receipt Exceptions: Method(s) 6010C, 7470A: The following sample was received with insufficient preservation: PZ-113-AD (160-18857-3). Nitric acid preservative was added by the laboratory, and the sample(s) pH was adjusted to < 2 SU.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5), PZ-203-SS (160-18857-6) and TRIP BLANK (160-18857-7) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/07/2016.

Batch 268225

The continuing calibration verification (CCV) associated with batch 160-268225 recovered outside acceptance criteria, low biased, for Methyl iodide. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were

Job ID: 160-18857-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

non-detect for this analyte, the data have been reported.(CCVIS 160-268225/2)

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-268225: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-268225/2)

According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Samples were analyzed outside the 7 day, unpreserved, holding time.PZ-113-AD (160-18857-3) and PZ-103-SS (160-18857-5)

Surrogate 1,2-Dichloroethane-d4 (Surr) recovery for the following sample was outside the upper control limit: PZ-113-SS (160-18857-2). This sample did not contain any target analytes associated with the affected surrogate; therefore, re-extraction and/or re-analysis was not performed.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 160-268225 recovered outside control limits for the following analytes: Carbon disulfide, Methyl iodide and 1,1-Dichloroethene.
(LCSD 160-268225/4)

The matrix spike duplicate (MSD) recoveries for analytical batch 160-268225 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control samples' (LCS/LCSD) recoveries were within acceptance limits.(160-18857-A-1 MSD)

The laboratory control sample duplicate (LCSD) for analytical batch 160-268225 recovered outside control limits for the following analyte: 1,1-Dichloroethene. This analyte was biased high in the LCSD and was not detected in the associated samples; therefore, the data have been reported.(LCSD 160-268225/4)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/06/2016 and analyzed on 09/07/2016.

Batch 268438
The initial calibration verification (ICV) result for batch analytical batch 160-268438 was above the upper control limit for Thallium. Sample results were below the reporting limit, and have been reported as qualified data.(ICV 160-268438/14)

The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 160-268203 and analytical batch 160-268438 were outside control limits for Phosphorus. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.(160-18857-F-1-C MS ^) and (160-18857-F-1-D MSD)

Due to the high concentration of Magnesium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-268203 and analytical batch 160-268438 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.(160-18857-F-1-C MS ^) and (160-18857-F-1-D MSD)

The following samples was diluted to bring the concentration of target analytes within the calibration range: PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5), PZ-203-SS (160-18857-6), (160-18857-F-1-C MS ^), (160-18857-F-1-D MSD) and (160-18857-F-1-B SD ^). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/06/2016 and analyzed on 09/07/2016.

Job ID: 160-18857-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 09/01/2016 and 09/02/2016.

The following samples in TDS batch 160-267627 were analzyed using a reduced aliquot, due to high concentrations of the target analyte: PZ-113-AD (160-18857-3). As a result, the reporting limits (RLs) have been adjusted for the reduced aliquot.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/01/2016 and 09/02/2016.

The following samples in Anion batch 160-267791 were diluted to bring the concentrations of target analytes within the calibration range: PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6). Elevated reporting limits (RLs) are provided.

The following samples in Anion batch 160-267791 were analyzed at dilution to start (2x) based on high sample conductivities that made undiluted analysis inadvisable: PZ-113-AD (160-18857-3) and PZ-103-SS (160-18857-5).
As a result, sample 18857-3 is reported non-detect (ND) for Fluoride and Sulfate at the initial dilution, and sample 18857-5 is ND for Sulfate at the initial dilution. Elevated reporting limits (RLs) are provided.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/22/2016.

The following samples in NH3 analytical batch 160-271200 were diluted to bring the concentration of the target analyte within the calibration range: PZ-113-AD (160-18857-3) and (160-18807-E-1 ^100). Elevated reporting limits (RLs) are provided.

Due to the high concentration of NH3, the following matrix spike (MS) for analytical batch 160-271200 could not be evaluated for accuracy: (160-18807-E-1 MS ^10). The concentration of ammonia spiked into the sample was diluted below reliable detection limits. The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 09/22/2016.

The following matrix spike (MS) recoveries for NO3-NO2 analytical batch 160-271335 were outside control limits: (160-18807-E-1 MS) and (160-18857-E-1 MS). Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits, as well as the historically low MS recoveries for this client.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND

Job ID: 160-18857-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 09/01/2016.

The following samples in COD batch 160-267771 were diluted to bring the concentration of target analytes within the calibration range: PZ-113-AD (160-18857-3). Elevated reporting limits (RLs) are provided.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)

Samples PZ-206-SS (160-18857-1), PZ-113-SS (160-18857-2), PZ-113-AD (160-18857-3), PZ-113-AS (160-18857-4), PZ-103-SS (160-18857-5) and PZ-203-SS (160-18857-6) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/20/2016 and analyzed on 09/21/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

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Chain of Custody Record

160-18857 Chain of Custody

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise T	COC No: 160-4493-2213.5
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com	Page: Page 5 of 6
Company: Missouri Attorney General's Office			Job #:
Address: PO BOX 899	Due Date Requested:		
City: Jefferson City	TAT Requested (days): Standard		
State, Zip: MO, 65102			
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required		
Email: brenna.mcdonald@dnr.mo.gov	WO #:		
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539		
Site: Bridgeton Landfill (BLF)	SSOW#:		

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide → No Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	D	A	CB		
PZ-206-SS	8/29/16	0851	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-113-SS	8/29/16	1014	G	Water	N	N	✓	✓	✓	✓	✓		6	only two 40ml VOA's
PZ-113-AD	8/29/16	1123	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-113-AS	8/29/16	1332	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-103-SS	8/29/16	1448	G	Water	N	N	✓	✓	✓	✓	✓		7	Landfill gas smell
PZ-203-SS	8/29/16	1602	G	Water	N	N	✓	✓	✓	✓	✓		7	
TripBlank	8/29/16	0800	G	Water	N	N					✓		3	
				Water										
				Water										
				Water										
				Water										

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Brenna McDonald	8/29/16 1645		Joe Clarke	8-29-16 1645	TAST
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18857-1

Login Number: 18857
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Refer to Job Narrative for details.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
*	RPD of the LCS and LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
X	Surrogate is outside control limits
H	Sample was prepped or analyzed beyond the specified holding time

HPLC/IC

Qualifier	Qualifier Description
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

General Chemistry

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18857-1	PZ-206-SS	Water	08/29/16 08:51	08/29/16 16:45
160-18857-2	PZ-113-SS	Water	08/29/16 10:14	08/29/16 16:45
160-18857-3	PZ-113-AD	Water	08/29/16 11:23	08/29/16 16:45
160-18857-4	PZ-113-AS	Water	08/29/16 13:32	08/29/16 16:45
160-18857-5	PZ-103-SS	Water	08/29/16 14:48	08/29/16 16:45
160-18857-6	PZ-203-SS	Water	08/29/16 16:02	08/29/16 16:45
160-18857-7	TRIP BLANK	Water	08/29/16 08:00	08/29/16 16:45

Detection Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Client Sample ID: PZ-206-SS — Lab Sample ID: 160-18857-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	2.4	J	5.0	0.37	ug/L	1		8260C	Total/NA
Fluoride	1.2		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate - DL	50		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	140		40	4.0	mg/L	200		300.0	Total/NA
Barium	110	J	250	75	ug/L	5		6010C	Total/NA
Boron	190	J	500	130	ug/L	5		6010C	Total/NA
CaHard	360000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	140000		5000	1500	ug/L	5		6010C	Total/NA
Magnesium	94		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	110		75	13	ug/L	5		6010C	Total/NA
MgHard	390000		21000	6200	ug/L	5		6010C	Total/NA
Sodium	24000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	750000		33000	9900	ug/L	5		6010C	Total/NA
Zinc	30	J	100	30	ug/L	5		6010C	Total/NA
Total Dissolved Solids (TDS)	860		5.0	3.5	mg/L	1		160.1	Total/NA
Ammonia	0.24		0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.022	J B F1	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA
Chemical Oxygen Demand	72		5.0	1.1	mg/L	1		410.4	Total/NA

Client Sample ID: PZ-113-SS — Lab Sample ID: 160-18857-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	19		0.50	0.050	mg/L	1		300.0	Total/NA
Fluoride - DL	2.6		2.0	0.20	mg/L	20		300.0	Total/NA
Chloride - DL	11		4.0	0.40	mg/L	20		300.0	Total/NA
Barium	210	J	250	75	ug/L	5		6010C	Total/NA
CaHard	330000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	130000		5000	1500	ug/L	5		6010C	Total/NA
Chromium	19	J	50	15	ug/L	5		6010C	Total/NA
Magnesium	54		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	92		75	13	ug/L	5		6010C	Total/NA
MgHard	220000		21000	6200	ug/L	5		6010C	Total/NA
Phosphorus	400	J	1300	380	ug/L	5		6010C	Total/NA
Sodium	18000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	550000		33000	9900	ug/L	5		6010C	Total/NA
Zinc	30	J	100	30	ug/L	5		6010C	Total/NA
Mercury	0.063	J	0.20	0.060	ug/L	1		7470A	Total/NA
Total Dissolved Solids (TDS)	320		5.0	3.5	mg/L	1		160.1	Total/NA
Ammonia	0.049	J	0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.012	J B	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA

Client Sample ID: PZ-113-AD — Lab Sample ID: 160-18857-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J H	20	6.7	ug/L	1		8260C	Total/NA
Benzene	1.2	J H	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	1.2	J H	5.0	0.38	ug/L	1		8260C	Total/NA
Sulfate - DL	0.27	J	1.0	0.10	mg/L	2		300.0	Total/NA
Chloride - DL3	820		100	10	mg/L	500		300.0	Total/NA
Barium	2600		250	75	ug/L	5		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ-113-AD (Continued) — Lab Sample ID: 160-18857-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	1400		500	130	ug/L	5		6010C	Total/NA
CaHard	750000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	300000		5000	1500	ug/L	5		6010C	Total/NA
Magnesium	91		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	680		75	13	ug/L	5		6010C	Total/NA
MgHard	370000		21000	6200	ug/L	5		6010C	Total/NA
Phosphorus	720	J	1300	380	ug/L	5		6010C	Total/NA
Sodium	470000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	1100000		33000	9900	ug/L	5		6010C	Total/NA
Mercury	0.11	J	0.20	0.060	ug/L	1		7470A	Total/NA
Total Dissolved Solids (TDS)	2600		25	17	mg/L	1		160.1	Total/NA
Nitrate/Nitrite	0.23	B	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA
Ammonia - DL	40		5.0	2.2	mg/L	100		350.1	Total/NA
Chemical Oxygen Demand - DL	220		50	11	mg/L	10		410.4	Total/NA

Client Sample ID: PZ-113-AS — Lab Sample ID: 160-18857-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	11	J	20	6.7	ug/L	1		8260C	Total/NA
Fluoride	0.15		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate	12		0.50	0.050	mg/L	1		300.0	Total/NA
Chloride - DL2	110		40	4.0	mg/L	200		300.0	Total/NA
Arsenic	26	J	50	20	ug/L	5		6010C	Total/NA
Barium	760		250	75	ug/L	5		6010C	Total/NA
Boron	340	J	500	130	ug/L	5		6010C	Total/NA
CaHard	440000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	180000		5000	1500	ug/L	5		6010C	Total/NA
Magnesium	49		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	5500		75	13	ug/L	5		6010C	Total/NA
MgHard	200000		21000	6200	ug/L	5		6010C	Total/NA
Sodium	63000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	640000		33000	9900	ug/L	5		6010C	Total/NA
Total Dissolved Solids (TDS)	860		5.0	3.5	mg/L	1		160.1	Total/NA
Ammonia	1.7		0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.066	B	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA
Chemical Oxygen Demand	25		5.0	1.1	mg/L	1		410.4	Total/NA

Client Sample ID: PZ-103-SS — Lab Sample ID: 160-18857-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	8.3	J H	20	6.7	ug/L	1		8260C	Total/NA
Benzene	59	H	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	1.2	J H	5.0	0.38	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	4.6	J H	5.0	0.35	ug/L	1		8260C	Total/NA
Ethylbenzene	5.9	H	5.0	0.30	ug/L	1		8260C	Total/NA
Methyl chloride	0.66	J H	10	0.55	ug/L	1		8260C	Total/NA
Toluene	12	H	5.0	1.0	ug/L	1		8260C	Total/NA
Xylenes, Total	8.8	J H	10	0.85	ug/L	1		8260C	Total/NA
Fluoride - DL	0.56		0.20	0.020	mg/L	2		300.0	Total/NA
Sulfate - DL	0.96	J	1.0	0.10	mg/L	2		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ-103-SS (Continued) — Lab Sample ID: 160-18857-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride - DL2	23		10	1.0	mg/L	50		300.0	Total/NA
Barium	760		250	75	ug/L	5		6010C	Total/NA
Boron	320	J	500	130	ug/L	5		6010C	Total/NA
CaHard	710000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	280000		5000	1500	ug/L	5		6010C	Total/NA
Chromium	15	J	50	15	ug/L	5		6010C	Total/NA
Magnesium	100		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	710		75	13	ug/L	5		6010C	Total/NA
MgHard	430000		21000	6200	ug/L	5		6010C	Total/NA
Phosphorus	820	J	1300	380	ug/L	5		6010C	Total/NA
Sodium	74000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	1100000		33000	9900	ug/L	5		6010C	Total/NA
Zinc	68	J	100	30	ug/L	5		6010C	Total/NA
Mercury	0.083	J	0.20	0.060	ug/L	1		7470A	Total/NA
Total Dissolved Solids (TDS)	1300		10	7.0	mg/L	1		160.1	Total/NA
Ammonia	0.46		0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.14	B	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA
Chemical Oxygen Demand	24		5.0	1.1	mg/L	1		410.4	Total/NA

Client Sample ID: PZ-203-SS — Lab Sample ID: 160-18857-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.38		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate - DL	51		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL	9.4		4.0	0.40	mg/L	20		300.0	Total/NA
Barium	93	J	250	75	ug/L	5		6010C	Total/NA
CaHard	240000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	95000		5000	1500	ug/L	5		6010C	Total/NA
Magnesium	42		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	18	J	75	13	ug/L	5		6010C	Total/NA
MgHard	170000		21000	6200	ug/L	5		6010C	Total/NA
Sodium	7700		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	410000		33000	9900	ug/L	5		6010C	Total/NA
Mercury	0.063	J	0.20	0.060	ug/L	1		7470A	Total/NA
Total Dissolved Solids (TDS)	470		5.0	3.5	mg/L	1		160.1	Total/NA
Ammonia	0.094		0.050	0.022	mg/L	1		350.1	Total/NA
Nitrate/Nitrite	0.014	J B	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA
Chemical Oxygen Demand	18		5.0	1.1	mg/L	1		410.4	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-18857-7

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: PZ-206-SS

Date Collected: 08/29/16 08:51
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 03:42	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 03:42	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 03:42	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 03:42	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 03:42	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 03:42	1
Carbon disulfide	ND	*	5.0	0.37	ug/L			09/07/16 03:42	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 03:42	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 03:42	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 03:42	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 03:42	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 03:42	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 03:42	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 03:42	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 03:42	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 03:42	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 03:42	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 03:42	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 03:42	1
1,2-Dichloroethane	**2.4**	**J**	5.0	0.37	ug/L			09/07/16 03:42	1
1,1-Dichloroethene	ND	*	5.0	0.37	ug/L			09/07/16 03:42	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 03:42	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 03:42	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 03:42	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 03:42	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 03:42	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 03:42	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 03:42	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 03:42	1
Methyl iodide	ND	* F1	5.0	1.5	ug/L			09/07/16 03:42	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 03:42	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 03:42	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 03:42	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 03:42	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 03:42	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 03:42	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 03:42	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 03:42	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 03:42	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 03:42	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 03:42	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 03:42	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 03:42	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 03:42	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 03:42	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 03:42	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 03:42	1

Client Sample ID: PZ-206-SS

Date Collected: 08/29/16 08:51
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*71 - 139*		*09/07/16 03:42*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 121*		*09/07/16 03:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*76 - 121*		*09/07/16 03:42*	*1*
Toluene-d8 (Surr)	*105*		*80 - 129*		*09/07/16 03:42*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**1.2**		0.10	0.010	mg/L			09/01/16 23:40	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**50**		10	1.0	mg/L			09/01/16 23:54	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**140**		40	4.0	mg/L			09/02/16 00:08	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:36	5
Arsenic	ND		50	20	ug/L		09/06/16 12:21	09/07/16 15:36	5
Barium	**110**	**J**	250	75	ug/L		09/06/16 12:21	09/07/16 15:36	5
Beryllium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 15:36	5
Boron	**190**	**J**	500	130	ug/L		09/06/16 12:21	09/07/16 15:36	5
Cadmium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 15:36	5
CaHard	**360000**		12000	3700	ug/L		09/06/16 12:21	09/07/16 15:36	5
Calcium	**140000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 15:36	5
Chromium	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:36	5
Cobalt	ND		250	75	ug/L		09/06/16 12:21	09/07/16 15:36	5
Copper	ND		130	25	ug/L		09/06/16 12:21	09/07/16 15:36	5
Lead	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:36	5
Magnesium	**94**		5.0	1.5	mg/L		09/06/16 12:21	09/07/16 15:36	5
Manganese	**110**		75	13	ug/L		09/06/16 12:21	09/07/16 15:36	5
MgHard	**390000**		21000	6200	ug/L		09/06/16 12:21	09/07/16 15:36	5
Nickel	ND		0.20	0.050	mg/L		09/06/16 12:21	09/07/16 15:36	5
Phosphorus	ND	F1	1300	380	ug/L		09/06/16 12:21	09/07/16 15:36	5
Selenium	ND		75	25	ug/L		09/06/16 12:21	09/07/16 15:36	5
Silver	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:36	5
Sodium	**24000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 15:36	5
Thallium	ND	^	100	25	ug/L		09/06/16 12:21	09/07/16 15:36	5
Total Hardness	**750000**		33000	9900	ug/L		09/06/16 12:21	09/07/16 15:36	5
Vanadium	ND		250	75	ug/L		09/06/16 12:21	09/07/16 15:36	5
Zinc	**30**	**J**	100	30	ug/L		09/06/16 12:21	09/07/16 15:36	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:09	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**860**		5.0	3.5	mg/L			09/01/16 09:30	1

Client Sample ID: PZ-206-SS

Lab Sample ID: 160-18857-1
Matrix: Water
Date Collected: 08/29/16 08:51
Date Received: 08/29/16 16:45

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.24		0.050	0.022	mg/L			09/22/16 14:36	1
Nitrate/Nitrite	0.022	J B F1	0.050	0.011	mg/L			09/22/16 22:29	1
Chemical Oxygen Demand	72		5.0	1.1	mg/L		09/01/16 09:38	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	1460		288	316	500	325	pCi/L	09/20/16 14:24	09/21/16 02:15	1

Client Sample ID: PZ-113-SS

Lab Sample ID: 160-18857-2
Matrix: Water
Date Collected: 08/29/16 10:14
Date Received: 08/29/16 16:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 04:07	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 04:07	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 04:07	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 04:07	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 04:07	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 04:07	1
Carbon disulfide	ND	*	5.0	0.37	ug/L			09/07/16 04:07	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 04:07	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 04:07	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 04:07	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 04:07	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 04:07	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 04:07	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 04:07	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 04:07	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 04:07	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 04:07	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 04:07	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 04:07	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 04:07	1
1,1-Dichloroethene	ND	*	5.0	0.37	ug/L			09/07/16 04:07	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 04:07	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 04:07	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 04:07	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 04:07	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 04:07	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 04:07	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 04:07	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 04:07	1
Methyl iodide	ND	*	5.0	1.5	ug/L			09/07/16 04:07	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 04:07	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 04:07	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 04:07	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 04:07	1

Client Sample ID: PZ-113-SS

Date Collected: 08/29/16 10:14
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 04:07	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 04:07	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 04:07	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 04:07	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 04:07	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 04:07	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 04:07	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 04:07	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 04:07	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 04:07	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 04:07	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 04:07	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 04:07	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*123*		*71 - 139*		*09/07/16 04:07*	*1*
Dibromofluoromethane (Surr)	*113*		*80 - 121*		*09/07/16 04:07*	*1*
1,2-Dichloroethane-d4 (Surr)	*122*	*X*	*76 - 121*		*09/07/16 04:07*	*1*
Toluene-d8 (Surr)	*117*		*80 - 129*		*09/07/16 04:07*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**19**		0.50	0.050	mg/L			09/02/16 02:18	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**2.6**		2.0	0.20	mg/L			09/02/16 02:33	20
Chloride	**11**		4.0	0.40	mg/L			09/02/16 02:33	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:07	5
Arsenic	ND		50	20	ug/L		09/06/16 12:21	09/07/16 16:07	5
Barium	**210**	**J**	250	75	ug/L		09/06/16 12:21	09/07/16 16:07	5
Beryllium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:07	5
Boron	ND		500	130	ug/L		09/06/16 12:21	09/07/16 16:07	5
Cadmium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:07	5
CaHard	**330000**		12000	3700	ug/L		09/06/16 12:21	09/07/16 16:07	5
Calcium	**130000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:07	5
Chromium	**19**	**J**	50	15	ug/L		09/06/16 12:21	09/07/16 16:07	5
Cobalt	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:07	5
Copper	ND		130	25	ug/L		09/06/16 12:21	09/07/16 16:07	5
Lead	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:07	5
Magnesium	**54**		5.0	1.5	mg/L		09/06/16 12:21	09/07/16 16:07	5
Manganese	**92**		75	13	ug/L		09/06/16 12:21	09/07/16 16:07	5
MgHard	**220000**		21000	6200	ug/L		09/06/16 12:21	09/07/16 16:07	5
Nickel	ND		0.20	0.050	mg/L		09/06/16 12:21	09/07/16 16:07	5
Phosphorus	**400**	**J**	1300	380	ug/L		09/06/16 12:21	09/07/16 16:07	5
Selenium	ND		75	25	ug/L		09/06/16 12:21	09/07/16 16:07	5
Silver	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:07	5

Client Sample ID: PZ-113-SS

Date Collected: 08/29/16 10:14
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	**18000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:07	5
Thallium	ND	^	100	25	ug/L		09/06/16 12:21	09/07/16 16:07	5
Total Hardness	**550000**		33000	9900	ug/L		09/06/16 12:21	09/07/16 16:07	5
Vanadium	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:07	5
Zinc	**30**	**J**	100	30	ug/L		09/06/16 12:21	09/07/16 16:07	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.063**	**J**	0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**320**		5.0	3.5	mg/L			09/01/16 09:30	1
Ammonia	**0.049**	**J**	0.050	0.022	mg/L			09/22/16 14:40	1
Nitrate/Nitrite	**0.012**	**J B**	0.050	0.011	mg/L			09/22/16 22:35	1
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/01/16 09:38	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	22.5	U	181	181	500	321	pCi/L	09/20/16 14:24	09/21/16 02:35	1

Client Sample ID: PZ-113-AD

Date Collected: 08/29/16 11:23
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**11**	**J H**	20	6.7	ug/L			09/07/16 04:32	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/07/16 04:32	1
Benzene	**1.2**	**J H**	5.0	0.25	ug/L			09/07/16 04:32	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/07/16 04:32	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/07/16 04:32	1
Bromoform	ND	H	5.0	0.37	ug/L			09/07/16 04:32	1
Carbon disulfide	ND	H *	5.0	0.37	ug/L			09/07/16 04:32	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/07/16 04:32	1
Chlorobenzene	**1.2**	**J H**	5.0	0.38	ug/L			09/07/16 04:32	1
Chloroethane	ND	H	10	0.38	ug/L			09/07/16 04:32	1
Chloroform	ND	H	5.0	0.15	ug/L			09/07/16 04:32	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/07/16 04:32	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/07/16 04:32	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/07/16 04:32	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/07/16 04:32	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/07/16 04:32	1
1,2-Dichlorobenzene	ND	H	5.0	0.28	ug/L			09/07/16 04:32	1
1,4-Dichlorobenzene	ND	H	5.0	0.35	ug/L			09/07/16 04:32	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/07/16 04:32	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/07/16 04:32	1
1,1-Dichloroethene	ND	H *	5.0	0.37	ug/L			09/07/16 04:32	1

Client Sample ID: PZ-113-AD
Date Collected: 08/29/16 11:23
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/07/16 04:32	1
Ethylbenzene	ND	H	5.0	0.30	ug/L			09/07/16 04:32	1
2-Hexanone	ND	H	20	0.59	ug/L			09/07/16 04:32	1
Methyl bromide	ND	H	10	0.40	ug/L			09/07/16 04:32	1
Methyl chloride	ND	H	10	0.55	ug/L			09/07/16 04:32	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/07/16 04:32	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/07/16 04:32	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/07/16 04:32	1
Methyl iodide	ND	H *	5.0	1.5	ug/L			09/07/16 04:32	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/07/16 04:32	1
Styrene	ND	H	5.0	0.35	ug/L			09/07/16 04:32	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/07/16 04:32	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/07/16 04:32	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/07/16 04:32	1
Toluene	ND	H	5.0	1.0	ug/L			09/07/16 04:32	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/07/16 04:32	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/07/16 04:32	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/07/16 04:32	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/07/16 04:32	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/07/16 04:32	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/07/16 04:32	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/07/16 04:32	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/07/16 04:32	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/07/16 04:32	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/07/16 04:32	1
Xylenes, Total	ND	H	10	0.85	ug/L			09/07/16 04:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*71 - 139*		*09/07/16 04:32*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 121*		*09/07/16 04:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*		*09/07/16 04:32*	*1*
Toluene-d8 (Surr)	*117*		*80 - 129*		*09/07/16 04:32*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20	0.020	mg/L			09/02/16 03:01	2
Sulfate	**0.27**	**J**	1.0	0.10	mg/L			09/02/16 03:01	2

Method: 300.0 - Anions, Ion Chromatography - DL3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**820**		100	10	mg/L			09/02/16 03:30	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:12	5
Arsenic	ND		50	20	ug/L		09/06/16 12:21	09/07/16 16:12	5
Barium	**2600**		250	75	ug/L		09/06/16 12:21	09/07/16 16:12	5
Beryllium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:12	5
Boron	**1400**		500	130	ug/L		09/06/16 12:21	09/07/16 16:12	5
Cadmium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:12	5

Client Sample ID: PZ-113-AD

Date Collected: 08/29/16 11:23
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-3
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
CaHard	750000		12000	3700	ug/L		09/06/16 12:21	09/07/16 16:12	5
Calcium	300000		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:12	5
Chromium	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:12	5
Cobalt	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:12	5
Copper	ND		130	25	ug/L		09/06/16 12:21	09/07/16 16:12	5
Lead	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:12	5
Magnesium	91		5.0	1.5	mg/L		09/06/16 12:21	09/07/16 16:12	5
Manganese	680		75	13	ug/L		09/06/16 12:21	09/07/16 16:12	5
MgHard	370000		21000	6200	ug/L		09/06/16 12:21	09/07/16 16:12	5
Nickel	ND		0.20	0.050	mg/L		09/06/16 12:21	09/07/16 16:12	5
Phosphorus	720	J	1300	380	ug/L		09/06/16 12:21	09/07/16 16:12	5
Selenium	ND		75	25	ug/L		09/06/16 12:21	09/07/16 16:12	5
Silver	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:12	5
Sodium	470000		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:12	5
Thallium	ND	^	100	25	ug/L		09/06/16 12:21	09/07/16 16:12	5
Total Hardness	1100000		33000	9900	ug/L		09/06/16 12:21	09/07/16 16:12	5
Vanadium	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:12	5
Zinc	ND		100	30	ug/L		09/06/16 12:21	09/07/16 16:12	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11	J	0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	2600		25	17	mg/L			09/01/16 09:30	1
Nitrate/Nitrite	0.23	B	0.050	0.011	mg/L			09/22/16 22:45	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	40		5.0	2.2	mg/L			09/22/16 14:43	100
Chemical Oxygen Demand	220		50	11	mg/L		09/01/16 09:38	09/01/16 14:22	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	90.1	U	189	189	500	326	pCi/L	09/20/16 14:24	09/21/16 02:56	1

Client Sample ID: PZ-113-AS

Date Collected: 08/29/16 13:32
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	11	J	20	6.7	ug/L			09/07/16 04:57	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 04:57	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 04:57	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 04:57	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 04:57	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 04:57	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Client Sample ID: PZ-113-AS
Date Collected: 08/29/16 13:32
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	ND	*	5.0	0.37	ug/L			09/07/16 04:57	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 04:57	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 04:57	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 04:57	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 04:57	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 04:57	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 04:57	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 04:57	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 04:57	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 04:57	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 04:57	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 04:57	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 04:57	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 04:57	1
1,1-Dichloroethene	ND	*	5.0	0.37	ug/L			09/07/16 04:57	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 04:57	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 04:57	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 04:57	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 04:57	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 04:57	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 04:57	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 04:57	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 04:57	1
Methyl iodide	ND	*	5.0	1.5	ug/L			09/07/16 04:57	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 04:57	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 04:57	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 04:57	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 04:57	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 04:57	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 04:57	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 04:57	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 04:57	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 04:57	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 04:57	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 04:57	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 04:57	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 04:57	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 04:57	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 04:57	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 04:57	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 04:57	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*71 - 139*		*09/07/16 04:57*	*1*
Dibromofluoromethane (Surr)	*103*		*80 - 121*		*09/07/16 04:57*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*		*09/07/16 04:57*	*1*
Toluene-d8 (Surr)	*124*		*80 - 129*		*09/07/16 04:57*	*1*

Client Sample ID: PZ-113-AS

Date Collected: 08/29/16 13:32
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-4

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.15**		0.10	0.010	mg/L			09/02/16 03:45	1
Sulfate	**12**		0.50	0.050	mg/L			09/02/16 03:45	1

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		40	4.0	mg/L			09/02/16 04:14	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:17	5
Arsenic	**26**	**J**	50	20	ug/L		09/06/16 12:21	09/07/16 16:17	5
Barium	**760**		250	75	ug/L		09/06/16 12:21	09/07/16 16:17	5
Beryllium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:17	5
Boron	**340**	**J**	500	130	ug/L		09/06/16 12:21	09/07/16 16:17	5
Cadmium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:17	5
CaHard	**440000**		12000	3700	ug/L		09/06/16 12:21	09/07/16 16:17	5
Calcium	**180000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:17	5
Chromium	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:17	5
Cobalt	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:17	5
Copper	ND		130	25	ug/L		09/06/16 12:21	09/07/16 16:17	5
Lead	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:17	5
Magnesium	**49**		5.0	1.5	mg/L		09/06/16 12:21	09/07/16 16:17	5
Manganese	**5500**		75	13	ug/L		09/06/16 12:21	09/07/16 16:17	5
MgHard	**200000**		21000	6200	ug/L		09/06/16 12:21	09/07/16 16:17	5
Nickel	ND		0.20	0.050	mg/L		09/06/16 12:21	09/07/16 16:17	5
Phosphorus	ND		1300	380	ug/L		09/06/16 12:21	09/07/16 16:17	5
Selenium	ND		75	25	ug/L		09/06/16 12:21	09/07/16 16:17	5
Silver	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:17	5
Sodium	**63000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:17	5
Thallium	ND	^	100	25	ug/L		09/06/16 12:21	09/07/16 16:17	5
Total Hardness	**640000**		33000	9900	ug/L		09/06/16 12:21	09/07/16 16:17	5
Vanadium	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:17	5
Zinc	ND		100	30	ug/L		09/06/16 12:21	09/07/16 16:17	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**860**		5.0	3.5	mg/L			09/01/16 09:30	1
Ammonia	**1.7**		0.050	0.022	mg/L			09/22/16 14:45	1
Nitrate/Nitrite	**0.066**	**B**	0.050	0.011	mg/L			09/22/16 22:48	1
Chemical Oxygen Demand	**25**		5.0	1.1	mg/L		09/01/16 09:38	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	36.0	U	182	182	500	322	pCi/L	09/20/16 14:24	09/21/16 03:17	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Client Sample ID: PZ-103-SS
Date Collected: 08/29/16 14:48
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**8.3**	**J H**	20	6.7	ug/L			09/07/16 05:22	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/07/16 05:22	1
Benzene	**59**	**H**	5.0	0.25	ug/L			09/07/16 05:22	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/07/16 05:22	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/07/16 05:22	1
Bromoform	ND	H	5.0	0.37	ug/L			09/07/16 05:22	1
Carbon disulfide	ND	H *	5.0	0.37	ug/L			09/07/16 05:22	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/07/16 05:22	1
Chlorobenzene	**1.2**	**J H**	5.0	0.38	ug/L			09/07/16 05:22	1
Chloroethane	ND	H	10	0.38	ug/L			09/07/16 05:22	1
Chloroform	ND	H	5.0	0.15	ug/L			09/07/16 05:22	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/07/16 05:22	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/07/16 05:22	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/07/16 05:22	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/07/16 05:22	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/07/16 05:22	1
1,2-Dichlorobenzene	ND	H	5.0	0.28	ug/L			09/07/16 05:22	1
1,4-Dichlorobenzene	**4.6**	**J H**	5.0	0.35	ug/L			09/07/16 05:22	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/07/16 05:22	1
1,2-Dichloroethane	ND	H	5.0	0.37	ug/L			09/07/16 05:22	1
1,1-Dichloroethene	ND	H *	5.0	0.37	ug/L			09/07/16 05:22	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/07/16 05:22	1
Ethylbenzene	**5.9**	**H**	5.0	0.30	ug/L			09/07/16 05:22	1
2-Hexanone	ND	H	20	0.59	ug/L			09/07/16 05:22	1
Methyl bromide	ND	H	10	0.40	ug/L			09/07/16 05:22	1
Methyl chloride	**0.66**	**J H**	10	0.55	ug/L			09/07/16 05:22	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/07/16 05:22	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/07/16 05:22	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/07/16 05:22	1
Methyl iodide	ND	H *	5.0	1.5	ug/L			09/07/16 05:22	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/07/16 05:22	1
Styrene	ND	H	5.0	0.35	ug/L			09/07/16 05:22	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/07/16 05:22	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/07/16 05:22	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/07/16 05:22	1
Toluene	**12**	**H**	5.0	1.0	ug/L			09/07/16 05:22	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/07/16 05:22	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/07/16 05:22	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/07/16 05:22	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/07/16 05:22	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/07/16 05:22	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/07/16 05:22	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/07/16 05:22	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/07/16 05:22	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/07/16 05:22	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/07/16 05:22	1
Xylenes, Total	**8.8**	**J H**	10	0.85	ug/L			09/07/16 05:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*118*		*71 - 139*		*09/07/16 05:22*	*1*

Client Sample ID: PZ-103-SS

Date Collected: 08/29/16 14:48
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-5

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*110*		*80 - 121*		*09/07/16 05:22*	*1*
1,2-Dichloroethane-d4 (Surr)	*105*		*76 - 121*		*09/07/16 05:22*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/07/16 05:22*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.56**		0.20	0.020	mg/L			09/02/16 04:57	2
Sulfate	**0.96**	**J**	1.0	0.10	mg/L			09/02/16 04:57	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**23**		10	1.0	mg/L			09/02/16 05:11	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:21	5
Arsenic	ND		50	20	ug/L		09/06/16 12:21	09/07/16 16:21	5
Barium	**760**		250	75	ug/L		09/06/16 12:21	09/07/16 16:21	5
Beryllium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:21	5
Boron	**320**	**J**	500	130	ug/L		09/06/16 12:21	09/07/16 16:21	5
Cadmium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:21	5
CaHard	**710000**		12000	3700	ug/L		09/06/16 12:21	09/07/16 16:21	5
Calcium	**280000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:21	5
Chromium	**15**	**J**	50	15	ug/L		09/06/16 12:21	09/07/16 16:21	5
Cobalt	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:21	5
Copper	ND		130	25	ug/L		09/06/16 12:21	09/07/16 16:21	5
Lead	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:21	5
Magnesium	**100**		5.0	1.5	mg/L		09/06/16 12:21	09/07/16 16:21	5
Manganese	**710**		75	13	ug/L		09/06/16 12:21	09/07/16 16:21	5
MgHard	**430000**		21000	6200	ug/L		09/06/16 12:21	09/07/16 16:21	5
Nickel	ND		0.20	0.050	mg/L		09/06/16 12:21	09/07/16 16:21	5
Phosphorus	**820**	**J**	1300	380	ug/L		09/06/16 12:21	09/07/16 16:21	5
Selenium	ND		75	25	ug/L		09/06/16 12:21	09/07/16 16:21	5
Silver	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:21	5
Sodium	**74000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:21	5
Thallium	ND	^	100	25	ug/L		09/06/16 12:21	09/07/16 16:21	5
Total Hardness	**1100000**		33000	9900	ug/L		09/06/16 12:21	09/07/16 16:21	5
Vanadium	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:21	5
Zinc	**68**	**J**	100	30	ug/L		09/06/16 12:21	09/07/16 16:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.083**	**J**	0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1300**		10	7.0	mg/L			09/02/16 09:08	1
Ammonia	**0.46**		0.050	0.022	mg/L			09/22/16 14:47	1
Nitrate/Nitrite	**0.14**	**B**	0.050	0.011	mg/L			09/22/16 22:51	1
Chemical Oxygen Demand	**24**		5.0	1.1	mg/L		09/01/16 09:38	09/01/16 14:22	1

Client Sample ID: PZ-103-SS

Date Collected: 08/29/16 14:48
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-5
Matrix: Water

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	320	U	210	212	500	327	pCi/L	09/20/16 14:24	09/21/16 03:38	1

Client Sample ID: PZ-203-SS

Date Collected: 08/29/16 16:02
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 05:47	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 05:47	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 05:47	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 05:47	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 05:47	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 05:47	1
Carbon disulfide	ND	*	5.0	0.37	ug/L			09/07/16 05:47	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 05:47	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 05:47	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 05:47	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 05:47	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 05:47	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 05:47	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 05:47	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 05:47	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 05:47	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 05:47	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 05:47	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 05:47	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 05:47	1
1,1-Dichloroethene	ND	*	5.0	0.37	ug/L			09/07/16 05:47	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 05:47	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 05:47	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 05:47	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 05:47	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 05:47	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 05:47	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 05:47	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 05:47	1
Methyl iodide	ND	*	5.0	1.5	ug/L			09/07/16 05:47	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 05:47	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 05:47	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 05:47	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 05:47	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 05:47	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 05:47	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 05:47	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 05:47	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 05:47	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 05:47	1

Client Sample ID: PZ-203-SS

Date Collected: 08/29/16 16:02
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 05:47	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 05:47	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 05:47	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 05:47	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 05:47	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 05:47	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 05:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*71 - 139*		*09/07/16 05:47*	*1*
Dibromofluoromethane (Surr)	*107*		*80 - 121*		*09/07/16 05:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*103*		*76 - 121*		*09/07/16 05:47*	*1*
Toluene-d8 (Surr)	*115*		*80 - 129*		*09/07/16 05:47*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.38**		0.10	0.010	mg/L			09/02/16 05:40	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**51**		10	1.0	mg/L			09/02/16 05:54	20
Chloride	**9.4**		4.0	0.40	mg/L			09/02/16 05:54	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:26	5
Arsenic	ND		50	20	ug/L		09/06/16 12:21	09/07/16 16:26	5
Barium	**93**	**J**	250	75	ug/L		09/06/16 12:21	09/07/16 16:26	5
Beryllium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:26	5
Boron	ND		500	130	ug/L		09/06/16 12:21	09/07/16 16:26	5
Cadmium	ND		25	7.5	ug/L		09/06/16 12:21	09/07/16 16:26	5
CaHard	**240000**		12000	3700	ug/L		09/06/16 12:21	09/07/16 16:26	5
Calcium	**95000**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:26	5
Chromium	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:26	5
Cobalt	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:26	5
Copper	ND		130	25	ug/L		09/06/16 12:21	09/07/16 16:26	5
Lead	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:26	5
Magnesium	**42**		5.0	1.5	mg/L		09/06/16 12:21	09/07/16 16:26	5
Manganese	**18**	**J**	75	13	ug/L		09/06/16 12:21	09/07/16 16:26	5
MgHard	**170000**		21000	6200	ug/L		09/06/16 12:21	09/07/16 16:26	5
Nickel	ND		0.20	0.050	mg/L		09/06/16 12:21	09/07/16 16:26	5
Phosphorus	ND		1300	380	ug/L		09/06/16 12:21	09/07/16 16:26	5
Selenium	ND		75	25	ug/L		09/06/16 12:21	09/07/16 16:26	5
Silver	ND		50	15	ug/L		09/06/16 12:21	09/07/16 16:26	5
Sodium	**7700**		5000	1500	ug/L		09/06/16 12:21	09/07/16 16:26	5
Thallium	ND	^	100	25	ug/L		09/06/16 12:21	09/07/16 16:26	5
Total Hardness	**410000**		33000	9900	ug/L		09/06/16 12:21	09/07/16 16:26	5
Vanadium	ND		250	75	ug/L		09/06/16 12:21	09/07/16 16:26	5
Zinc	ND		100	30	ug/L		09/06/16 12:21	09/07/16 16:26	5

Client Sample ID: PZ-203-SS

Lab Sample ID: 160-18857-6

Date Collected: 08/29/16 16:02

Matrix: Water

Date Received: 08/29/16 16:45

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.063	J	0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	470		5.0	3.5	mg/L			09/02/16 09:08	1
Ammonia	0.094		0.050	0.022	mg/L			09/22/16 14:50	1
Nitrate/Nitrite	0.014	J B	0.050	0.011	mg/L			09/22/16 22:54	1
Chemical Oxygen Demand	18		5.0	1.1	mg/L		09/01/16 09:38	09/01/16 14:22	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-31.1	U	176	176	500	321	pCi/L	09/20/16 14:24	09/21/16 03:59	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18857-7

Date Collected: 08/29/16 08:00

Matrix: Water

Date Received: 08/29/16 16:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 03:16	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 03:16	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 03:16	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 03:16	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 03:16	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 03:16	1
Carbon disulfide	ND	*	5.0	0.37	ug/L			09/07/16 03:16	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 03:16	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 03:16	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 03:16	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 03:16	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 03:16	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 03:16	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 03:16	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 03:16	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 03:16	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 03:16	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 03:16	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 03:16	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 03:16	1
1,1-Dichloroethene	ND	*	5.0	0.37	ug/L			09/07/16 03:16	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 03:16	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 03:16	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 03:16	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 03:16	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 03:16	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 03:16	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 03:16	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 03:16	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Client Sample ID: TRIP BLANK
Date Collected: 08/29/16 08:00
Date Received: 08/29/16 16:45

Lab Sample ID: 160-18857-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl iodide	ND	*	5.0	1.5	ug/L			09/07/16 03:16	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 03:16	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 03:16	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 03:16	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 03:16	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 03:16	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 03:16	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 03:16	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 03:16	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 03:16	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 03:16	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 03:16	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 03:16	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 03:16	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 03:16	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 03:16	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 03:16	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 03:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*114*		*71 - 139*		*09/07/16 03:16*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 121*		*09/07/16 03:16*	*1*
1,2-Dichloroethane-d4 (Surr)	*110*		*76 - 121*		*09/07/16 03:16*	*1*
Toluene-d8 (Surr)	*101*		*80 - 129*		*09/07/16 03:16*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-268225/20
Matrix: Water
Analysis Batch: 268225

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 02:51	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 02:51	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 02:51	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 02:51	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 02:51	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 02:51	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 02:51	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 02:51	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 02:51	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 02:51	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 02:51	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 02:51	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 02:51	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 02:51	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 02:51	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 02:51	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 02:51	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 02:51	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 02:51	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 02:51	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 02:51	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 02:51	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 02:51	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 02:51	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 02:51	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 02:51	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 02:51	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 02:51	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 02:51	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 02:51	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 02:51	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 02:51	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 02:51	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 02:51	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 02:51	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 02:51	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 02:51	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 02:51	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 02:51	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 02:51	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 02:51	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 02:51	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 02:51	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 02:51	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 02:51	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 02:51	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 02:51	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-268225/20
Matrix: Water
Analysis Batch: 268225

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	122		71 - 139		09/07/16 02:51	1
Dibromofluoromethane (Surr)	98		80 - 121		09/07/16 02:51	1
1,2-Dichloroethane-d4 (Surr)	96		76 - 121		09/07/16 02:51	1
Toluene-d8 (Surr)	106		80 - 129		09/07/16 02:51	1

Lab Sample ID: LCS 160-268225/3
Matrix: Water
Analysis Batch: 268225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	53.1		ug/L		106	63 - 131
Acrylonitrile	500	498		ug/L		100	81 - 117
Benzene	50.0	48.0		ug/L		96	80 - 120
Bromochloromethane	50.0	47.3		ug/L		95	80 - 120
Bromodichloromethane	50.0	48.1		ug/L		96	80 - 120
Bromoform	50.0	50.4		ug/L		101	80 - 120
Carbon disulfide	50.0	45.2		ug/L		90	79 - 126
Carbon tetrachloride	50.0	46.5		ug/L		93	73 - 123
Chlorobenzene	50.0	47.6		ug/L		95	80 - 120
Chloroethane	50.0	47.1		ug/L		94	52 - 140
Chloroform	50.0	46.0		ug/L		92	80 - 120
cis-1,2-Dichloroethene	50.0	52.5		ug/L		105	80 - 120
cis-1,3-Dichloropropene	50.0	53.2		ug/L		106	80 - 122
Dibromochloromethane	50.0	50.2		ug/L		100	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	50.9		ug/L		102	77 - 125
1,2-Dibromoethane (EDB)	50.0	50.0		ug/L		100	80 - 120
1,2-Dichlorobenzene	50.0	50.2		ug/L		100	80 - 120
1,4-Dichlorobenzene	50.0	47.7		ug/L		95	80 - 120
1,1-Dichloroethane	50.0	47.7		ug/L		95	80 - 120
1,2-Dichloroethane	50.0	48.1		ug/L		96	69 - 124
1,1-Dichloroethene	50.0	48.8		ug/L		98	77 - 126
1,2-Dichloropropane	50.0	48.7		ug/L		97	80 - 120
Ethylbenzene	50.0	51.8		ug/L		104	80 - 120
2-Hexanone	50.0	53.7		ug/L		107	64 - 136
Methyl bromide	50.0	48.2		ug/L		96	57 - 139
Methyl chloride	50.0	44.9		ug/L		90	70 - 127
Methylene bromide	50.0	46.8		ug/L		94	78 - 120
Methylene Chloride	50.0	47.3		ug/L		95	80 - 120
Methyl Ethyl Ketone	50.0	48.0		ug/L		96	70 - 130
Methyl iodide	50.0	40.9		ug/L		82	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	52.2		ug/L		104	76 - 129
Styrene	50.0	53.9		ug/L		108	80 - 120
1,1,1,2-Tetrachloroethane	50.0	49.2		ug/L		98	80 - 120
1,1,2,2-Tetrachloroethane	50.0	45.2		ug/L		90	80 - 120
Tetrachloroethene	50.0	48.8		ug/L		98	80 - 120
Toluene	50.0	46.9		ug/L		94	80 - 120
trans-1,4-Dichloro-2-butene	50.0	49.1		ug/L		98	75 - 127
trans-1,2-Dichloroethene	50.0	50.0		ug/L		100	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-268225/3
Matrix: Water
Analysis Batch: 268225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,3-Dichloropropene	50.0	54.3		ug/L		109	80 - 130
1,1,1-Trichloroethane	50.0	47.7		ug/L		95	76 - 120
1,1,2-Trichloroethane	50.0	48.5		ug/L		97	80 - 120
Trichloroethene	50.0	47.2		ug/L		94	73 - 120
Trichlorofluoromethane	50.0	46.8		ug/L		94	74 - 130
1,2,3-Trichloropropane	50.0	46.7		ug/L		93	80 - 120
Vinyl acetate	50.0	52.2		ug/L		104	37 - 140
Vinyl chloride	50.0	48.7		ug/L		97	51 - 140
Xylenes, Total	100	103		ug/L		103	80 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*113*		*71 - 139*
Dibromofluoromethane (Surr)	*97*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*
Toluene-d8 (Surr)	*108*		*80 - 129*

Lab Sample ID: LCSD 160-268225/4
Matrix: Water
Analysis Batch: 268225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	50.0	46.7		ug/L		93	63 - 131	13	20
Acrylonitrile	500	470		ug/L		94	81 - 117	6	20
Benzene	50.0	47.9		ug/L		96	80 - 120	0	20
Bromochloromethane	50.0	45.5		ug/L		91	80 - 120	4	20
Bromodichloromethane	50.0	48.9		ug/L		98	80 - 120	2	20
Bromoform	50.0	49.8		ug/L		100	80 - 120	1	20
Carbon disulfide	50.0	60.3	*	ug/L		121	79 - 126	29	20
Carbon tetrachloride	50.0	46.4		ug/L		93	73 - 123	0	20
Chlorobenzene	50.0	47.9		ug/L		96	80 - 120	1	20
Chloroethane	50.0	49.5		ug/L		99	52 - 140	5	20
Chloroform	50.0	45.7		ug/L		91	80 - 120	1	20
cis-1,2-Dichloroethene	50.0	52.7		ug/L		105	80 - 120	0	20
cis-1,3-Dichloropropene	50.0	52.0		ug/L		104	80 - 122	2	20
Dibromochloromethane	50.0	50.7		ug/L		101	80 - 120	1	20
1,2-Dibromo-3-Chloropropane	50.0	47.6		ug/L		95	77 - 125	7	20
1,2-Dibromoethane (EDB)	50.0	51.1		ug/L		102	80 - 120	2	20
1,2-Dichlorobenzene	50.0	49.3		ug/L		99	80 - 120	2	20
1,4-Dichlorobenzene	50.0	47.1		ug/L		94	80 - 120	1	20
1,1-Dichloroethane	50.0	47.1		ug/L		94	80 - 120	1	20
1,2-Dichloroethane	50.0	46.1		ug/L		92	69 - 124	4	20
1,1-Dichloroethene	50.0	64.6	*	ug/L		129	77 - 126	28	20
1,2-Dichloropropane	50.0	50.9		ug/L		102	80 - 120	5	20
Ethylbenzene	50.0	52.4		ug/L		105	80 - 120	1	20
2-Hexanone	50.0	51.8		ug/L		104	64 - 136	4	20
Methyl bromide	50.0	47.7		ug/L		95	57 - 139	1	20
Methyl chloride	50.0	44.8		ug/L		90	70 - 127	0	20
Methylene bromide	50.0	44.7		ug/L		89	78 - 120	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-268225/4
Matrix: Water
Analysis Batch: 268225

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	46.5		ug/L		93	80 - 120	2	20
Methyl Ethyl Ketone			50.0	45.2		ug/L		90	70 - 130	6	20
Methyl iodide			50.0	51.6	*	ug/L		103	73 - 125	23	20
4-Methyl-2-pentanone (MIBK)			50.0	53.2		ug/L		106	76 - 129	2	20
Styrene			50.0	53.6		ug/L		107	80 - 120	1	20
1,1,1,2-Tetrachloroethane			50.0	48.5		ug/L		97	80 - 120	1	20
1,1,2,2-Tetrachloroethane			50.0	46.6		ug/L		93	80 - 120	3	20
Tetrachloroethene			50.0	52.4		ug/L		105	80 - 120	7	20
Toluene			50.0	46.9		ug/L		94	80 - 120	0	20
trans-1,4-Dichloro-2-butene			50.0	50.4		ug/L		101	75 - 127	3	20
trans-1,2-Dichloroethene			50.0	51.1		ug/L		102	80 - 120	2	20
trans-1,3-Dichloropropene			50.0	57.1		ug/L		114	80 - 130	5	20
1,1,1-Trichloroethane			50.0	47.5		ug/L		95	76 - 120	1	20
1,1,2-Trichloroethane			50.0	49.1		ug/L		98	80 - 120	1	20
Trichloroethene			50.0	51.3		ug/L		103	73 - 120	8	20
Trichlorofluoromethane			50.0	47.2		ug/L		94	74 - 130	1	20
1,2,3-Trichloropropane			50.0	46.2		ug/L		92	80 - 120	1	20
Vinyl acetate			50.0	47.4		ug/L		95	37 - 140	10	20
Vinyl chloride			50.0	49.3		ug/L		99	51 - 140	1	20
Xylenes, Total			100	104		ug/L		104	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*110*		*71 - 139*
Dibromofluoromethane (Surr)	*94*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*91*		*76 - 121*
Toluene-d8 (Surr)	*107*		*80 - 129*

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 268225

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	57.5		ug/L		115	52 - 138
Acrylonitrile	ND		500	541		ug/L		108	58 - 142
Benzene	ND		50.0	48.6		ug/L		97	80 - 120
Bromochloromethane	ND		50.0	48.9		ug/L		98	72 - 125
Bromodichloromethane	ND		50.0	48.4		ug/L		97	71 - 128
Bromoform	ND		50.0	52.4		ug/L		105	65 - 133
Carbon disulfide	ND	*	50.0	45.9		ug/L		92	69 - 139
Carbon tetrachloride	ND		50.0	47.5		ug/L		95	70 - 126
Chlorobenzene	ND		50.0	48.8		ug/L		98	80 - 120
Chloroethane	ND		50.0	48.2		ug/L		96	59 - 144
Chloroform	ND		50.0	46.9		ug/L		94	80 - 120
cis-1,2-Dichloroethene	ND		50.0	54.7		ug/L		109	80 - 124
cis-1,3-Dichloropropene	ND		50.0	54.7		ug/L		109	67 - 130
Dibromochloromethane	ND		50.0	52.6		ug/L		105	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	65.5		ug/L		131	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	52.5		ug/L		105	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 268225

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	55.9		ug/L		112	80 - 124
1,4-Dichlorobenzene	ND		50.0	48.7		ug/L		97	80 - 120
1,1-Dichloroethane	ND		50.0	48.2		ug/L		96	80 - 120
1,2-Dichloroethane	2.4	J	50.0	49.2		ug/L		94	56 - 136
1,1-Dichloroethene	ND	*	50.0	49.9		ug/L		100	66 - 137
1,2-Dichloropropane	ND		50.0	49.9		ug/L		100	80 - 123
Ethylbenzene	ND		50.0	52.8		ug/L		106	80 - 121
2-Hexanone	ND		50.0	60.0		ug/L		120	47 - 150
Methyl bromide	ND		50.0	45.3		ug/L		91	53 - 146
Methyl chloride	ND		50.0	45.4		ug/L		91	61 - 137
Methylene bromide	ND		50.0	48.9		ug/L		98	61 - 136
Methylene Chloride	ND		50.0	48.2		ug/L		96	80 - 120
Methyl Ethyl Ketone	ND		50.0	54.8		ug/L		110	58 - 143
Methyl iodide	ND	* F1	50.0	58.4		ug/L		117	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	59.7		ug/L		119	53 - 150
Styrene	ND		50.0	54.3		ug/L		109	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	49.9		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	48.2		ug/L		96	60 - 150
Tetrachloroethene	ND		50.0	47.8		ug/L		96	66 - 132
Toluene	ND		50.0	46.0		ug/L		92	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	54.3		ug/L		109	55 - 146
trans-1,2-Dichloroethene	ND		50.0	50.8		ug/L		102	79 - 121
trans-1,3-Dichloropropene	ND		50.0	56.6		ug/L		113	68 - 143
1,1,1-Trichloroethane	ND		50.0	48.0		ug/L		96	74 - 123
1,1,2-Trichloroethane	ND		50.0	49.7		ug/L		99	70 - 134
Trichloroethene	ND		50.0	46.8		ug/L		94	63 - 120
Trichlorofluoromethane	ND		50.0	46.2		ug/L		92	53 - 150
1,2,3-Trichloropropane	ND		50.0	49.9		ug/L		100	62 - 137
Vinyl acetate	ND		50.0	60.9		ug/L		122	63 - 150
Vinyl chloride	ND		50.0	49.7		ug/L		99	54 - 140
Xylenes, Total	ND		100	104		ug/L		104	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*114*		*71 - 139*
Dibromofluoromethane (Surr)	*96*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*98*		*76 - 121*
Toluene-d8 (Surr)	*102*		*80 - 129*

Lab Sample ID: 160-18857-1 MSD
Matrix: Water
Analysis Batch: 268225

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	51.0		ug/L		102	52 - 138	12	20
Acrylonitrile	ND		500	522		ug/L		104	58 - 142	4	20
Benzene	ND		50.0	48.9		ug/L		98	80 - 120	1	20
Bromochloromethane	ND		50.0	47.6		ug/L		95	72 - 125	3	20
Bromodichloromethane	ND		50.0	47.8		ug/L		96	71 - 128	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18857-1 MSD
Matrix: Water
Analysis Batch: 268225

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	44.5		ug/L		89	65 - 133	16	20
Carbon disulfide	ND	*	50.0	45.9		ug/L		92	69 - 139	0	20
Carbon tetrachloride	ND		50.0	47.2		ug/L		94	70 - 126	1	20
Chlorobenzene	ND		50.0	48.9		ug/L		98	80 - 120	0	20
Chloroethane	ND		50.0	47.7		ug/L		95	59 - 144	1	20
Chloroform	ND		50.0	47.2		ug/L		94	80 - 120	1	20
cis-1,2-Dichloroethene	ND		50.0	54.5		ug/L		109	80 - 124	0	20
cis-1,3-Dichloropropene	ND		50.0	54.5		ug/L		109	67 - 130	0	20
Dibromochloromethane	ND		50.0	50.3		ug/L		101	68 - 133	4	20
1,2-Dibromo-3-Chloropropane	ND		50.0	54.6		ug/L		109	58 - 148	18	20
1,2-Dibromoethane (EDB)	ND		50.0	53.4		ug/L		107	65 - 138	2	20
1,2-Dichlorobenzene	ND		50.0	51.8		ug/L		104	80 - 124	8	20
1,4-Dichlorobenzene	ND		50.0	48.7		ug/L		97	80 - 120	0	20
1,1-Dichloroethane	ND		50.0	48.9		ug/L		98	80 - 120	1	20
1,2-Dichloroethane	2.4	J	50.0	48.0		ug/L		91	56 - 136	2	20
1,1-Dichloroethene	ND	*	50.0	50.5		ug/L		101	66 - 137	1	20
1,2-Dichloropropane	ND		50.0	49.7		ug/L		99	80 - 123	0	20
Ethylbenzene	ND		50.0	52.5		ug/L		105	80 - 121	0	20
2-Hexanone	ND		50.0	59.2		ug/L		118	47 - 150	1	20
Methyl bromide	ND		50.0	44.8		ug/L		90	53 - 146	1	20
Methyl chloride	ND		50.0	45.4		ug/L		91	61 - 137	0	20
Methylene bromide	ND		50.0	47.9		ug/L		96	61 - 136	2	20
Methylene Chloride	ND		50.0	48.2		ug/L		96	80 - 120	0	20
Methyl Ethyl Ketone	ND		50.0	52.2		ug/L		104	58 - 143	5	20
Methyl iodide	ND	* F1	50.0	63.6	F1	ug/L		127	69 - 124	9	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	53.7		ug/L		107	53 - 150	11	20
Styrene	ND		50.0	55.1		ug/L		110	44 - 150	1	20
1,1,1,2-Tetrachloroethane	ND		50.0	50.0		ug/L		100	80 - 120	0	20
1,1,2,2-Tetrachloroethane	ND		50.0	43.0		ug/L		86	60 - 150	11	20
Tetrachloroethene	ND		50.0	44.6		ug/L		89	66 - 132	7	20
Toluene	ND		50.0	43.3		ug/L		87	75 - 134	6	20
trans-1,4-Dichloro-2-butene	ND		50.0	45.0		ug/L		90	55 - 146	19	20
trans-1,2-Dichloroethene	ND		50.0	52.4		ug/L		105	79 - 121	3	20
trans-1,3-Dichloropropene	ND		50.0	52.1		ug/L		104	68 - 143	8	20
1,1,1-Trichloroethane	ND		50.0	48.2		ug/L		96	74 - 123	1	20
1,1,2-Trichloroethane	ND		50.0	46.5		ug/L		93	70 - 134	7	20
Trichloroethene	ND		50.0	47.3		ug/L		95	63 - 120	1	20
Trichlorofluoromethane	ND		50.0	48.0		ug/L		96	53 - 150	4	20
1,2,3-Trichloropropane	ND		50.0	41.9		ug/L		84	62 - 137	18	20
Vinyl acetate	ND		50.0	59.0		ug/L		118	63 - 150	3	20
Vinyl chloride	ND		50.0	52.5		ug/L		105	54 - 140	5	20
Xylenes, Total	ND		100	107		ug/L		107	80 - 124	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*96*		*71 - 139*
Dibromofluoromethane (Surr)	*98*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*95*		*76 - 121*
Toluene-d8 (Surr)	*96*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-267791/9
Matrix: Water
Analysis Batch: 267791

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/01/16 15:58	1
Sulfate	ND		0.50	0.050	mg/L			09/01/16 15:58	1
Chloride	ND		0.20	0.020	mg/L			09/01/16 15:58	1

Lab Sample ID: LCS 160-267791/10
Matrix: Water
Analysis Batch: 267791

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			1.00	1.02		mg/L		102	90 - 110		
Sulfate			8.00	7.72		mg/L		97	90 - 110		
Chloride			2.00	1.95		mg/L		97	90 - 110		

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 267791

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	1.2		2.00	3.36	E	mg/L		108	90 - 110		

Lab Sample ID: 160-18857-1 DU
Matrix: Water
Analysis Batch: 267791

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	1.2			1.22		mg/L				1	20

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 267791

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate - DL	50		80.0	123		mg/L		92	90 - 110		

Lab Sample ID: 160-18857-1 DU
Matrix: Water
Analysis Batch: 267791

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sulfate - DL	50			49.2		mg/L				1	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 267791

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	140		400	514		mg/L		93	90 - 110

Lab Sample ID: 160-18857-1 DU
Matrix: Water
Analysis Batch: 267791

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	140		136		mg/L		3	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-268203/1-A
Matrix: Water
Analysis Batch: 268438

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268203

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Arsenic	ND		10	4.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Barium	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:27	1
Beryllium	ND		5.0	1.5	ug/L		09/06/16 12:21	09/07/16 15:27	1
Boron	ND		100	25	ug/L		09/06/16 12:21	09/07/16 15:27	1
Cadmium	ND		5.0	1.5	ug/L		09/06/16 12:21	09/07/16 15:27	1
CaHard	ND		2500	750	ug/L		09/06/16 12:21	09/07/16 15:27	1
Calcium	ND		1000	300	ug/L		09/06/16 12:21	09/07/16 15:27	1
Chromium	ND		10	3.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Cobalt	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:27	1
Copper	ND		25	5.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Lead	ND		10	3.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Magnesium	ND		1.0	0.30	mg/L		09/06/16 12:21	09/07/16 15:27	1
Manganese	ND		15	2.5	ug/L		09/06/16 12:21	09/07/16 15:27	1
MgHard	ND		4100	1200	ug/L		09/06/16 12:21	09/07/16 15:27	1
Nickel	ND		0.040	0.010	mg/L		09/06/16 12:21	09/07/16 15:27	1
Phosphorus	ND		250	75	ug/L		09/06/16 12:21	09/07/16 15:27	1
Selenium	ND		15	5.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Silver	ND		10	3.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Sodium	ND		1000	300	ug/L		09/06/16 12:21	09/07/16 15:27	1
Thallium	ND	^	20	5.0	ug/L		09/06/16 12:21	09/07/16 15:27	1
Total Hardness	ND		6600	2000	ug/L		09/06/16 12:21	09/07/16 15:27	1
Vanadium	ND		50	15	ug/L		09/06/16 12:21	09/07/16 15:27	1
Zinc	ND		20	6.0	ug/L		09/06/16 12:21	09/07/16 15:27	1

Lab Sample ID: LCS 160-268203/2-A
Matrix: Water
Analysis Batch: 268438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	481		ug/L		96	80 - 120
Arsenic	1000	931		ug/L		93	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-268203/2-A
Matrix: Water
Analysis Batch: 268438

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268203

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	1000	999		ug/L		100	80 - 120
Beryllium	1000	1010		ug/L		101	80 - 120
Boron	2000	2010		ug/L		101	80 - 120
Cadmium	1000	954		ug/L		95	80 - 120
Calcium	10000	10000		ug/L		100	80 - 120
Chromium	1000	995		ug/L		99	80 - 120
Cobalt	1000	999		ug/L		100	80 - 120
Copper	1000	971		ug/L		97	80 - 120
Lead	1000	1000		ug/L		100	80 - 120
Magnesium	10.0	9.78		mg/L		98	80 - 120
Manganese	1000	1020		ug/L		102	80 - 120
Nickel	1.00	1.01		mg/L		101	80 - 120
Phosphorus	1000	1090		ug/L		109	80 - 120
Selenium	500	469		ug/L		94	80 - 120
Silver	200	196		ug/L		98	80 - 120
Sodium	10000	9810		ug/L		98	80 - 120
Thallium	200	210	^	ug/L		105	80 - 120
Vanadium	1000	996		ug/L		100	80 - 120
Zinc	1000	966		ug/L		97	80 - 120

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 268438

Client Sample ID: PZ-206-SS
Prep Type: Total/NA
Prep Batch: 268203

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	506		ug/L		101	75 - 125
Arsenic	ND		1000	988		ug/L		99	75 - 125
Barium	110	J	1000	1110		ug/L		100	75 - 125
Beryllium	ND		1000	1030		ug/L		103	75 - 125
Boron	190	J	2000	2210		ug/L		101	75 - 125
Cadmium	ND		1000	999		ug/L		100	75 - 125
Calcium	140000		10000	153000	4	ug/L		84	75 - 125
Chromium	ND		1000	1020		ug/L		102	75 - 125
Cobalt	ND		1000	1030		ug/L		103	75 - 125
Copper	ND		1000	1010		ug/L		101	75 - 125
Lead	ND		1000	1050		ug/L		105	75 - 125
Magnesium	94		10.0	102	4	mg/L		80	75 - 125
Manganese	110		1000	1140		ug/L		103	75 - 125
Nickel	ND		1.00	1.05		mg/L		105	75 - 125
Phosphorus	ND	F1	1000	1340	F1	ug/L		134	75 - 125
Selenium	ND		500	476		ug/L		95	75 - 125
Silver	ND		200	203		ug/L		102	75 - 125
Sodium	24000		10000	33900		ug/L		96	75 - 125
Thallium	ND	^	200	227	^	ug/L		113	75 - 125
Vanadium	ND		1000	1020		ug/L		102	75 - 125
Zinc	30	J	1000	1050		ug/L		102	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18857-1 MSD — **Client Sample ID: PZ-206-SS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268438 — **Prep Batch: 268203**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	506		ug/L		101	75 - 125	0	20
Arsenic	ND		1000	993		ug/L		99	75 - 125	1	20
Barium	110	J	1000	1100		ug/L		100	75 - 125	1	20
Beryllium	ND		1000	1030		ug/L		103	75 - 125	0	20
Boron	190	J	2000	2210		ug/L		101	75 - 125	0	20
Cadmium	ND		1000	1000		ug/L		100	75 - 125	0	20
Calcium	140000		10000	153000	4	ug/L		83	75 - 125	0	20
Chromium	ND		1000	1020		ug/L		102	75 - 125	0	20
Cobalt	ND		1000	1030		ug/L		103	75 - 125	0	20
Copper	ND		1000	1010		ug/L		101	75 - 125	0	20
Lead	ND		1000	1050		ug/L		105	75 - 125	0	20
Magnesium	94		10.0	101	4	mg/L		73	75 - 125	1	20
Manganese	110		1000	1140		ug/L		103	75 - 125	0	20
Nickel	ND		1.00	1.05		mg/L		105	75 - 125	0	20
Phosphorus	ND	F1	1000	1340	F1	ug/L		134	75 - 125	0	20
Selenium	ND		500	460		ug/L		92	75 - 125	3	20
Silver	ND		200	203		ug/L		101	75 - 125	0	20
Sodium	24000		10000	33700		ug/L		94	75 - 125	1	20
Thallium	ND	^	200	226	^	ug/L		113	75 - 125	0	20
Vanadium	ND		1000	1020		ug/L		102	75 - 125	0	20
Zinc	30	J	1000	1050		ug/L		102	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-268164/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268454 — **Prep Batch: 268164**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/06/16 09:50	09/07/16 08:05	1

Lab Sample ID: LCS 160-268164/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268454 — **Prep Batch: 268164**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.64		ug/L		93	80 - 120

Lab Sample ID: 160-18684-N-4-B MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268454 — **Prep Batch: 268164**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.54		ug/L		91	80 - 120

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: 160-18684-N-4-C MSD
Matrix: Water
Analysis Batch: 268454

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 268164

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.65		ug/L		93	80 - 120	2	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-267627/1
Matrix: Water
Analysis Batch: 267627

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			09/01/16 09:30	1

Lab Sample ID: LCS 160-267627/2
Matrix: Water
Analysis Batch: 267627

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	505		mg/L		101	90 - 110

Lab Sample ID: 160-18839-D-1 DU
Matrix: Water
Analysis Batch: 267627

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	2000		2010		mg/L		2	20

Lab Sample ID: MB 160-267834/1
Matrix: Water
Analysis Batch: 267834

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			09/02/16 09:08	1

Lab Sample ID: LCS 160-267834/2
Matrix: Water
Analysis Batch: 267834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	506		mg/L		101	90 - 110

Lab Sample ID: 160-18897-D-1 DU
Matrix: Water
Analysis Batch: 267834

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	3200		3390		mg/L		5	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-271200/12
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/22/16 13:44	1

Lab Sample ID: LCS 160-271200/13
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia			0.500	0.489		mg/L		98	90 - 110		

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 271200

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia	0.24		0.500	0.790		mg/L		110	90 - 110		

Method: 350.1 - Nitrogen, Ammonia - DL

Lab Sample ID: 160-18807-E-1 MS ^100
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ammonia - DL	95		0.500	86.9	4	mg/L		-1596	90 - 110		

Lab Sample ID: 160-18807-E-1 DU ^100
Matrix: Water
Analysis Batch: 271200

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Ammonia - DL	95			93.6		mg/L				1	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-271335/4
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0216	J	0.050	0.011	mg/L			09/22/16 21:30	1

Lab Sample ID: LCS 160-271335/5
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite			0.500	0.460		mg/L		92	90 - 110		

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 160-18807-E-1 MS
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	0.14	B F1	0.500	0.155	F1	mg/L		2	90 - 110		

Lab Sample ID: 160-18857-1 MS
Matrix: Water
Analysis Batch: 271335

Client Sample ID: PZ-206-SS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrate/Nitrite	0.022	J B F1	0.500	0.0236	J F1	mg/L		0.2	90 - 110		

Lab Sample ID: 160-18807-E-1 DU
Matrix: Water
Analysis Batch: 271335

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.14	B F1	0.146		mg/L		0.8	20

Method: 410.4 - COD

Lab Sample ID: MB 160-267630/3-A
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267630

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/01/16 09:36	09/01/16 14:22	1

Lab Sample ID: LCS 160-267630/4-A
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: 160-18839-E-5-D MS
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	16		50.0	70.0		mg/L		108	90 - 110

Lab Sample ID: 160-18807-E-3-B DU
Matrix: Water
Analysis Batch: 267771

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 267630

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	43		38.0		mg/L		12	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-270734/1-A
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270734

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-49.10	U	173	173	500	319	pCi/L	09/20/16 14:24	09/20/16 23:28	1

Lab Sample ID: LCS 160-270734/2-A
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270734

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3020	2995		452	500	322	pCi/L	99	74 - 114		

Lab Sample ID: 280-87757-C-6-B MS
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	892		3020	4225		566	500	329	pCi/L	110	67 - 130		

Lab Sample ID: 280-87757-C-5-B DU
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	1650			1829		350	500	329	pCi/L			0.26	1

GC/MS VOA

Analysis Batch: 268225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	8260C	
160-18857-2	PZ-113-SS	Total/NA	Water	8260C	
160-18857-3	PZ-113-AD	Total/NA	Water	8260C	
160-18857-4	PZ-113-AS	Total/NA	Water	8260C	
160-18857-5	PZ-103-SS	Total/NA	Water	8260C	
160-18857-6	PZ-203-SS	Total/NA	Water	8260C	
160-18857-7	TRIP BLANK	Total/NA	Water	8260C	
MB 160-268225/20	Method Blank	Total/NA	Water	8260C	
LCS 160-268225/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-268225/4	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18857-1 MS	PZ-206-SS	Total/NA	Water	8260C	
160-18857-1 MSD	PZ-206-SS	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 267791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 - DL	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 - DL2	PZ-206-SS	Total/NA	Water	300.0	
160-18857-2	PZ-113-SS	Total/NA	Water	300.0	
160-18857-2 - DL	PZ-113-SS	Total/NA	Water	300.0	
160-18857-3 - DL	PZ-113-AD	Total/NA	Water	300.0	
160-18857-3 - DL3	PZ-113-AD	Total/NA	Water	300.0	
160-18857-4	PZ-113-AS	Total/NA	Water	300.0	
160-18857-4 - DL2	PZ-113-AS	Total/NA	Water	300.0	
160-18857-5 - DL	PZ-103-SS	Total/NA	Water	300.0	
160-18857-5 - DL2	PZ-103-SS	Total/NA	Water	300.0	
160-18857-6	PZ-203-SS	Total/NA	Water	300.0	
160-18857-6 - DL	PZ-203-SS	Total/NA	Water	300.0	
MB 160-267791/9	Method Blank	Total/NA	Water	300.0	
LCS 160-267791/10	Lab Control Sample	Total/NA	Water	300.0	
160-18857-1 MS	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 MS - DL	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 MS - DL2	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 DU	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 DU - DL	PZ-206-SS	Total/NA	Water	300.0	
160-18857-1 DU - DL2	PZ-206-SS	Total/NA	Water	300.0	

Metals

Prep Batch: 268164

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	7470A	
160-18857-2	PZ-113-SS	Total/NA	Water	7470A	
160-18857-3	PZ-113-AD	Total/NA	Water	7470A	
160-18857-4	PZ-113-AS	Total/NA	Water	7470A	
160-18857-5	PZ-103-SS	Total/NA	Water	7470A	
160-18857-6	PZ-203-SS	Total/NA	Water	7470A	
MB 160-268164/1-A	Method Blank	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 268164 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 160-268164/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18684-N-4-B MS	Matrix Spike	Total/NA	Water	7470A	
160-18684-N-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 268203

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	3010A	
160-18857-2	PZ-113-SS	Total/NA	Water	3010A	
160-18857-3	PZ-113-AD	Total/NA	Water	3010A	
160-18857-4	PZ-113-AS	Total/NA	Water	3010A	
160-18857-5	PZ-103-SS	Total/NA	Water	3010A	
160-18857-6	PZ-203-SS	Total/NA	Water	3010A	
MB 160-268203/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-268203/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18857-1 MS	PZ-206-SS	Total/NA	Water	3010A	
160-18857-1 MSD	PZ-206-SS	Total/NA	Water	3010A	

Analysis Batch: 268438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	6010C	268203
160-18857-2	PZ-113-SS	Total/NA	Water	6010C	268203
160-18857-3	PZ-113-AD	Total/NA	Water	6010C	268203
160-18857-4	PZ-113-AS	Total/NA	Water	6010C	268203
160-18857-5	PZ-103-SS	Total/NA	Water	6010C	268203
160-18857-6	PZ-203-SS	Total/NA	Water	6010C	268203
MB 160-268203/1-A	Method Blank	Total/NA	Water	6010C	268203
LCS 160-268203/2-A	Lab Control Sample	Total/NA	Water	6010C	268203
160-18857-1 MS	PZ-206-SS	Total/NA	Water	6010C	268203
160-18857-1 MSD	PZ-206-SS	Total/NA	Water	6010C	268203

Analysis Batch: 268454

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	7470A	268164
160-18857-2	PZ-113-SS	Total/NA	Water	7470A	268164
160-18857-3	PZ-113-AD	Total/NA	Water	7470A	268164
160-18857-4	PZ-113-AS	Total/NA	Water	7470A	268164
160-18857-5	PZ-103-SS	Total/NA	Water	7470A	268164
160-18857-6	PZ-203-SS	Total/NA	Water	7470A	268164
MB 160-268164/1-A	Method Blank	Total/NA	Water	7470A	268164
LCS 160-268164/2-A	Lab Control Sample	Total/NA	Water	7470A	268164
160-18684-N-4-B MS	Matrix Spike	Total/NA	Water	7470A	268164
160-18684-N-4-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	268164

General Chemistry

Analysis Batch: 267627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	160.1	
160-18857-2	PZ-113-SS	Total/NA	Water	160.1	
160-18857-3	PZ-113-AD	Total/NA	Water	160.1	

General Chemistry (Continued)

Analysis Batch: 267627 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-4	PZ-113-AS	Total/NA	Water	160.1	
MB 160-267627/1	Method Blank	Total/NA	Water	160.1	
LCS 160-267627/2	Lab Control Sample	Total/NA	Water	160.1	
160-18839-D-1 DU	Duplicate	Total/NA	Water	160.1	

Prep Batch: 267630

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	410.4	
160-18857-2	PZ-113-SS	Total/NA	Water	410.4	
160-18857-3 - DL	PZ-113-AD	Total/NA	Water	410.4	
160-18857-4	PZ-113-AS	Total/NA	Water	410.4	
160-18857-5	PZ-103-SS	Total/NA	Water	410.4	
160-18857-6	PZ-203-SS	Total/NA	Water	410.4	
MB 160-267630/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-267630/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18839-E-5-D MS	Matrix Spike	Total/NA	Water	410.4	
160-18807-E-3-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 267771

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	410.4	267630
160-18857-2	PZ-113-SS	Total/NA	Water	410.4	267630
160-18857-3 - DL	PZ-113-AD	Total/NA	Water	410.4	267630
160-18857-4	PZ-113-AS	Total/NA	Water	410.4	267630
160-18857-5	PZ-103-SS	Total/NA	Water	410.4	267630
160-18857-6	PZ-203-SS	Total/NA	Water	410.4	267630
MB 160-267630/3-A	Method Blank	Total/NA	Water	410.4	267630
LCS 160-267630/4-A	Lab Control Sample	Total/NA	Water	410.4	267630
160-18839-E-5-D MS	Matrix Spike	Total/NA	Water	410.4	267630
160-18807-E-3-B DU	Duplicate	Total/NA	Water	410.4	267630

Analysis Batch: 267834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-5	PZ-103-SS	Total/NA	Water	160.1	
160-18857-6	PZ-203-SS	Total/NA	Water	160.1	
MB 160-267834/1	Method Blank	Total/NA	Water	160.1	
LCS 160-267834/2	Lab Control Sample	Total/NA	Water	160.1	
160-18897-D-1 DU	Duplicate	Total/NA	Water	160.1	

Analysis Batch: 271200

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	350.1	
160-18857-2	PZ-113-SS	Total/NA	Water	350.1	
160-18857-3 - DL	PZ-113-AD	Total/NA	Water	350.1	
160-18857-4	PZ-113-AS	Total/NA	Water	350.1	
160-18857-5	PZ-103-SS	Total/NA	Water	350.1	
160-18857-6	PZ-203-SS	Total/NA	Water	350.1	
MB 160-271200/12	Method Blank	Total/NA	Water	350.1	
LCS 160-271200/13	Lab Control Sample	Total/NA	Water	350.1	
160-18807-E-1 MS ^100 - DL	Matrix Spike	Total/NA	Water	350.1	
160-18857-1 MS	PZ-206-SS	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 271200 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18807-E-1 DU ^100 - DL	Duplicate	Total/NA	Water	350.1	

Analysis Batch: 271335

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	353.1 Preserved	
160-18857-2	PZ-113-SS	Total/NA	Water	353.1 Preserved	
160-18857-3	PZ-113-AD	Total/NA	Water	353.1 Preserved	
160-18857-4	PZ-113-AS	Total/NA	Water	353.1 Preserved	
160-18857-5	PZ-103-SS	Total/NA	Water	353.1 Preserved	
160-18857-6	PZ-203-SS	Total/NA	Water	353.1 Preserved	
MB 160-271335/4	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-271335/5	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18807-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18857-1 MS	PZ-206-SS	Total/NA	Water	353.1 Preserved	
160-18807-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 270734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18857-1	PZ-206-SS	Total/NA	Water	LSC_Dist_Susp	
160-18857-2	PZ-113-SS	Total/NA	Water	LSC_Dist_Susp	
160-18857-3	PZ-113-AD	Total/NA	Water	LSC_Dist_Susp	
160-18857-4	PZ-113-AS	Total/NA	Water	LSC_Dist_Susp	
160-18857-5	PZ-103-SS	Total/NA	Water	LSC_Dist_Susp	
160-18857-6	PZ-203-SS	Total/NA	Water	LSC_Dist_Susp	
MB 160-270734/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-270734/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
280-87757-C-6-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
280-87757-C-5-B DU	Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18857-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18857-1	PZ-206-SS	119	97	94	105
160-18857-1 MS	PZ-206-SS	114	96	98	102
160-18857-1 MSD	PZ-206-SS	96	98	95	96
160-18857-2	PZ-113-SS	123	113	122 X	117
160-18857-3	PZ-113-AD	113	107	102	117
160-18857-4	PZ-113-AS	117	103	102	124
160-18857-5	PZ-103-SS	118	110	105	109
160-18857-6	PZ-203-SS	101	107	103	115
160-18857-7	TRIP BLANK	114	104	110	101
LCS 160-268225/3	Lab Control Sample	113	97	97	108
LCSD 160-268225/4	Lab Control Sample Dup	110	94	91	107
MB 160-268225/20	Method Blank	122	98	96	106

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18897-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
10/4/2016 12:46:40 PM

Chenise Lambert-Sykes, Project Manager I
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18897-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18897-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 08/31/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 4.7 C.

Receipt Exceptions

A trip blank was submitted for analysis with these samples; however, it was not listed on the Chain of Custody (COC).

The following samples was received with insufficient preservation: S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). Nitric acid preservative was added by the laboratory, and the samples' pHs were adjusted to < 2 SU.

The container label for the following sample did not match the information listed on the Chain-of-Custody (COC): LR-100 (160-18897-3). The container labels list LR-103, while the COC lists LR-100. The samples were logged per the COC.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6), I-73 (160-18897-7) and TRIP BLANK (160-18897-8) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/07/2016 and 09/08/2016.

Job ID: 160-18897-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

Analytical Batch: 268415
According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. The sample was analyzed outside the 7 day, unpreserved, holding time. PZ-205-AS (160-18897-1)

According to the COC, samples were presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Samples were analyzed within the 7 day, unpreserved, holding time. S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6), I-73 (160-18897-7), (160-18897-A-6 MS) and (160-18897-A-6 MSD)

The following sample was analyzed at reduced volume due to high concentrations of target analytes: PZ-205-AS (160-18897-1). The reporting limits have been elevated by the appropriate factor.

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-268415: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-268415/3)

Surrogate Dibromofluoromethane (Surr) recovery for the following sample was outside control limits: PZ-205-AS (160-18897-1). Evidence of matrix interference is present in the form of a large co-eluting non-target analyte; therefore, re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)
Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/12/2016 and analyzed on 09/13/2016.

Prep Batch: 269134
Due to difficult sample matrix dilutions were performed for the following samples: PZ-205-AS (160-18897-1) and S-5 (160-18897-4). These dilutions were prepared as follows: 25mL to 50mL

Analytical Batch: 269399
The following samples was diluted to bring the concentration of target analytes within the calibration range: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6), I-73 (160-18897-7), (160-18933-B-4-A ^5), (160-18933-B-4-B MS ^), (160-18933-B-4-C MSD) and (160-18933-B-4-A SD ^). Elevated reporting limits (RLs) are provided.

The Laboratory Control Sample (LCS) was above the upper calibration range for Boron. However, the percent recovery was within acceptable limits. Data will be reported. (LCS 160-269134/2-A)

Due to the high concentration of Calcium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-269134 and analytical batch 160-269399 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details. (160-18933-B-4-B MS ^) and (160-18933-B-4-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 09/12/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 160-18897-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

TOTAL DISSOLVED SOLIDS

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 09/02/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/06/2016 and 09/07/2016.

Analytical Batch: 268208

The following samples in Anion batch 160-268208 were diluted to bring the concentrations of target analytes within the calibration range: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). Elevated reporting limits (RLs) are provided.

The following samples in Anion batch 160-268208 were analyzed at dilution to start (2x or 5x dilutions, respectively) due to high sample conductivities, which made undiluted analysis inadvisable: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). As a result, some results for Fluoride and Sulfate are below the adjusted reporting limit (RL) at the initial dilution.

The following matrix spike (MS) recovered outside control limits for Fluoride (85%) in Anion batch 160-268208: (160-18897-D-1 MS). Sample matrix interference is suspected, because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/29/2016.

Analytical Batch: 272554

Reanalysis of the following samples in NH3 analytical batch 160-272554 was performed outside of the analytical holding time due to the initial in hold analysis having a high LCS and CCVs: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). Reanalysis was performed within two times the holding time, and the original, in hold data is included with the raw data.

The following samples in NH3 analytical batch 160-272554 were diluted to bring the concentration of the target analyte within the calibration range: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). Elevated reporting limits (RLs) are provided.

Due to the high concentration of NH3 in the parent samples, which required dilution, the following matrix spikes (MS) for analytical batch 160-272554 were diluted below reliable detection limits: (160-18897-E-1 MS ^10). The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 10/03/2016.

Analytical Batch: 272820

Reanalysis of the following samples in NO3-NO2 analytical batch 160-272820 was performed outside of the analytical holding time due to

Job ID: 160-18897-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

failed QC requirements: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). Reanalysis was performed within two times the holding time, and the original, in hold data is included with the raw data.

Nitrate/Nitrite was detected in method blank MB 160-272820/13 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

The following sample/sample duplicate (DU) RPD in NO3-NO2 analytical batch 160-272820 is slightly outside of acceptance criteria: PZ-205-AS (160-18897-1) and (160-18897-E-1 DU). RPD determinations for results that are less than 5X the reporting limit (RL), and are within the RL from each other are considered to be approximate, and therefore the data are reported.

The following matrix spike (MS) recovery for NO3-NO2 analytical batch 160-272820 was outside control limits: (160-18897-E-1 MS). Sample matrix interference is suspected because of the historical data associated with MS recoveries from this client, as well as the associated laboratory control sample (LCS) recovery being within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 09/06/2016.

Analytical Batch: 268216

The following samples in COD batch 160-268216 were diluted to bring the concentration of target analytes within the calibration range: PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)

Samples PZ-205-AS (160-18897-1), PZ-107-SS (160-18897-2), LR-100 (160-18897-3), S-5 (160-18897-4), I-4 (160-18897-5), D-3 (160-18897-6) and I-73 (160-18897-7) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/08/2016 and analyzed on 09/09/2016 and 09/10/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.6
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 6 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days): Standard			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N	S	N	O	A	CB		
PZ-205-AS	8/30/16	0845	G	Water	N	N	✓	✓	✓	✓	✓		7	
PZ-107-SS	8/30/16	0959	G	Water	N	N	✓	✓	✓	✓	✓		7	
LR-100	8/30/16	~~1145~~ 1154	G	Water	N	N	✓	✓	✓	✓	✓		7	
S-5	8/31/16	0943	G	Water	N	N	✓	✓	✓	✓	✓		7	
I-4	8/31/16	1050	G	Water	N	N	✓	✓	✓	✓	✓		7	
D-3	8/31/16	1139	G	Water	N	N	✓	✓	✓	✓	✓		7	
I-73	8/31/16	1339	G		N	N	✓	✓	✓	✓	✓		7	

160-18897 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Brenna McDonald	8/31/16 1625		Gil Clark	8-31-16 1625	TA STL
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

10/4/2016

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18897-1

Login Number: 18897
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	False	Refer to Job Narrative for details.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Refer to Job Narrative for details.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18897-1	PZ-205-AS	Water	08/30/16 08:45	08/31/16 16:25
160-18897-2	PZ-107-SS	Water	08/30/16 09:59	08/31/16 16:25
160-18897-3	LR-100	Water	08/30/16 11:45	08/31/16 16:25
160-18897-4	S-5	Water	08/31/16 09:43	08/31/16 16:25
160-18897-5	I-4	Water	08/31/16 10:50	08/31/16 16:25
160-18897-6	D-3	Water	08/31/16 11:39	08/31/16 16:25
160-18897-7	I-73	Water	08/31/16 13:39	08/31/16 16:25
160-18897-8	TRIP BLANK	Water	08/31/16 00:00	08/31/16 16:25

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Client Sample ID: PZ-205-AS
Date Collected: 08/30/16 08:45
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND	H	20	6.7	ug/L			09/07/16 20:30	1
Acrylonitrile	ND	H	50	1.7	ug/L			09/07/16 20:30	1
Bromochloromethane	ND	H	5.0	0.55	ug/L			09/07/16 20:30	1
Bromodichloromethane	ND	H	5.0	0.25	ug/L			09/07/16 20:30	1
Bromoform	ND	H	5.0	0.37	ug/L			09/07/16 20:30	1
Carbon disulfide	ND	H	5.0	0.37	ug/L			09/07/16 20:30	1
Carbon tetrachloride	ND	H	5.0	0.36	ug/L			09/07/16 20:30	1
Chlorobenzene	**6.4**	**H**	5.0	0.38	ug/L			09/07/16 20:30	1
Chloroethane	ND	H	10	0.38	ug/L			09/07/16 20:30	1
Chloroform	ND	H	5.0	0.15	ug/L			09/07/16 20:30	1
cis-1,2-Dichloroethene	ND	H	5.0	0.16	ug/L			09/07/16 20:30	1
cis-1,3-Dichloropropene	ND	H	5.0	0.34	ug/L			09/07/16 20:30	1
Dibromochloromethane	ND	H	5.0	0.33	ug/L			09/07/16 20:30	1
1,2-Dibromo-3-Chloropropane	ND	H	10	1.2	ug/L			09/07/16 20:30	1
1,2-Dibromoethane (EDB)	ND	H	5.0	0.44	ug/L			09/07/16 20:30	1
1,2-Dichlorobenzene	**0.79**	**J H**	5.0	0.28	ug/L			09/07/16 20:30	1
1,4-Dichlorobenzene	**23**	**H**	5.0	0.35	ug/L			09/07/16 20:30	1
1,1-Dichloroethane	ND	H	5.0	0.39	ug/L			09/07/16 20:30	1
1,2-Dichloroethane	**0.39**	**J H**	5.0	0.37	ug/L			09/07/16 20:30	1
1,1-Dichloroethene	ND	H	5.0	0.37	ug/L			09/07/16 20:30	1
1,2-Dichloropropane	ND	H	5.0	0.32	ug/L			09/07/16 20:30	1
Ethylbenzene	**19**	**H**	5.0	0.30	ug/L			09/07/16 20:30	1
2-Hexanone	ND	H	20	0.59	ug/L			09/07/16 20:30	1
Methyl bromide	ND	H	10	0.40	ug/L			09/07/16 20:30	1
Methyl chloride	ND	H	10	0.55	ug/L			09/07/16 20:30	1
Methylene bromide	ND	H	5.0	0.41	ug/L			09/07/16 20:30	1
Methylene Chloride	ND	H	5.0	1.7	ug/L			09/07/16 20:30	1
Methyl Ethyl Ketone	ND	H	20	0.39	ug/L			09/07/16 20:30	1
Methyl iodide	ND	H	5.0	1.5	ug/L			09/07/16 20:30	1
4-Methyl-2-pentanone (MIBK)	ND	H	20	0.33	ug/L			09/07/16 20:30	1
Styrene	ND	H	5.0	0.35	ug/L			09/07/16 20:30	1
1,1,1,2-Tetrachloroethane	ND	H	5.0	0.25	ug/L			09/07/16 20:30	1
1,1,2,2-Tetrachloroethane	ND	H	5.0	0.43	ug/L			09/07/16 20:30	1
Tetrachloroethene	ND	H	5.0	0.28	ug/L			09/07/16 20:30	1
Toluene	**79**	**H**	5.0	1.0	ug/L			09/07/16 20:30	1
trans-1,4-Dichloro-2-butene	ND	H	10	0.95	ug/L			09/07/16 20:30	1
trans-1,2-Dichloroethene	ND	H	5.0	0.18	ug/L			09/07/16 20:30	1
trans-1,3-Dichloropropene	ND	H	5.0	0.35	ug/L			09/07/16 20:30	1
1,1,1-Trichloroethane	ND	H	5.0	0.29	ug/L			09/07/16 20:30	1
1,1,2-Trichloroethane	ND	H	5.0	0.57	ug/L			09/07/16 20:30	1
Trichloroethene	ND	H	5.0	0.29	ug/L			09/07/16 20:30	1
Trichlorofluoromethane	ND	H	5.0	0.22	ug/L			09/07/16 20:30	1
1,2,3-Trichloropropane	ND	H	5.0	0.56	ug/L			09/07/16 20:30	1
Vinyl acetate	ND	H	5.0	0.61	ug/L			09/07/16 20:30	1
Vinyl chloride	ND	H	5.0	0.43	ug/L			09/07/16 20:30	1
Xylenes, Total	**54**	**H**	10	0.85	ug/L			09/07/16 20:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*104*		*71 - 139*		*09/07/16 20:30*	*1*

Client Sample ID: PZ-205-AS

Date Collected: 08/30/16 08:45
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-1

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*135*	*X*	*80 - 121*		*09/07/16 20:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*94*		*76 - 121*		*09/07/16 20:30*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*		*09/07/16 20:30*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**870**	**H**	25	1.3	ug/L			09/08/16 01:18	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*71 - 139*		*09/08/16 01:18*	*5*
Dibromofluoromethane (Surr)	*108*		*80 - 121*		*09/08/16 01:18*	*5*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/08/16 01:18*	*5*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/08/16 01:18*	*5*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.056**	**J F1**	0.20	0.020	mg/L			09/06/16 17:30	2
Sulfate	**1.8**		1.0	0.10	mg/L			09/06/16 17:30	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**980**		100	10	mg/L			09/06/16 17:59	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:39	5
Arsenic	**62**	**J**	100	40	ug/L		09/12/16 11:53	09/13/16 17:39	5
Barium	**3600**		500	150	ug/L		09/12/16 11:53	09/13/16 17:39	5
Beryllium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:39	5
Boron	**1400**		1000	250	ug/L		09/12/16 11:53	09/13/16 17:39	5
Cadmium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:39	5
CaHard	**1100000**		25000	7500	ug/L		09/12/16 11:53	09/13/16 17:39	5
Calcium	**460000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 17:39	5
Chromium	**42**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 17:39	5
Cobalt	ND		500	150	ug/L		09/12/16 11:53	09/13/16 17:39	5
Copper	ND		250	50	ug/L		09/12/16 11:53	09/13/16 17:39	5
Lead	**43**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 17:39	5
Magnesium	**150**		10	3.0	mg/L		09/12/16 11:53	09/13/16 17:39	5
Manganese	**1200**		150	25	ug/L		09/12/16 11:53	09/13/16 17:39	5
MgHard	**600000**		41000	12000	ug/L		09/12/16 11:53	09/13/16 17:39	5
Nickel	ND		0.40	0.10	mg/L		09/12/16 11:53	09/13/16 17:39	5
Phosphorus	**1700**	**J**	2500	750	ug/L		09/12/16 11:53	09/13/16 17:39	5
Selenium	ND		150	50	ug/L		09/12/16 11:53	09/13/16 17:39	5
Silver	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:39	5
Sodium	**280000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 17:39	5
Thallium	ND		200	50	ug/L		09/12/16 11:53	09/13/16 17:39	5
Total Hardness	**1700000**		66000	20000	ug/L		09/12/16 11:53	09/13/16 17:39	5
Vanadium	ND		500	150	ug/L		09/12/16 11:53	09/13/16 17:39	5
Zinc	**92**	**J**	200	60	ug/L		09/12/16 11:53	09/13/16 17:39	5

Client Sample ID: PZ-205-AS

Date Collected: 08/30/16 08:45
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-1
Matrix: Water

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**3200**		25	17	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	**0.062**	**H B F1**	0.050	0.011	mg/L			10/03/16 14:58	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**590**		50	11	mg/L		09/06/16 08:48	09/06/16 14:22	10

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**26**	**H**	5.0	2.2	mg/L			09/29/16 17:18	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**24600**		887	2340	500	245	pCi/L	09/08/16 14:25	09/09/16 22:47	1

Client Sample ID: PZ-107-SS

Date Collected: 08/30/16 09:59
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 20:55	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 20:55	1
Benzene	ND		5.0	0.25	ug/L			09/08/16 01:43	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 20:55	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 20:55	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 20:55	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 20:55	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 20:55	1
Chlorobenzene	**0.39**	**J**	5.0	0.38	ug/L			09/07/16 20:55	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 20:55	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 20:55	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 20:55	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 20:55	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 20:55	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 20:55	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 20:55	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 20:55	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 20:55	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 20:55	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 20:55	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 20:55	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 20:55	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 20:55	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 20:55	1

Client Sample ID: PZ-107-SS

Date Collected: 08/30/16 09:59
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl bromide	ND		10	0.40	ug/L			09/07/16 20:55	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 20:55	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 20:55	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 20:55	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 20:55	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 20:55	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 20:55	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 20:55	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 20:55	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 20:55	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 20:55	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 20:55	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 20:55	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 20:55	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 20:55	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 20:55	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 20:55	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 20:55	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 20:55	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 20:55	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 20:55	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 20:55	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 20:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*110*		*71 - 139*		*09/07/16 20:55*	*1*
4-Bromofluorobenzene (Surr)	*118*		*71 - 139*		*09/08/16 01:43*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 121*		*09/07/16 20:55*	*1*
Dibromofluoromethane (Surr)	*101*		*80 - 121*		*09/08/16 01:43*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*		*09/07/16 20:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*		*09/08/16 01:43*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/07/16 20:55*	*1*
Toluene-d8 (Surr)	*108*		*80 - 129*		*09/08/16 01:43*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.24**		0.20	0.020	mg/L			09/06/16 20:08	2
Sulfate	**39**		1.0	0.10	mg/L			09/06/16 20:08	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**500**		100	10	mg/L			09/06/16 20:37	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:43	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 17:43	5
Barium	**920**		250	75	ug/L		09/12/16 11:53	09/13/16 17:43	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 17:43	5
Boron	**960**		500	130	ug/L		09/12/16 11:53	09/13/16 17:43	5

Client Sample ID: PZ-107-SS

Date Collected: 08/30/16 09:59
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 17:43	5
CaHard	**590000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 17:43	5
Calcium	**240000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 17:43	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:43	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:43	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 17:43	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:43	5
Magnesium	**130**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 17:43	5
Manganese	**140**		75	13	ug/L		09/12/16 11:53	09/13/16 17:43	5
MgHard	**550000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 17:43	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 17:43	5
Phosphorus	ND		1300	380	ug/L		09/12/16 11:53	09/13/16 17:43	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 17:43	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:43	5
Sodium	**190000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 17:43	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 17:43	5
Total Hardness	**1100000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 17:43	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:43	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1900**		10	7.0	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	ND	H	0.050	0.011	mg/L			10/03/16 15:07	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**230**		25	5.6	mg/L		09/06/16 08:48	09/06/16 14:22	5

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**29**	**H**	5.0	2.2	mg/L			09/29/16 17:25	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**2300**		306	367	500	253	pCi/L	09/08/16 14:25	09/09/16 23:10	1

Client Sample ID: LR-100

Date Collected: 08/30/16 11:45
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 00:42	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 00:42	1

Client Sample ID: LR-100
Date Collected: 08/30/16 11:45
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**8.6**		5.0	0.25	ug/L			09/08/16 00:42	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 00:42	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 00:42	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 00:42	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 00:42	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 00:42	1
Chlorobenzene	**41**		5.0	0.38	ug/L			09/08/16 00:42	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 00:42	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 00:42	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 00:42	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 00:42	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 00:42	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 00:42	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 00:42	1
1,2-Dichlorobenzene	**0.52**	**J**	5.0	0.28	ug/L			09/08/16 00:42	1
1,4-Dichlorobenzene	**6.3**		5.0	0.35	ug/L			09/08/16 00:42	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 00:42	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 00:42	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 00:42	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 00:42	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 00:42	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 00:42	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 00:42	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 00:42	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 00:42	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 00:42	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 00:42	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 00:42	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 00:42	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 00:42	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 00:42	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 00:42	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 00:42	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 00:42	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 00:42	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 00:42	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 00:42	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 00:42	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 00:42	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 00:42	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 00:42	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 00:42	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 00:42	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 00:42	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 00:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*119*		*71 - 139*		*09/08/16 00:42*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 121*		*09/08/16 00:42*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*76 - 121*		*09/08/16 00:42*	*1*

Client Sample ID: LR-100
Date Collected: 08/30/16 11:45
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/08/16 00:42*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20	0.020	mg/L			09/06/16 20:52	2
Sulfate	**0.26**	**J**	1.0	0.10	mg/L			09/06/16 20:52	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**		10	1.0	mg/L			09/06/16 21:06	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:48	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 17:48	5
Barium	**410**		250	75	ug/L		09/12/16 11:53	09/13/16 17:48	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 17:48	5
Boron	**1600**		500	130	ug/L		09/12/16 11:53	09/13/16 17:48	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 17:48	5
CaHard	**300000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 17:48	5
Calcium	**120000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 17:48	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:48	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:48	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 17:48	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:48	5
Magnesium	**60**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 17:48	5
Manganese	**210**		75	13	ug/L		09/12/16 11:53	09/13/16 17:48	5
MgHard	**250000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 17:48	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 17:48	5
Phosphorus	ND		1300	380	ug/L		09/12/16 11:53	09/13/16 17:48	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 17:48	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:48	5
Sodium	**130000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 17:48	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 17:48	5
Total Hardness	**550000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 17:48	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:48	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:48	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1100**		10	7.0	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	**0.021**	**J H B**	0.050	0.011	mg/L			10/03/16 15:10	1
Chemical Oxygen Demand	**96**		5.0	1.1	mg/L		09/06/16 08:48	09/06/16 14:22	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Client Sample ID: LR-100

Lab Sample ID: 160-18897-3
Matrix: Water
Date Collected: 08/30/16 11:45
Date Received: 08/31/16 16:25

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**97**	**H**	5.0	2.2	mg/L			09/29/16 17:27	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	44.1	U	142	142	500	247	pCi/L	09/08/16 14:25	09/09/16 23:32	1

Client Sample ID: S-5

Lab Sample ID: 160-18897-4
Matrix: Water
Date Collected: 08/31/16 09:43
Date Received: 08/31/16 16:25

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**24**		20	6.7	ug/L			09/07/16 21:20	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 21:20	1
Benzene	**3.6**	**J**	5.0	0.25	ug/L			09/07/16 21:20	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 21:20	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 21:20	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 21:20	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 21:20	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 21:20	1
Chlorobenzene	**2.5**	**J**	5.0	0.38	ug/L			09/07/16 21:20	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 21:20	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 21:20	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 21:20	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 21:20	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 21:20	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 21:20	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 21:20	1
1,2-Dichlorobenzene	**1.2**	**J**	5.0	0.28	ug/L			09/07/16 21:20	1
1,4-Dichlorobenzene	**6.4**		5.0	0.35	ug/L			09/07/16 21:20	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 21:20	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 21:20	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 21:20	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 21:20	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 21:20	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 21:20	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 21:20	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 21:20	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 21:20	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 21:20	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 21:20	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 21:20	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 21:20	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 21:20	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 21:20	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 21:20	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 21:20	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 21:20	1

Client Sample ID: S-5
Date Collected: 08/31/16 09:43
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 21:20	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 21:20	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 21:20	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 21:20	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 21:20	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 21:20	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 21:20	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 21:20	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 21:20	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 21:20	1
Xylenes, Total	**3.8**	**J**	10	0.85	ug/L			09/07/16 21:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*71 - 139*		*09/07/16 21:20*	*1*
Dibromofluoromethane (Surr)	*97*		*80 - 121*		*09/07/16 21:20*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/07/16 21:20*	*1*
Toluene-d8 (Surr)	*103*		*80 - 129*		*09/07/16 21:20*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20	0.020	mg/L			09/06/16 22:04	2
Sulfate	**0.57**	**J**	1.0	0.10	mg/L			09/06/16 22:04	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**430**		100	10	mg/L			09/06/16 22:32	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:52	5
Arsenic	ND		100	40	ug/L		09/12/16 11:53	09/13/16 17:52	5
Barium	**550**		500	150	ug/L		09/12/16 11:53	09/13/16 17:52	5
Beryllium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:52	5
Boron	**2500**		1000	250	ug/L		09/12/16 11:53	09/13/16 17:52	5
Cadmium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:52	5
CaHard	**140000**		25000	7500	ug/L		09/12/16 11:53	09/13/16 17:52	5
Calcium	**57000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 17:52	5
Chromium	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:52	5
Cobalt	ND		500	150	ug/L		09/12/16 11:53	09/13/16 17:52	5
Copper	ND		250	50	ug/L		09/12/16 11:53	09/13/16 17:52	5
Lead	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:52	5
Magnesium	**64**		10	3.0	mg/L		09/12/16 11:53	09/13/16 17:52	5
Manganese	**140**	**J**	150	25	ug/L		09/12/16 11:53	09/13/16 17:52	5
MgHard	**260000**		41000	12000	ug/L		09/12/16 11:53	09/13/16 17:52	5
Nickel	ND		0.40	0.10	mg/L		09/12/16 11:53	09/13/16 17:52	5
Phosphorus	**4600**		2500	750	ug/L		09/12/16 11:53	09/13/16 17:52	5
Selenium	ND		150	50	ug/L		09/12/16 11:53	09/13/16 17:52	5
Silver	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:52	5
Sodium	**440000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 17:52	5
Thallium	ND		200	50	ug/L		09/12/16 11:53	09/13/16 17:52	5

Client Sample ID: S-5

Lab Sample ID: 160-18897-4

Date Collected: 08/31/16 09:43

Matrix: Water

Date Received: 08/31/16 16:25

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Hardness	**400000**		66000	20000	ug/L		09/12/16 11:53	09/13/16 17:52	5
Vanadium	ND		500	150	ug/L		09/12/16 11:53	09/13/16 17:52	5
Zinc	ND		200	60	ug/L		09/12/16 11:53	09/13/16 17:52	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**2100**		25	17	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	**0.021**	**J H B**	0.050	0.011	mg/L			10/03/16 15:13	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**330**		25	5.6	mg/L		09/06/16 08:48	09/06/16 14:22	5

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**270**	**H**	50	22	mg/L			09/29/16 17:29	1000

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	172	U	157	157	500	250	pCi/L	09/08/16 14:25	09/09/16 23:55	1

Client Sample ID: I-4

Lab Sample ID: 160-18897-5

Date Collected: 08/31/16 10:50

Matrix: Water

Date Received: 08/31/16 16:25

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**14**	**J**	20	6.7	ug/L			09/07/16 21:45	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 21:45	1
Benzene	**4.5**	**J**	5.0	0.25	ug/L			09/07/16 21:45	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 21:45	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 21:45	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 21:45	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 21:45	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 21:45	1
Chlorobenzene	**8.8**		5.0	0.38	ug/L			09/07/16 21:45	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 21:45	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 21:45	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 21:45	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 21:45	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 21:45	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 21:45	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 21:45	1
1,2-Dichlorobenzene	**2.9**	**J**	5.0	0.28	ug/L			09/07/16 21:45	1
1,4-Dichlorobenzene	**5.4**		5.0	0.35	ug/L			09/07/16 21:45	1

Client Sample ID: I-4
Date Collected: 08/31/16 10:50
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 21:45	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 21:45	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 21:45	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 21:45	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 21:45	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 21:45	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 21:45	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 21:45	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 21:45	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 21:45	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 21:45	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 21:45	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 21:45	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 21:45	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 21:45	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 21:45	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 21:45	1
Toluene	**1.8**	**J**	5.0	1.0	ug/L			09/07/16 21:45	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 21:45	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 21:45	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 21:45	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 21:45	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 21:45	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 21:45	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 21:45	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 21:45	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 21:45	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 21:45	1
Xylenes, Total	**4.0**	**J**	10	0.85	ug/L			09/07/16 21:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*71 - 139*		*09/07/16 21:45*	*1*
Dibromofluoromethane (Surr)	*99*		*80 - 121*		*09/07/16 21:45*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*76 - 121*		*09/07/16 21:45*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/07/16 21:45*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20	0.020	mg/L			09/06/16 22:47	2
Sulfate	**0.93**	**J**	1.0	0.10	mg/L			09/06/16 22:47	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**190**		10	1.0	mg/L			09/06/16 23:01	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:57	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 17:57	5
Barium	**650**		250	75	ug/L		09/12/16 11:53	09/13/16 17:57	5

Client Sample ID: I-4
Date Collected: 08/31/16 10:50
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-5
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 17:57	5
Boron	**1700**		500	130	ug/L		09/12/16 11:53	09/13/16 17:57	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 17:57	5
CaHard	**250000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 17:57	5
Calcium	**100000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 17:57	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:57	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:57	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 17:57	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:57	5
Magnesium	**62**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 17:57	5
Manganese	**460**		75	13	ug/L		09/12/16 11:53	09/13/16 17:57	5
MgHard	**250000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 17:57	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 17:57	5
Phosphorus	**2700**		1300	380	ug/L		09/12/16 11:53	09/13/16 17:57	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 17:57	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:57	5
Sodium	**260000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 17:57	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 17:57	5
Total Hardness	**500000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 17:57	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:57	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 17:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1500**		10	7.0	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	**0.018**	**J H B**	0.050	0.011	mg/L			10/03/16 15:16	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**220**		25	5.6	mg/L		09/06/16 08:48	09/06/16 14:22	5

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**170**	**H**	5.0	2.2	mg/L			09/29/16 17:36	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	82.9	U	145	145	500	245	pCi/L	09/08/16 14:25	09/10/16 00:18	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Client Sample ID: D-3
Date Collected: 08/31/16 11:39
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 22:30	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 22:30	1
Benzene	**3.6**	**J**	5.0	0.25	ug/L			09/07/16 22:30	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 22:30	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 22:30	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 22:30	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 22:30	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 22:30	1
Chlorobenzene	**4.3**	**J**	5.0	0.38	ug/L			09/07/16 22:30	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 22:30	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 22:30	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 22:30	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 22:30	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 22:30	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 22:30	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 22:30	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 22:30	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 22:30	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 22:30	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 22:30	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 22:30	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 22:30	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 22:30	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 22:30	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 22:30	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 22:30	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 22:30	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 22:30	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 22:30	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 22:30	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 22:30	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 22:30	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 22:30	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 22:30	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 22:30	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 22:30	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 22:30	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 22:30	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 22:30	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 22:30	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 22:30	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 22:30	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 22:30	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 22:30	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 22:30	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 22:30	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 22:30	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*71 - 139*		*09/07/16 22:30*	*1*

Client Sample ID: D-3

Date Collected: 08/31/16 11:39
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-6

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*100*		*80 - 121*		*09/07/16 22:30*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*		*09/07/16 22:30*	*1*
Toluene-d8 (Surr)	*108*		*80 - 129*		*09/07/16 22:30*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.20	0.020	mg/L			09/06/16 23:30	2
Sulfate	**0.28**	**J**	1.0	0.10	mg/L			09/06/16 23:30	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**830**		100	10	mg/L			09/06/16 23:59	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:01	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 18:01	5
Barium	**2500**		250	75	ug/L		09/12/16 11:53	09/13/16 18:01	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:01	5
Boron	**1700**		500	130	ug/L		09/12/16 11:53	09/13/16 18:01	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:01	5
CaHard	**600000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:01	5
Calcium	**240000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:01	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:01	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:01	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:01	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:01	5
Magnesium	**81**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:01	5
Manganese	**360**		75	13	ug/L		09/12/16 11:53	09/13/16 18:01	5
MgHard	**330000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:01	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:01	5
Phosphorus	**800**	**J**	1300	380	ug/L		09/12/16 11:53	09/13/16 18:01	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:01	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:01	5
Sodium	**470000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:01	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:01	5
Total Hardness	**930000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:01	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:01	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:01	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**2300**		25	17	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	**0.017**	**J H B**	0.050	0.011	mg/L			10/03/16 15:26	1

Client Sample ID: D-3

Lab Sample ID: 160-18897-6
Matrix: Water
Date Collected: 08/31/16 11:39
Date Received: 08/31/16 16:25

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	200		25	5.6	mg/L		09/06/16 08:48	09/06/16 14:22	5

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	50	H	5.0	2.2	mg/L			09/29/16 17:39	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	374		176	179	500	249	pCi/L	09/08/16 14:25	09/10/16 00:40	1

Client Sample ID: I-73

Lab Sample ID: 160-18897-7
Matrix: Water
Date Collected: 08/31/16 13:39
Date Received: 08/31/16 16:25

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	10	J	20	6.7	ug/L			09/07/16 22:55	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 22:55	1
Benzene	64		5.0	0.25	ug/L			09/07/16 22:55	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 22:55	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 22:55	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 22:55	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 22:55	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 22:55	1
Chlorobenzene	18		5.0	0.38	ug/L			09/07/16 22:55	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 22:55	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 22:55	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 22:55	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 22:55	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 22:55	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 22:55	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 22:55	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 22:55	1
1,4-Dichlorobenzene	1.8	J	5.0	0.35	ug/L			09/07/16 22:55	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 22:55	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 22:55	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 22:55	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 22:55	1
Ethylbenzene	3.0	J	5.0	0.30	ug/L			09/07/16 22:55	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 22:55	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 22:55	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 22:55	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 22:55	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 22:55	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 22:55	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 22:55	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 22:55	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 22:55	1

Client Sample ID: I-73
Date Collected: 08/31/16 13:39
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-7
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 22:55	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 22:55	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 22:55	1
Toluene	**1.1**	**J**	5.0	1.0	ug/L			09/07/16 22:55	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 22:55	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 22:55	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 22:55	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 22:55	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 22:55	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 22:55	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 22:55	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 22:55	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 22:55	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 22:55	1
Xylenes, Total	**5.0**	**J**	10	0.85	ug/L			09/07/16 22:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*107*		*71 - 139*		*09/07/16 22:55*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 121*		*09/07/16 22:55*	*1*
1,2-Dichloroethane-d4 (Surr)	*93*		*76 - 121*		*09/07/16 22:55*	*1*
Toluene-d8 (Surr)	*104*		*80 - 129*		*09/07/16 22:55*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.082**	**J**	0.20	0.020	mg/L			09/07/16 00:42	2
Sulfate	**0.39**	**J**	1.0	0.10	mg/L			09/07/16 00:42	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**720**		100	10	mg/L			09/07/16 01:11	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:06	5
Arsenic	**130**		50	20	ug/L		09/12/16 11:53	09/13/16 18:06	5
Barium	**1400**		250	75	ug/L		09/12/16 11:53	09/13/16 18:06	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:06	5
Boron	**3000**		500	130	ug/L		09/12/16 11:53	09/13/16 18:06	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:06	5
CaHard	**250000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:06	5
Calcium	**98000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:06	5
Chromium	**33**	**J**	50	15	ug/L		09/12/16 11:53	09/13/16 18:06	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:06	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:06	5
Lead	**95**		50	15	ug/L		09/12/16 11:53	09/13/16 18:06	5
Magnesium	**50**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:06	5
Manganese	**440**		75	13	ug/L		09/12/16 11:53	09/13/16 18:06	5
MgHard	**200000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:06	5
Nickel	**0.095**	**J**	0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:06	5
Phosphorus	**1300**		1300	380	ug/L		09/12/16 11:53	09/13/16 18:06	5

Client Sample ID: I-73

Date Collected: 08/31/16 13:39
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-7
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:06	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:06	5
Sodium	**340000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:06	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:06	5
Total Hardness	**450000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:06	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:06	5
Zinc	**1300**		100	30	ug/L		09/12/16 11:53	09/13/16 18:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1600**		25	17	mg/L			09/02/16 09:08	1
Nitrate/Nitrite	**0.052**	**H B**	0.050	0.011	mg/L			10/03/16 15:29	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**250**		25	5.6	mg/L		09/06/16 08:48	09/06/16 14:22	5

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**240**	**H**	50	22	mg/L			09/29/16 17:41	1000

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**10700**		606	1120	500	254	pCi/L	09/08/16 14:25	09/10/16 01:03	1

Client Sample ID: TRIP BLANK

Date Collected: 08/31/16 00:00
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 20:05	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 20:05	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 20:05	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 20:05	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 20:05	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 20:05	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 20:05	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 20:05	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 20:05	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 20:05	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 20:05	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 20:05	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 20:05	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 20:05	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Client Sample ID: TRIP BLANK
Date Collected: 08/31/16 00:00
Date Received: 08/31/16 16:25

Lab Sample ID: 160-18897-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 20:05	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 20:05	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 20:05	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 20:05	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 20:05	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 20:05	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 20:05	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 20:05	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 20:05	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 20:05	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 20:05	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 20:05	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 20:05	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 20:05	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 20:05	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 20:05	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 20:05	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 20:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 20:05	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 20:05	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 20:05	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 20:05	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 20:05	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 20:05	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 20:05	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 20:05	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 20:05	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 20:05	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 20:05	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 20:05	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 20:05	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*71 - 139*		*09/07/16 20:05*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 121*		*09/07/16 20:05*	*1*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*		*09/07/16 20:05*	*1*
Toluene-d8 (Surr)	*105*		*80 - 129*		*09/07/16 20:05*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-268415/7
Matrix: Water
Analysis Batch: 268415

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/07/16 19:40	1
Acrylonitrile	ND		50	1.7	ug/L			09/07/16 19:40	1
Benzene	ND		5.0	0.25	ug/L			09/07/16 19:40	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/07/16 19:40	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/07/16 19:40	1
Bromoform	ND		5.0	0.37	ug/L			09/07/16 19:40	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/07/16 19:40	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/07/16 19:40	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/07/16 19:40	1
Chloroethane	ND		10	0.38	ug/L			09/07/16 19:40	1
Chloroform	ND		5.0	0.15	ug/L			09/07/16 19:40	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/07/16 19:40	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/07/16 19:40	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/07/16 19:40	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/07/16 19:40	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/07/16 19:40	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/07/16 19:40	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/07/16 19:40	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/07/16 19:40	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/07/16 19:40	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/07/16 19:40	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/07/16 19:40	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/07/16 19:40	1
2-Hexanone	ND		20	0.59	ug/L			09/07/16 19:40	1
Methyl bromide	ND		10	0.40	ug/L			09/07/16 19:40	1
Methyl chloride	ND		10	0.55	ug/L			09/07/16 19:40	1
Methylene bromide	ND		5.0	0.41	ug/L			09/07/16 19:40	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/07/16 19:40	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/07/16 19:40	1
Methyl iodide	ND		5.0	1.5	ug/L			09/07/16 19:40	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/07/16 19:40	1
Styrene	ND		5.0	0.35	ug/L			09/07/16 19:40	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/07/16 19:40	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/07/16 19:40	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/07/16 19:40	1
Toluene	ND		5.0	1.0	ug/L			09/07/16 19:40	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/07/16 19:40	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/07/16 19:40	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/07/16 19:40	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/07/16 19:40	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/07/16 19:40	1
Trichloroethene	ND		5.0	0.29	ug/L			09/07/16 19:40	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/07/16 19:40	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/07/16 19:40	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/07/16 19:40	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/07/16 19:40	1
Xylenes, Total	ND		10	0.85	ug/L			09/07/16 19:40	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-268415/7
Matrix: Water
Analysis Batch: 268415

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	111		71 - 139		09/07/16 19:40	1
Dibromofluoromethane (Surr)	102		80 - 121		09/07/16 19:40	1
1,2-Dichloroethane-d4 (Surr)	99		76 - 121		09/07/16 19:40	1
Toluene-d8 (Surr)	109		80 - 129		09/07/16 19:40	1

Lab Sample ID: LCS 160-268415/4
Matrix: Water
Analysis Batch: 268415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	55.5		ug/L		111	63 - 131
Acrylonitrile	500	485		ug/L		97	81 - 117
Benzene	50.0	51.0		ug/L		102	80 - 120
Bromochloromethane	50.0	47.8		ug/L		96	80 - 120
Bromodichloromethane	50.0	50.1		ug/L		100	80 - 120
Bromoform	50.0	47.4		ug/L		95	80 - 120
Carbon disulfide	50.0	48.5		ug/L		97	79 - 126
Carbon tetrachloride	50.0	48.2		ug/L		96	73 - 123
Chlorobenzene	50.0	50.5		ug/L		101	80 - 120
Chloroethane	50.0	47.2		ug/L		94	52 - 140
Chloroform	50.0	48.3		ug/L		97	80 - 120
cis-1,2-Dichloroethene	50.0	48.8		ug/L		98	80 - 120
cis-1,3-Dichloropropene	50.0	50.9		ug/L		102	80 - 122
Dibromochloromethane	50.0	50.1		ug/L		100	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	44.7		ug/L		89	77 - 125
1,2-Dibromoethane (EDB)	50.0	49.9		ug/L		100	80 - 120
1,2-Dichlorobenzene	50.0	48.9		ug/L		98	80 - 120
1,4-Dichlorobenzene	50.0	53.0		ug/L		106	80 - 120
1,1-Dichloroethane	50.0	48.5		ug/L		97	80 - 120
1,2-Dichloroethane	50.0	49.4		ug/L		99	69 - 124
1,1-Dichloroethene	50.0	47.3		ug/L		95	77 - 126
1,2-Dichloropropane	50.0	49.1		ug/L		98	80 - 120
Ethylbenzene	50.0	47.5		ug/L		95	80 - 120
2-Hexanone	50.0	51.2		ug/L		102	64 - 136
Methyl bromide	50.0	46.8		ug/L		94	57 - 139
Methyl chloride	50.0	45.7		ug/L		91	70 - 127
Methylene bromide	50.0	48.3		ug/L		97	78 - 120
Methylene Chloride	50.0	47.8		ug/L		96	80 - 120
Methyl Ethyl Ketone	50.0	52.5		ug/L		105	70 - 130
Methyl iodide	50.0	47.1		ug/L		94	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	51.9		ug/L		104	76 - 129
Styrene	50.0	53.6		ug/L		107	80 - 120
1,1,1,2-Tetrachloroethane	50.0	50.4		ug/L		101	80 - 120
1,1,2,2-Tetrachloroethane	50.0	45.7		ug/L		91	80 - 120
Tetrachloroethene	50.0	48.2		ug/L		96	80 - 120
Toluene	50.0	49.7		ug/L		99	80 - 120
trans-1,4-Dichloro-2-butene	50.0	47.2		ug/L		94	75 - 127
trans-1,2-Dichloroethene	50.0	47.2		ug/L		94	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-268415/4
Matrix: Water
Analysis Batch: 268415

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	51.1		ug/L		102	80 - 130		
1,1,1-Trichloroethane			50.0	48.4		ug/L		97	76 - 120		
1,1,2-Trichloroethane			50.0	48.7		ug/L		97	80 - 120		
Trichloroethene			50.0	51.1		ug/L		102	73 - 120		
Trichlorofluoromethane			50.0	47.2		ug/L		94	74 - 130		
1,2,3-Trichloropropane			50.0	46.1		ug/L		92	80 - 120		
Vinyl acetate			50.0	48.8		ug/L		98	37 - 140		
Vinyl chloride			50.0	46.0		ug/L		92	51 - 140		
Xylenes, Total			100	94.7		ug/L		95	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*101*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*101*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: LCSD 160-268415/5
Matrix: Water
Analysis Batch: 268415

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	55.3		ug/L		111	63 - 131	0	20
Acrylonitrile			500	486		ug/L		97	81 - 117	0	20
Benzene			50.0	51.5		ug/L		103	80 - 120	1	20
Bromochloromethane			50.0	47.9		ug/L		96	80 - 120	0	20
Bromodichloromethane			50.0	51.3		ug/L		103	80 - 120	2	20
Bromoform			50.0	49.6		ug/L		99	80 - 120	5	20
Carbon disulfide			50.0	47.9		ug/L		96	79 - 126	1	20
Carbon tetrachloride			50.0	48.7		ug/L		97	73 - 123	1	20
Chlorobenzene			50.0	51.4		ug/L		103	80 - 120	2	20
Chloroethane			50.0	44.2		ug/L		88	52 - 140	7	20
Chloroform			50.0	48.9		ug/L		98	80 - 120	1	20
cis-1,2-Dichloroethene			50.0	48.2		ug/L		96	80 - 120	1	20
cis-1,3-Dichloropropene			50.0	52.5		ug/L		105	80 - 122	3	20
Dibromochloromethane			50.0	50.8		ug/L		102	80 - 120	1	20
1,2-Dibromo-3-Chloropropane			50.0	47.1		ug/L		94	77 - 125	5	20
1,2-Dibromoethane (EDB)			50.0	50.8		ug/L		102	80 - 120	2	20
1,2-Dichlorobenzene			50.0	49.8		ug/L		100	80 - 120	2	20
1,4-Dichlorobenzene			50.0	53.9		ug/L		108	80 - 120	2	20
1,1-Dichloroethane			50.0	48.4		ug/L		97	80 - 120	0	20
1,2-Dichloroethane			50.0	49.5		ug/L		99	69 - 124	0	20
1,1-Dichloroethene			50.0	46.5		ug/L		93	77 - 126	2	20
1,2-Dichloropropane			50.0	49.2		ug/L		98	80 - 120	0	20
Ethylbenzene			50.0	46.8		ug/L		94	80 - 120	1	20
2-Hexanone			50.0	50.8		ug/L		102	64 - 136	1	20
Methyl bromide			50.0	43.4		ug/L		87	57 - 139	8	20
Methyl chloride			50.0	44.5		ug/L		89	70 - 127	3	20
Methylene bromide			50.0	48.7		ug/L		97	78 - 120	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-268415/5
Matrix: Water
Analysis Batch: 268415

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	47.5		ug/L		95	80 - 120	1	20
Methyl Ethyl Ketone			50.0	52.6		ug/L		105	70 - 130	0	20
Methyl iodide			50.0	46.6		ug/L		93	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)			50.0	51.8		ug/L		104	76 - 129	0	20
Styrene			50.0	53.7		ug/L		107	80 - 120	0	20
1,1,1,2-Tetrachloroethane			50.0	50.4		ug/L		101	80 - 120	0	20
1,1,2,2-Tetrachloroethane			50.0	47.4		ug/L		95	80 - 120	4	20
Tetrachloroethene			50.0	48.1		ug/L		96	80 - 120	0	20
Toluene			50.0	50.1		ug/L		100	80 - 120	1	20
trans-1,4-Dichloro-2-butene			50.0	49.0		ug/L		98	75 - 127	4	20
trans-1,2-Dichloroethene			50.0	47.8		ug/L		96	80 - 120	1	20
trans-1,3-Dichloropropene			50.0	52.2		ug/L		104	80 - 130	2	20
1,1,1-Trichloroethane			50.0	48.8		ug/L		98	76 - 120	1	20
1,1,2-Trichloroethane			50.0	50.1		ug/L		100	80 - 120	3	20
Trichloroethene			50.0	51.4		ug/L		103	73 - 120	1	20
Trichlorofluoromethane			50.0	44.7		ug/L		89	74 - 130	6	20
1,2,3-Trichloropropane			50.0	48.0		ug/L		96	80 - 120	4	20
Vinyl acetate			50.0	49.2		ug/L		98	37 - 140	1	20
Vinyl chloride			50.0	43.3		ug/L		87	51 - 140	6	20
Xylenes, Total			100	94.1		ug/L		94	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*100*		*71 - 139*
Dibromofluoromethane (Surr)	*101*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*101*		*76 - 121*
Toluene-d8 (Surr)	*99*		*80 - 129*

Lab Sample ID: 160-18897-6 MS
Matrix: Water
Analysis Batch: 268415

Client Sample ID: D-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	51.8		ug/L		104	52 - 138
Acrylonitrile	ND		500	471		ug/L		94	58 - 142
Benzene	3.6	J	50.0	55.3		ug/L		103	80 - 120
Bromochloromethane	ND		50.0	46.9		ug/L		94	72 - 125
Bromodichloromethane	ND		50.0	48.5		ug/L		97	71 - 128
Bromoform	ND		50.0	42.0		ug/L		84	65 - 133
Carbon disulfide	ND		50.0	50.6		ug/L		101	69 - 139
Carbon tetrachloride	ND		50.0	48.9		ug/L		98	70 - 126
Chlorobenzene	4.3	J	50.0	55.3		ug/L		102	80 - 120
Chloroethane	ND		50.0	61.7		ug/L		123	59 - 144
Chloroform	ND		50.0	47.6		ug/L		95	80 - 120
cis-1,2-Dichloroethene	ND		50.0	47.9		ug/L		96	80 - 124
cis-1,3-Dichloropropene	ND		50.0	48.1		ug/L		96	67 - 130
Dibromochloromethane	ND		50.0	47.7		ug/L		95	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	43.4		ug/L		87	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	45.7		ug/L		91	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18897-6 MS
Matrix: Water
Analysis Batch: 268415

Client Sample ID: D-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	48.9		ug/L		98	80 - 124
1,4-Dichlorobenzene	ND		50.0	52.9		ug/L		106	80 - 120
1,1-Dichloroethane	ND		50.0	48.7		ug/L		97	80 - 120
1,2-Dichloroethane	ND		50.0	46.4		ug/L		93	56 - 136
1,1-Dichloroethene	ND		50.0	47.9		ug/L		96	66 - 137
1,2-Dichloropropane	ND		50.0	48.0		ug/L		96	80 - 123
Ethylbenzene	ND		50.0	50.4		ug/L		101	80 - 121
2-Hexanone	ND		50.0	44.3		ug/L		89	47 - 150
Methyl bromide	ND		50.0	58.6		ug/L		117	53 - 146
Methyl chloride	ND		50.0	46.8		ug/L		94	61 - 137
Methylene bromide	ND		50.0	45.1		ug/L		90	61 - 136
Methylene Chloride	ND		50.0	47.8		ug/L		96	80 - 120
Methyl Ethyl Ketone	ND		50.0	45.6		ug/L		91	58 - 143
Methyl iodide	ND		50.0	47.5		ug/L		95	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	49.7		ug/L		99	53 - 150
Styrene	ND		50.0	53.0		ug/L		106	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	51.2		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	44.6		ug/L		89	60 - 150
Tetrachloroethene	ND		50.0	48.9		ug/L		98	66 - 132
Toluene	ND		50.0	51.8		ug/L		104	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	41.9		ug/L		84	55 - 146
trans-1,2-Dichloroethene	ND		50.0	48.5		ug/L		97	79 - 121
trans-1,3-Dichloropropene	ND		50.0	46.9		ug/L		94	68 - 143
1,1,1-Trichloroethane	ND		50.0	50.3		ug/L		101	74 - 123
1,1,2-Trichloroethane	ND		50.0	47.9		ug/L		96	70 - 134
Trichloroethene	ND		50.0	49.1		ug/L		98	63 - 120
Trichlorofluoromethane	ND		50.0	55.5		ug/L		111	53 - 150
1,2,3-Trichloropropane	ND		50.0	41.6		ug/L		83	62 - 137
Vinyl acetate	ND		50.0	48.8		ug/L		98	63 - 150
Vinyl chloride	ND		50.0	55.4		ug/L		111	54 - 140
Xylenes, Total	ND		100	97.9		ug/L		98	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*90*		*71 - 139*
Dibromofluoromethane (Surr)	*99*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*94*		*76 - 121*
Toluene-d8 (Surr)	*103*		*80 - 129*

Lab Sample ID: 160-18897-6 MSD
Matrix: Water
Analysis Batch: 268415

Client Sample ID: D-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	62.2		ug/L		124	52 - 138	18	20
Acrylonitrile	ND		500	536		ug/L		107	58 - 142	13	20
Benzene	3.6	J	50.0	58.6		ug/L		110	80 - 120	6	20
Bromochloromethane	ND		50.0	51.1		ug/L		102	72 - 125	9	20
Bromodichloromethane	ND		50.0	52.6		ug/L		105	71 - 128	8	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18897-6 MSD
Matrix: Water
Analysis Batch: 268415

Client Sample ID: D-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	48.4		ug/L		97	65 - 133	14	20
Carbon disulfide	ND		50.0	53.2		ug/L		106	69 - 139	5	20
Carbon tetrachloride	ND		50.0	52.3		ug/L		105	70 - 126	7	20
Chlorobenzene	4.3	J	50.0	58.2		ug/L		108	80 - 120	5	20
Chloroethane	ND		50.0	59.3		ug/L		119	59 - 144	4	20
Chloroform	ND		50.0	51.8		ug/L		104	80 - 120	8	20
cis-1,2-Dichloroethene	ND		50.0	50.7		ug/L		101	80 - 124	6	20
cis-1,3-Dichloropropene	ND		50.0	53.3		ug/L		107	67 - 130	10	20
Dibromochloromethane	ND		50.0	52.7		ug/L		105	68 - 133	10	20
1,2-Dibromo-3-Chloropropane	ND		50.0	47.9		ug/L		96	58 - 148	10	20
1,2-Dibromoethane (EDB)	ND		50.0	51.5		ug/L		103	65 - 138	12	20
1,2-Dichlorobenzene	ND		50.0	51.6		ug/L		103	80 - 124	5	20
1,4-Dichlorobenzene	ND		50.0	55.3		ug/L		111	80 - 120	4	20
1,1-Dichloroethane	ND		50.0	52.0		ug/L		104	80 - 120	7	20
1,2-Dichloroethane	ND		50.0	51.4		ug/L		103	56 - 136	10	20
1,1-Dichloroethene	ND		50.0	50.8		ug/L		102	66 - 137	6	20
1,2-Dichloropropane	ND		50.0	51.4		ug/L		103	80 - 123	7	20
Ethylbenzene	ND		50.0	51.8		ug/L		104	80 - 121	3	20
2-Hexanone	ND		50.0	51.1		ug/L		102	47 - 150	14	20
Methyl bromide	ND		50.0	56.1		ug/L		112	53 - 146	4	20
Methyl chloride	ND		50.0	48.3		ug/L		97	61 - 137	3	20
Methylene bromide	ND		50.0	51.4		ug/L		103	61 - 136	13	20
Methylene Chloride	ND		50.0	49.6		ug/L		99	80 - 120	4	20
Methyl Ethyl Ketone	ND		50.0	55.4		ug/L		111	58 - 143	19	20
Methyl iodide	ND		50.0	50.6		ug/L		101	69 - 124	6	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	56.5		ug/L		113	53 - 150	13	20
Styrene	ND		50.0	56.0		ug/L		112	44 - 150	5	20
1,1,1,2-Tetrachloroethane	ND		50.0	53.9		ug/L		108	80 - 120	5	20
1,1,2,2-Tetrachloroethane	ND		50.0	49.1		ug/L		98	60 - 150	10	20
Tetrachloroethene	ND		50.0	50.3		ug/L		101	66 - 132	3	20
Toluene	ND		50.0	53.9		ug/L		108	75 - 134	4	20
trans-1,4-Dichloro-2-butene	ND		50.0	46.1		ug/L		92	55 - 146	9	20
trans-1,2-Dichloroethene	ND		50.0	51.3		ug/L		103	79 - 121	6	20
trans-1,3-Dichloropropene	ND		50.0	52.8		ug/L		106	68 - 143	12	20
1,1,1-Trichloroethane	ND		50.0	53.1		ug/L		106	74 - 123	5	20
1,1,2-Trichloroethane	ND		50.0	51.9		ug/L		104	70 - 134	8	20
Trichloroethene	ND		50.0	53.2		ug/L		106	63 - 120	8	20
Trichlorofluoromethane	ND		50.0	55.1		ug/L		110	53 - 150	1	20
1,2,3-Trichloropropane	ND		50.0	48.4		ug/L		97	62 - 137	15	20
Vinyl acetate	ND		50.0	55.4		ug/L		111	63 - 150	13	20
Vinyl chloride	ND		50.0	55.3		ug/L		111	54 - 140	0	20
Xylenes, Total	ND		100	101		ug/L		101	80 - 124	3	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*101*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*
Toluene-d8 (Surr)	*103*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-268208/18
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/06/16 17:01	1
Sulfate	ND		0.50	0.050	mg/L			09/06/16 17:01	1
Chloride	ND		0.20	0.020	mg/L			09/06/16 17:01	1

Lab Sample ID: LCS 160-268208/19
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			1.00	1.01		mg/L		101	90 - 110		
Sulfate			8.00	7.67		mg/L		96	90 - 110		
Chloride			2.00	1.95		mg/L		97	90 - 110		

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18897-1 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride - DL	0.056	J F1	4.00	3.46	F1	mg/L		85	90 - 110		
Sulfate - DL	1.8		8.00	9.27		mg/L		94	90 - 110		

Lab Sample ID: 160-18897-1 DU
Matrix: Water
Analysis Batch: 268208

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride - DL	0.056	J F1		0.0641	J	mg/L				14	20
Sulfate - DL	1.8			1.71		mg/L				4	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-18897-1 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride - DL2	980		1000	1940		mg/L		97	90 - 110		

Lab Sample ID: 160-18897-1 DU
Matrix: Water
Analysis Batch: 268208

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chloride - DL2	980			976		mg/L				0.2	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-269134/1-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Arsenic	ND		10	4.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Barium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Beryllium	ND		5.0	1.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
Boron	ND		100	25	ug/L		09/12/16 11:53	09/13/16 17:30	1
Cadmium	ND		5.0	1.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
CaHard	ND		2500	750	ug/L		09/12/16 11:53	09/13/16 17:30	1
Calcium	ND		1000	300	ug/L		09/12/16 11:53	09/13/16 17:30	1
Chromium	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Cobalt	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Copper	ND		25	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Lead	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Magnesium	ND		1.0	0.30	mg/L		09/12/16 11:53	09/13/16 17:30	1
Manganese	ND		15	2.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
MgHard	ND		4100	1200	ug/L		09/12/16 11:53	09/13/16 17:30	1
Nickel	ND		0.040	0.010	mg/L		09/12/16 11:53	09/13/16 17:30	1
Phosphorus	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:30	1
Selenium	ND		15	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Silver	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Sodium	ND		1000	300	ug/L		09/12/16 11:53	09/13/16 17:30	1
Thallium	ND		20	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Total Hardness	ND		6600	2000	ug/L		09/12/16 11:53	09/13/16 17:30	1
Vanadium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Zinc	ND		20	6.0	ug/L		09/12/16 11:53	09/13/16 17:30	1

Lab Sample ID: LCS 160-269134/2-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	489		ug/L		98	80 - 120
Arsenic	1000	956		ug/L		96	80 - 120
Barium	1000	1000		ug/L		100	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Boron	2000	2080	E	ug/L		104	80 - 120
Cadmium	1000	976		ug/L		98	80 - 120
Calcium	10000	10200		ug/L		102	80 - 120
Chromium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	1020		ug/L		102	80 - 120
Copper	1000	992		ug/L		99	80 - 120
Lead	1000	1030		ug/L		103	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Manganese	1000	1050		ug/L		105	80 - 120
Nickel	1.00	1.02		mg/L		102	80 - 120
Phosphorus	1000	1100		ug/L		110	80 - 120
Selenium	500	489		ug/L		98	80 - 120
Silver	200	206		ug/L		103	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-269134/2-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	214		ug/L		107	80 - 120
Vanadium	1000	1010		ug/L		101	80 - 120
Zinc	1000	966		ug/L		97	80 - 120

Lab Sample ID: 160-18933-B-4-B MS ^5
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	487		ug/L		97	75 - 125
Arsenic	74		1000	1030		ug/L		95	75 - 125
Barium	770		1000	1730		ug/L		96	75 - 125
Beryllium	ND		1000	1020		ug/L		102	75 - 125
Boron	270	J	2000	2340		ug/L		103	75 - 125
Cadmium	ND		1000	978		ug/L		98	75 - 125
Calcium	310000		10000	311000	4	ug/L		-9	75 - 125
Chromium	ND		1000	999		ug/L		100	75 - 125
Cobalt	ND		1000	999		ug/L		100	75 - 125
Copper	ND		1000	977		ug/L		98	75 - 125
Lead	ND		1000	1020		ug/L		102	75 - 125
Magnesium	72		10.0	80.4	4	mg/L		81	75 - 125
Manganese	2300		1000	3280		ug/L		96	75 - 125
Nickel	ND		1.00	1.02		mg/L		102	75 - 125
Phosphorus	1700		1000	2770		ug/L		104	75 - 125
Selenium	ND		500	488		ug/L		98	75 - 125
Silver	ND		200	208		ug/L		104	75 - 125
Sodium	60000		10000	68200	4	ug/L		83	75 - 125
Thallium	ND		200	219		ug/L		110	75 - 125
Vanadium	ND		1000	991		ug/L		99	75 - 125
Zinc	ND		1000	972		ug/L		97	75 - 125

Lab Sample ID: 160-18933-B-4-C MSD ^5
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	495		ug/L		99	75 - 125	2	20
Arsenic	74		1000	1050		ug/L		98	75 - 125	2	20
Barium	770		1000	1730		ug/L		96	75 - 125	0	20
Beryllium	ND		1000	1000		ug/L		100	75 - 125	1	20
Boron	270	J	2000	2290		ug/L		101	75 - 125	2	20
Cadmium	ND		1000	991		ug/L		99	75 - 125	1	20
Calcium	310000		10000	323000	4	ug/L		112	75 - 125	4	20
Chromium	ND		1000	1010		ug/L		101	75 - 125	1	20
Cobalt	ND		1000	1010		ug/L		101	75 - 125	2	20
Copper	ND		1000	996		ug/L		100	75 - 125	2	20
Lead	ND		1000	1020		ug/L		102	75 - 125	1	20
Magnesium	72		10.0	81.9	4	mg/L		96	75 - 125	2	20
Manganese	2300		1000	3290		ug/L		98	75 - 125	0	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18933-B-4-C MSD ^5 — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269399 — **Prep Batch: 269134**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	ND		1.00	1.04		mg/L		104	75 - 125	2	20
Phosphorus	1700		1000	2860		ug/L		113	75 - 125	3	20
Selenium	ND		500	496		ug/L		99	75 - 125	2	20
Silver	ND		200	208		ug/L		104	75 - 125	0	20
Sodium	60000		10000	69300	4	ug/L		94	75 - 125	2	20
Thallium	ND		200	224		ug/L		112	75 - 125	2	20
Vanadium	ND		1000	981		ug/L		98	75 - 125	1	20
Zinc	ND		1000	984		ug/L		98	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-269108/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:34	1

Lab Sample ID: LCS 160-269108/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.22		ug/L		84	80 - 120

Lab Sample ID: 160-18807-G-1-C MS — **Client Sample ID: Matrix Spike**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.11	J	5.00	4.78		ug/L		93	80 - 120

Lab Sample ID: 160-18807-G-1-D MSD — **Client Sample ID: Matrix Spike Duplicate**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269210 — **Prep Batch: 269108**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11	J	5.00	4.71		ug/L		92	80 - 120	1	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-267834/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 267834

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			09/02/16 09:08	1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 160-267834/2
Matrix: Water
Analysis Batch: 267834

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	506		mg/L		101	90 - 110

Lab Sample ID: 160-18897-1 DU
Matrix: Water
Analysis Batch: 267834

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	3200		3390		mg/L		5	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-272554/25
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/29/16 17:13	1

Lab Sample ID: LCS 160-272554/26
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.535		mg/L		107	90 - 110

Method: 350.1 - Nitrogen, Ammonia - RADL

Lab Sample ID: 160-18897-1 MS
Matrix: Water
Analysis Batch: 272554

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia - RADL	26	H	0.500	26.8	4	mg/L		72	90 - 110

Lab Sample ID: 160-18897-1 DU
Matrix: Water
Analysis Batch: 272554

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia - RADL	26	H	26.6		mg/L		0.5	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-272820/13
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0115	J	0.050	0.011	mg/L			10/03/16 14:51	1

Lab Sample ID: LCS 160-272820/14
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.508		mg/L		102	90 - 110

Lab Sample ID: 160-18897-1 MS
Matrix: Water
Analysis Batch: 272820

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.062	H B F1	0.500	0.0586	F1	mg/L		-0.7	90 - 110

Lab Sample ID: 160-18897-1 DU
Matrix: Water
Analysis Batch: 272820

Client Sample ID: PZ-205-AS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.062	H B F1	0.0500	F5	mg/L		22	20

Method: 410.4 - COD

Lab Sample ID: MB 160-268158/3-A
Matrix: Water
Analysis Batch: 268216

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/06/16 08:48	09/06/16 14:22	1

Lab Sample ID: LCS 160-268158/4-A
Matrix: Water
Analysis Batch: 268216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268158

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: 160-18897-3 MS
Matrix: Water
Analysis Batch: 268216

Client Sample ID: LR-100
Prep Type: Total/NA
Prep Batch: 268158

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	96		50.0	147		mg/L		102	90 - 110

Method: 410.4 - COD (Continued)

Lab Sample ID: 160-18897-3 DU
Matrix: Water
Analysis Batch: 268216

Client Sample ID: LR-100
Prep Type: Total/NA
Prep Batch: 268158

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	96			95.0		mg/L				1	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-268584/1-A
Matrix: Water
Analysis Batch: 269119

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268584

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	5.405	U	138	138	500	249	pCi/L	09/08/16 14:25	09/09/16 17:30	1

Lab Sample ID: LCS 160-268584/2-A
Matrix: Water
Analysis Batch: 269119

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268584

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3030	2748		407	500	250	pCi/L	91	74 - 114		

Lab Sample ID: 160-18699-G-5-A MS
Matrix: Water
Analysis Batch: 269119

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 268584

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	-28.4	U	3030	3064		436	500	251	pCi/L	101	67 - 130		

Lab Sample ID: 160-18699-G-5-B MSD
Matrix: Water
Analysis Batch: 269119

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 268584

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Tritium	-28.4	U	3030	2825		414	500	250	pCi/L	93	67 - 130	0.28	1

QC Association Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

GC/MS VOA

Analysis Batch: 268415

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	8260C	
160-18897-1 - DL	PZ-205-AS	Total/NA	Water	8260C	
160-18897-2	PZ-107-SS	Total/NA	Water	8260C	
160-18897-2	PZ-107-SS	Total/NA	Water	8260C	
160-18897-3	LR-100	Total/NA	Water	8260C	
160-18897-4	S-5	Total/NA	Water	8260C	
160-18897-5	I-4	Total/NA	Water	8260C	
160-18897-6	D-3	Total/NA	Water	8260C	
160-18897-7	I-73	Total/NA	Water	8260C	
160-18897-8	TRIP BLANK	Total/NA	Water	8260C	
MB 160-268415/7	Method Blank	Total/NA	Water	8260C	
LCS 160-268415/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-268415/5	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18897-6 MS	D-3	Total/NA	Water	8260C	
160-18897-6 MSD	D-3	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 268208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1 - DL	PZ-205-AS	Total/NA	Water	300.0	
160-18897-1 - DL2	PZ-205-AS	Total/NA	Water	300.0	
160-18897-2 - DL	PZ-107-SS	Total/NA	Water	300.0	
160-18897-2 - DL2	PZ-107-SS	Total/NA	Water	300.0	
160-18897-3 - DL	LR-100	Total/NA	Water	300.0	
160-18897-3 - DL2	LR-100	Total/NA	Water	300.0	
160-18897-4 - DL	S-5	Total/NA	Water	300.0	
160-18897-4 - DL2	S-5	Total/NA	Water	300.0	
160-18897-5 - DL	I-4	Total/NA	Water	300.0	
160-18897-5 - DL2	I-4	Total/NA	Water	300.0	
160-18897-6 - DL	D-3	Total/NA	Water	300.0	
160-18897-6 - DL2	D-3	Total/NA	Water	300.0	
160-18897-7 - DL	I-73	Total/NA	Water	300.0	
160-18897-7 - DL2	I-73	Total/NA	Water	300.0	
MB 160-268208/18	Method Blank	Total/NA	Water	300.0	
LCS 160-268208/19	Lab Control Sample	Total/NA	Water	300.0	
160-18897-1 MS - DL	PZ-205-AS	Total/NA	Water	300.0	
160-18897-1 MS - DL2	PZ-205-AS	Total/NA	Water	300.0	
160-18897-1 DU - DL	PZ-205-AS	Total/NA	Water	300.0	
160-18897-1 DU - DL2	PZ-205-AS	Total/NA	Water	300.0	

Metals

Prep Batch: 269108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	7470A	
160-18897-2	PZ-107-SS	Total/NA	Water	7470A	
160-18897-3	LR-100	Total/NA	Water	7470A	
160-18897-4	S-5	Total/NA	Water	7470A	
160-18897-5	I-4	Total/NA	Water	7470A	

Metals (Continued)

Prep Batch: 269108 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-6	D-3	Total/NA	Water	7470A	
160-18897-7	I-73	Total/NA	Water	7470A	
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18807-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	
160-18807-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 269134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	3010A	
160-18897-2	PZ-107-SS	Total/NA	Water	3010A	
160-18897-3	LR-100	Total/NA	Water	3010A	
160-18897-4	S-5	Total/NA	Water	3010A	
160-18897-5	I-4	Total/NA	Water	3010A	
160-18897-6	D-3	Total/NA	Water	3010A	
160-18897-7	I-73	Total/NA	Water	3010A	
MB 160-269134/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-269134/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18933-B-4-B MS ^5	Matrix Spike	Total/NA	Water	3010A	
160-18933-B-4-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 269210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	7470A	269108
160-18897-2	PZ-107-SS	Total/NA	Water	7470A	269108
160-18897-3	LR-100	Total/NA	Water	7470A	269108
160-18897-4	S-5	Total/NA	Water	7470A	269108
160-18897-5	I-4	Total/NA	Water	7470A	269108
160-18897-6	D-3	Total/NA	Water	7470A	269108
160-18897-7	I-73	Total/NA	Water	7470A	269108
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	269108
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	269108
160-18807-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	269108
160-18807-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	269108

Analysis Batch: 269399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	6010C	269134
160-18897-2	PZ-107-SS	Total/NA	Water	6010C	269134
160-18897-3	LR-100	Total/NA	Water	6010C	269134
160-18897-4	S-5	Total/NA	Water	6010C	269134
160-18897-5	I-4	Total/NA	Water	6010C	269134
160-18897-6	D-3	Total/NA	Water	6010C	269134
160-18897-7	I-73	Total/NA	Water	6010C	269134
MB 160-269134/1-A	Method Blank	Total/NA	Water	6010C	269134
LCS 160-269134/2-A	Lab Control Sample	Total/NA	Water	6010C	269134
160-18933-B-4-B MS ^5	Matrix Spike	Total/NA	Water	6010C	269134
160-18933-B-4-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	6010C	269134

General Chemistry

Analysis Batch: 267834

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	160.1	
160-18897-2	PZ-107-SS	Total/NA	Water	160.1	
160-18897-3	LR-100	Total/NA	Water	160.1	
160-18897-4	S-5	Total/NA	Water	160.1	
160-18897-5	I-4	Total/NA	Water	160.1	
160-18897-6	D-3	Total/NA	Water	160.1	
160-18897-7	I-73	Total/NA	Water	160.1	
MB 160-267834/1	Method Blank	Total/NA	Water	160.1	
LCS 160-267834/2	Lab Control Sample	Total/NA	Water	160.1	
160-18897-1 DU	PZ-205-AS	Total/NA	Water	160.1	

Prep Batch: 268158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1 - DL	PZ-205-AS	Total/NA	Water	410.4	
160-18897-2 - DL	PZ-107-SS	Total/NA	Water	410.4	
160-18897-3	LR-100	Total/NA	Water	410.4	
160-18897-4 - DL	S-5	Total/NA	Water	410.4	
160-18897-5 - DL	I-4	Total/NA	Water	410.4	
160-18897-6 - DL	D-3	Total/NA	Water	410.4	
160-18897-7 - DL	I-73	Total/NA	Water	410.4	
MB 160-268158/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-268158/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18897-3 MS	LR-100	Total/NA	Water	410.4	
160-18897-3 DU	LR-100	Total/NA	Water	410.4	

Analysis Batch: 268216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1 - DL	PZ-205-AS	Total/NA	Water	410.4	268158
160-18897-2 - DL	PZ-107-SS	Total/NA	Water	410.4	268158
160-18897-3	LR-100	Total/NA	Water	410.4	268158
160-18897-4 - DL	S-5	Total/NA	Water	410.4	268158
160-18897-5 - DL	I-4	Total/NA	Water	410.4	268158
160-18897-6 - DL	D-3	Total/NA	Water	410.4	268158
160-18897-7 - DL	I-73	Total/NA	Water	410.4	268158
MB 160-268158/3-A	Method Blank	Total/NA	Water	410.4	268158
LCS 160-268158/4-A	Lab Control Sample	Total/NA	Water	410.4	268158
160-18897-3 MS	LR-100	Total/NA	Water	410.4	268158
160-18897-3 DU	LR-100	Total/NA	Water	410.4	268158

Analysis Batch: 272554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1 - RADL	PZ-205-AS	Total/NA	Water	350.1	
160-18897-2 - RADL	PZ-107-SS	Total/NA	Water	350.1	
160-18897-3 - RADL	LR-100	Total/NA	Water	350.1	
160-18897-4 - RADL	S-5	Total/NA	Water	350.1	
160-18897-5 - RADL	I-4	Total/NA	Water	350.1	
160-18897-6 - RADL	D-3	Total/NA	Water	350.1	
160-18897-7 - RADL	I-73	Total/NA	Water	350.1	
MB 160-272554/25	Method Blank	Total/NA	Water	350.1	
LCS 160-272554/26	Lab Control Sample	Total/NA	Water	350.1	
160-18897-1 MS - RADL	PZ-205-AS	Total/NA	Water	350.1	

General Chemistry (Continued)

Analysis Batch: 272554 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1 DU - RADL	PZ-205-AS	Total/NA	Water	350.1	

Analysis Batch: 272820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	353.1 Preserved	
160-18897-2	PZ-107-SS	Total/NA	Water	353.1 Preserved	
160-18897-3	LR-100	Total/NA	Water	353.1 Preserved	
160-18897-4	S-5	Total/NA	Water	353.1 Preserved	
160-18897-5	I-4	Total/NA	Water	353.1 Preserved	
160-18897-6	D-3	Total/NA	Water	353.1 Preserved	
160-18897-7	I-73	Total/NA	Water	353.1 Preserved	
MB 160-272820/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-272820/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18897-1 MS	PZ-205-AS	Total/NA	Water	353.1 Preserved	
160-18897-1 DU	PZ-205-AS	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 268584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18897-1	PZ-205-AS	Total/NA	Water	LSC_Dist_Susp	
160-18897-2	PZ-107-SS	Total/NA	Water	LSC_Dist_Susp	
160-18897-3	LR-100	Total/NA	Water	LSC_Dist_Susp	
160-18897-4	S-5	Total/NA	Water	LSC_Dist_Susp	
160-18897-5	I-4	Total/NA	Water	LSC_Dist_Susp	
160-18897-6	D-3	Total/NA	Water	LSC_Dist_Susp	
160-18897-7	I-73	Total/NA	Water	LSC_Dist_Susp	
MB 160-268584/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-268584/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
160-18699-G-5-A MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
160-18699-G-5-B MSD	Matrix Spike Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18897-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18897-1 - DL	PZ-205-AS	112	108	96	109
160-18897-1	PZ-205-AS	104	135 X	94	104
160-18897-2	PZ-107-SS	110	101	102	109
160-18897-2	PZ-107-SS	118	101	102	108
160-18897-3	LR-100	119	102	101	109
160-18897-4	S-5	107	97	96	103
160-18897-5	I-4	108	99	98	109
160-18897-6	D-3	112	100	97	108
160-18897-6 MS	D-3	90	99	94	103
160-18897-6 MSD	D-3	93	101	104	103
160-18897-7	I-73	107	96	93	104
160-18897-8	TRIP BLANK	117	95	97	105
LCS 160-268415/4	Lab Control Sample	95	101	101	101
LCSD 160-268415/5	Lab Control Sample Dup	100	101	101	99
MB 160-268415/7	Method Blank	111	102	99	109

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica St. Louis
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Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18907-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
10/4/2016 12:54:07 PM

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18907-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18907-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/01/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 7.2 C.

Receipt Exceptions

The following sample was received with insufficient preservation for method 6010C: MW-1204 (160-18907-1). Nitric acid preservative was added by the laboratory, and the sample's pH was adjusted to < 2 SU.

The following sample was received with insufficient preservation for method 6010C: LCS-6B (160-18907-7). Nitric acid preservative was added by the laboratory, and the sample's pH remained ~ 7 SU.

The following sample was received with insufficient preservation for methods 350.1, 353.1 Preserved, and 410.4: LCS-6B (160-18907-7). Sulfuric acid preservative was added by the laboratory, and the sample's pH was adjusted to < 2 SU.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6), LCS-6B (160-18907-7) and TRIP BLANK (160-18907-8) were analyzed for volatile organic compounds (GC MS) in

Job ID: 160-18907-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/08/2016, 09/09/2016 and 09/15/2016.

Analytical Batch: 268602
According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Samples were analyzed within the 7 day, unpreserved, holding time. MW-1204 (160-18907-1), PZ-302-AS (160-18907-5) and LCS-6B (160-18907-7)

According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Sample was analyzed outside the 7 day, unpreserved, holding time by 4 minutes. LCS-6B (160-18907-7)

The following samples were analyzed at reduced volume due to high concentrations of target analytes: MW-1204 (160-18907-1) and LCS-6B (160-18907-7). The reporting limits have been elevated by the appropriate factor.

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-268602: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-268602/3)

The continuing calibration verification (CCV) associated with batch 160-268602 recovered above the upper control limit for Methyl bromide. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. (CCVIS 160-268602/3)

The continuing calibration verification (CCV) associated with batch 160-269921 recovered above the upper control limit for Vinyl acetate. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. (CCVIS 160-269921/2)

Analytical Batch: 270088
The following samples were analyzed at reduced volume due to high concentrations of target analytes: PZ-112-AS (160-18907-2) and PZ-302-AS (160-18907-5). The reporting limits have been elevated by the appropriate factor.

A matrix spike/matrix spike duplicate (MS/MSD) was not performed with analytical batch 160-270088; the only associated samples are dilutions. An LCS/LCSD was performed to demonstrate accuracy and precision. (MB 160-270088/7)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)
Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/12/2016 and analyzed on 09/13/2016 and 09/14/2016.

Prep Batch: 269134
Due to difficult sample matrix dilutions were performed for the following samples: MW-1204 (160-18907-1) and PZ-302-AS (160-18907-5). These dilutions were prepared as follows: 25mL to 50mL

Analytical Batch: 269399
The following sample(s) was diluted due to the nature of the sample matrix. Samples are high in salts: MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6), LCS-6B (160-18907-7), (160-18933-B-4-A ^5), (160-18933-B-4-B MS ^), (160-18933-B-4-C MSD) and (160-18933-B-4-A SD ^). Elevated reporting limits (RLs) are provided.

The Laboratory Control Sample (LCS) was above the upper calibration range for Boron. However, the percent recovery was within acceptable limits. Data will be reported. (LCS 160-269134/2-A)

Due to the high concentration of Calcium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-269134 and analytical batch 160-269399 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met

Job ID: 160-18907-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

acceptance criteria. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details. (160-18933-B-4-B MS ^) and (160-18933-B-4-C MSD)

Analytical Batch: 269953
The following sample was diluted to bring the concentration of target analytes within the calibration range: PZ-204A-SS (160-18907-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL MERCURY
Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared and analyzed on 09/12/2016.

Prep Batch: 269108
The samples associated with preparation batch 160-269108 were observed after adding potassium permanganate for 15 minutes and they retained color. After digestion but before adding sodium chloride hydroxylamine sulfate the potassium permanganate had reduced. MW-1204 (160-18907-1)

Prep Batch: 269109
The following samples were a very dark strong leachate and required a dilution due to the nature of this sample matrix: LCS-6B (160-18907-7).

Analytical Batch: 269210
The following samples were diluted due to its milky color. PZ-302-AS (160-18907-5). Elevated reporting limits (RL) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS
Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 09/07/2016.

Analytical Batch: 268258
The following samples in TDS batch 160-268258 were analyzed at reduced aliquot due to high concentrations of the target analyte: MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5) and LCS-6B (160-18907-7).The reporting limit has been adjusted for the reduced aliquot.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY
Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/07/2016.

Analytical Batch: 268258
The following samples in Anion batch 160-268208 were diluted to bring the concentrations of target analytes within the calibration range: MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7). Elevated reporting limits (RLs) are provided.

Analytical Batch: 268208
The following samples in Anion batch 160-268208 were analyzed at dilution to start (2x or 5x dilutions, respectively) due to high sample conductivities, which made undiluted analysis inadvisable: MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5) and LCS-6B (160-18907-7). As a result, some results for Fluoride and Sulfate are below the adjusted reporting limit (RL) at the initial dilution.

Job ID: 160-18907-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The following matrix spike (MS) recovered outside control limits for Fluoride (85%) in Anion batch 160-268208: (160-18897-D-1 MS). Sample matrix interference is suspected, because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/29/2016.

Analytical Batch: 272554

The following samples in NH3 analytical batch 160-272554 were diluted to bring the concentration of the target analyte within the calibration range: MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), PZ-302-AS (160-18907-5) and LCS-6B (160-18907-7). Elevated reporting limits (RLs) are provided.

Due to the high concentration of NH3 in the parent samples, which required dilution, the following matrix spikes (MS) for analytical batch 160-272554 were diluted below reliable detection limits: (160-18897-E-1 MS ^10). The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 10/03/2016.

Analytical Batch: 272820

Reanalysis of the following samples in NO3-NO2 analytical batch 160-272820 was performed outside of the analytical holding time due to failed QC requirements: MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7). Reanalysis was performed within two times the holding time, and the original, in hold data is included with the raw data.

Nitrate/Nitrite was detected in method blank MB 160-272820/13 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

The following sample/sample duplicate (DU) RPD in NO3-NO2 analytical batch 160-272820 is slightly outside of acceptance criteria: (160-18897-E-1) and (160-18897-E-1 DU). RPD determinations for results that are less than 5X the reporting limit (RL), and are within the RL from each other are considered to be approximate, and therefore the data are reported.

The following matrix spike (MS) recovery for NO3-NO2 analytical batch 160-272820 was outside control limits: (160-18897-E-1 MS). Sample matrix interference is suspected because of the historical data associated with MS recoveries from this client, as well as the associated laboratory control sample (LCS) recovery being within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND

Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared and analyzed on 09/06/2016.

Analytical Batch: 268216

The following samples in COD batch 160-268216 were diluted to bring the concentration of target analytes within the calibration range: MW-1204 (160-18907-1), PZ-204A-SS (160-18907-4) and LCS-6B (160-18907-7). Elevated reporting limits (RLs) are provided.

Job ID: 160-18907-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)

Samples MW-1204 (160-18907-1), PZ-112-AS (160-18907-2), I-68 (160-18907-3), PZ-204A-SS (160-18907-4), PZ-302-AS (160-18907-5), S-53 (160-18907-6) and LCS-6B (160-18907-7) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/23/2016 and analyzed on 09/26/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 2

160-18907 Chain of Custody

# of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.6
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 6 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days): Standard			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	S	N	D	A	C		
MW-1204	9/1/16	0857	G	Water	N	N	✓	✓	✓	✓	✓		strong leachate
PZ-112-AS	9/1/16	1016	G	Water	N	N	✓	✓	✓	✓	✓		
I-68	9/1/16	1123	G	Water	N	N	✓	✓	✓	✓	✓		
PZ-204A-SS	9/1/16	1331	G	Water	N	N	✓	✓	✓	✓	✓		
PZ-302-AS	9/1/16	1355	G	Water	N	N	✓	✓	✓	✓	✓		
S-53	9/1/16	1425	G	Water	N	N	✓	✓	✓	✓	✓		
LCS-6B	9/1/16	1515	G		N	N	✓	✓	✓	✓	✓		~~LCS/MB~~ Created
Triplank	9/1/16	0800	G								✓		

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Brenna McDonald	9/1/16 1610			9/1/16 1610	
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18907-1

Login Number: 18907
List Number: 1
Creator: Clarke, Jill C

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	Received same day of collection; chilling process has begun.
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	Refer to Job Narrative for details.
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	False	Refer to Job Narrative for details.
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
H	Sample was prepped or analyzed beyond the specified holding time

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18907-1	MW-1204	Water	09/01/16 08:57	09/01/16 16:10
160-18907-2	PZ-112-AS	Water	09/01/16 10:16	09/01/16 16:10
160-18907-3	I-68	Water	09/01/16 11:23	09/01/16 16:10
160-18907-4	PZ-204A-SS	Water	09/01/16 13:31	09/01/16 16:10
160-18907-5	PZ-302-AS	Water	09/01/16 13:55	09/01/16 16:10
160-18907-6	S-53	Water	09/01/16 14:25	09/01/16 16:10
160-18907-7	LCS-6B	Water	09/01/16 15:15	09/01/16 16:10
160-18907-8	TRIP BLANK	Water	09/01/16 08:00	09/01/16 16:10

Client Sample ID: MW-1204
Date Collected: 09/01/16 08:57
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**2000**		400	130	ug/L			09/08/16 23:39	20
Acrylonitrile	ND		1000	33	ug/L			09/08/16 23:39	20
Benzene	ND		100	5.0	ug/L			09/08/16 23:39	20
Bromochloromethane	ND		100	11	ug/L			09/08/16 23:39	20
Bromodichloromethane	ND		100	5.0	ug/L			09/08/16 23:39	20
Bromoform	ND		100	7.4	ug/L			09/08/16 23:39	20
Carbon disulfide	ND		100	7.4	ug/L			09/08/16 23:39	20
Carbon tetrachloride	ND		100	7.2	ug/L			09/08/16 23:39	20
Chlorobenzene	ND		100	7.6	ug/L			09/08/16 23:39	20
Chloroethane	ND		200	7.6	ug/L			09/08/16 23:39	20
Chloroform	ND		100	3.0	ug/L			09/08/16 23:39	20
cis-1,2-Dichloroethene	ND		100	3.2	ug/L			09/08/16 23:39	20
cis-1,3-Dichloropropene	ND		100	6.8	ug/L			09/08/16 23:39	20
Dibromochloromethane	ND		100	6.6	ug/L			09/08/16 23:39	20
1,2-Dibromo-3-Chloropropane	ND		200	23	ug/L			09/08/16 23:39	20
1,2-Dibromoethane (EDB)	ND		100	8.8	ug/L			09/08/16 23:39	20
1,2-Dichlorobenzene	ND		100	5.6	ug/L			09/08/16 23:39	20
1,4-Dichlorobenzene	ND		100	7.0	ug/L			09/08/16 23:39	20
1,1-Dichloroethane	ND		100	7.8	ug/L			09/08/16 23:39	20
1,2-Dichloroethane	ND		100	7.4	ug/L			09/08/16 23:39	20
1,1-Dichloroethene	ND		100	7.4	ug/L			09/08/16 23:39	20
1,2-Dichloropropane	ND		100	6.4	ug/L			09/08/16 23:39	20
Ethylbenzene	ND		100	6.0	ug/L			09/08/16 23:39	20
2-Hexanone	ND		400	12	ug/L			09/08/16 23:39	20
Methyl bromide	ND		200	8.0	ug/L			09/08/16 23:39	20
Methyl chloride	ND		200	11	ug/L			09/08/16 23:39	20
Methylene bromide	ND		100	8.2	ug/L			09/08/16 23:39	20
Methylene Chloride	ND		100	33	ug/L			09/08/16 23:39	20
Methyl Ethyl Ketone	**1000**		400	7.8	ug/L			09/08/16 23:39	20
Methyl iodide	ND		100	30	ug/L			09/08/16 23:39	20
4-Methyl-2-pentanone (MIBK)	ND		400	6.6	ug/L			09/08/16 23:39	20
Styrene	ND		100	7.0	ug/L			09/08/16 23:39	20
1,1,1,2-Tetrachloroethane	ND		100	5.0	ug/L			09/08/16 23:39	20
1,1,2,2-Tetrachloroethane	ND		100	8.6	ug/L			09/08/16 23:39	20
Tetrachloroethene	ND		100	5.6	ug/L			09/08/16 23:39	20
Toluene	**54**	**J**	100	20	ug/L			09/08/16 23:39	20
trans-1,4-Dichloro-2-butene	ND		200	19	ug/L			09/08/16 23:39	20
trans-1,2-Dichloroethene	ND		100	3.6	ug/L			09/08/16 23:39	20
trans-1,3-Dichloropropene	ND		100	7.0	ug/L			09/08/16 23:39	20
1,1,1-Trichloroethane	ND		100	5.8	ug/L			09/08/16 23:39	20
1,1,2-Trichloroethane	ND		100	11	ug/L			09/08/16 23:39	20
Trichloroethene	ND		100	5.8	ug/L			09/08/16 23:39	20
Trichlorofluoromethane	ND		100	4.4	ug/L			09/08/16 23:39	20
1,2,3-Trichloropropane	ND		100	11	ug/L			09/08/16 23:39	20
Vinyl acetate	ND		100	12	ug/L			09/08/16 23:39	20
Vinyl chloride	ND		100	8.6	ug/L			09/08/16 23:39	20
Xylenes, Total	ND		200	17	ug/L			09/08/16 23:39	20

Client Sample ID: MW-1204

Date Collected: 09/01/16 08:57
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*71 - 139*		*09/08/16 23:39*	*20*
Dibromofluoromethane (Surr)	*92*		*80 - 121*		*09/08/16 23:39*	*20*
1,2-Dichloroethane-d4 (Surr)	*91*		*76 - 121*		*09/08/16 23:39*	*20*
Toluene-d8 (Surr)	*107*		*80 - 129*		*09/08/16 23:39*	*20*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.80**		0.20	0.020	mg/L			09/07/16 01:26	2
Sulfate	**1.3**		1.0	0.10	mg/L			09/07/16 01:26	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**960**		100	10	mg/L			09/07/16 01:54	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:10	5
Arsenic	ND		100	40	ug/L		09/12/16 11:53	09/13/16 18:10	5
Barium	**5000**		500	150	ug/L		09/12/16 11:53	09/13/16 18:10	5
Beryllium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:10	5
Boron	**2300**		1000	250	ug/L		09/12/16 11:53	09/13/16 18:10	5
Cadmium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:10	5
CaHard	**970000**		25000	7500	ug/L		09/12/16 11:53	09/13/16 18:10	5
Calcium	**390000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 18:10	5
Chromium	**50**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 18:10	5
Cobalt	ND		500	150	ug/L		09/12/16 11:53	09/13/16 18:10	5
Copper	ND		250	50	ug/L		09/12/16 11:53	09/13/16 18:10	5
Lead	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:10	5
Magnesium	**130**		10	3.0	mg/L		09/12/16 11:53	09/13/16 18:10	5
Manganese	**820**		150	25	ug/L		09/12/16 11:53	09/13/16 18:10	5
MgHard	**530000**		41000	12000	ug/L		09/12/16 11:53	09/13/16 18:10	5
Nickel	ND		0.40	0.10	mg/L		09/12/16 11:53	09/13/16 18:10	5
Phosphorus	ND		2500	750	ug/L		09/12/16 11:53	09/13/16 18:10	5
Selenium	ND		150	50	ug/L		09/12/16 11:53	09/13/16 18:10	5
Silver	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:10	5
Sodium	**360000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 18:10	5
Thallium	ND		200	50	ug/L		09/12/16 11:53	09/13/16 18:10	5
Total Hardness	**1500000**		66000	20000	ug/L		09/12/16 11:53	09/13/16 18:10	5
Vanadium	ND		500	150	ug/L		09/12/16 11:53	09/13/16 18:10	5
Zinc	ND		200	60	ug/L		09/12/16 11:53	09/13/16 18:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**3900**		50	35	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	**0.11**	**H B**	0.050	0.011	mg/L			10/03/16 15:32	1

Client Sample ID: MW-1204

Date Collected: 09/01/16 08:57
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-1
Matrix: Water

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	1400		250	56	mg/L		09/06/16 08:48	09/06/16 14:22	50

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	89		5.0	2.2	mg/L			09/29/16 17:43	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	9020		574	980	500	281	pCi/L	09/23/16 15:38	09/26/16 16:35	1

Client Sample ID: PZ-112-AS

Date Collected: 09/01/16 10:16
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 19:12	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 19:12	1
Benzene	15		5.0	0.25	ug/L			09/08/16 19:12	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 19:12	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 19:12	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 19:12	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 19:12	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 19:12	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 19:12	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 19:12	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 19:12	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 19:12	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 19:12	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 19:12	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 19:12	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 19:12	1
1,4-Dichlorobenzene	9.5		5.0	0.35	ug/L			09/08/16 19:12	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 19:12	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 19:12	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 19:12	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 19:12	1
Ethylbenzene	0.34	J	5.0	0.30	ug/L			09/08/16 19:12	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 19:12	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 19:12	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 19:12	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 19:12	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 19:12	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 19:12	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 19:12	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 19:12	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 19:12	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 19:12	1

Client Sample ID: PZ-112-AS

Date Collected: 09/01/16 10:16
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-2

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 19:12	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 19:12	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 19:12	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 19:12	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 19:12	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 19:12	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 19:12	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 19:12	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 19:12	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 19:12	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 19:12	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 19:12	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 19:12	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*117*		*71 - 139*		*09/08/16 19:12*	*1*
Dibromofluoromethane (Surr)	*94*		*80 - 121*		*09/08/16 19:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*76 - 121*		*09/08/16 19:12*	*1*
Toluene-d8 (Surr)	*81*		*80 - 129*		*09/08/16 19:12*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chlorobenzene	**1000**		50	3.8	ug/L			09/15/16 19:11	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*101*		*71 - 139*		*09/15/16 19:11*	*10*
Dibromofluoromethane (Surr)	*100*		*80 - 121*		*09/15/16 19:11*	*10*
1,2-Dichloroethane-d4 (Surr)	*107*		*76 - 121*		*09/15/16 19:11*	*10*
Toluene-d8 (Surr)	*100*		*80 - 129*		*09/15/16 19:11*	*10*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.12**	**J**	0.20	0.020	mg/L			09/07/16 02:09	2
Sulfate	**0.32**	**J**	1.0	0.10	mg/L			09/07/16 02:09	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**100**		10	1.0	mg/L			09/07/16 02:23	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:28	5
Arsenic	**190**		50	20	ug/L		09/12/16 11:53	09/13/16 18:28	5
Barium	**1600**		250	75	ug/L		09/12/16 11:53	09/13/16 18:28	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:28	5
Boron	**900**		500	130	ug/L		09/12/16 11:53	09/13/16 18:28	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:28	5
CaHard	**240000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:28	5
Calcium	**94000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:28	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:28	5

Client Sample ID: PZ-112-AS

Date Collected: 09/01/16 10:16
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:28	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:28	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:28	5
Magnesium	**57**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:28	5
Manganese	**130**		75	13	ug/L		09/12/16 11:53	09/13/16 18:28	5
MgHard	**230000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:28	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:28	5
Phosphorus	**1500**		1300	380	ug/L		09/12/16 11:53	09/13/16 18:28	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:28	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:28	5
Sodium	**88000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:28	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:28	5
Total Hardness	**470000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:28	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:28	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:28	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 17:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**790**		25	17	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	**0.025**	**J H B**	0.050	0.011	mg/L			10/03/16 15:35	1
Chemical Oxygen Demand	**41**		5.0	1.1	mg/L		09/06/16 08:48	09/06/16 14:22	1

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**150**		5.0	2.2	mg/L			09/29/16 17:46	100

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	112	U	166	167	500	280	pCi/L	09/23/16 15:38	09/26/16 17:20	1

Client Sample ID: I-68

Date Collected: 09/01/16 11:23
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 19:38	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 19:38	1
Benzene	ND		5.0	0.25	ug/L			09/08/16 19:38	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 19:38	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 19:38	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 19:38	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 19:38	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 19:38	1
Chlorobenzene	**1.1**	**J**	5.0	0.38	ug/L			09/08/16 19:38	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Client Sample ID: I-68
Date Collected: 09/01/16 11:23
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		10	0.38	ug/L			09/08/16 19:38	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 19:38	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 19:38	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 19:38	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 19:38	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 19:38	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 19:38	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 19:38	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/08/16 19:38	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 19:38	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 19:38	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 19:38	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 19:38	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 19:38	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 19:38	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 19:38	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 19:38	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 19:38	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 19:38	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 19:38	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 19:38	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 19:38	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 19:38	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 19:38	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 19:38	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 19:38	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 19:38	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 19:38	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 19:38	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 19:38	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 19:38	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 19:38	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 19:38	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 19:38	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 19:38	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 19:38	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 19:38	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 19:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*113*		*71 - 139*		*09/08/16 19:38*	*1*
Dibromofluoromethane (Surr)	*104*		*80 - 121*		*09/08/16 19:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*		*09/08/16 19:38*	*1*
Toluene-d8 (Surr)	*112*		*80 - 129*		*09/08/16 19:38*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.095**	**J**	0.20	0.020	mg/L			09/07/16 03:21	2

Client Sample ID: I-68
Date Collected: 09/01/16 11:23
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-3
Matrix: Water

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**52**		25	2.5	mg/L			09/07/16 03:35	50

Method: 300.0 - Anions, Ion Chromatography - DL3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**310**		40	4.0	mg/L			09/07/16 14:00	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:33	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 18:33	5
Barium	**370**		250	75	ug/L		09/12/16 11:53	09/13/16 18:33	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:33	5
Boron	ND		500	130	ug/L		09/12/16 11:53	09/13/16 18:33	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:33	5
CaHard	**510000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:33	5
Calcium	**210000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:33	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:33	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:33	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:33	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:33	5
Magnesium	**42**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:33	5
Manganese	**3900**		75	13	ug/L		09/12/16 11:53	09/13/16 18:33	5
MgHard	**170000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:33	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:33	5
Phosphorus	ND		1300	380	ug/L		09/12/16 11:53	09/13/16 18:33	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:33	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:33	5
Sodium	**91000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:33	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:33	5
Total Hardness	**690000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:33	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:33	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:33	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:30	09/12/16 18:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**620**		5.0	3.5	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	ND	H	0.050	0.011	mg/L			10/03/16 15:38	1
Chemical Oxygen Demand	**11**		5.0	1.1	mg/L		09/06/16 08:48	09/06/16 14:22	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.030**	**J**	0.050	0.022	mg/L			09/29/16 17:48	1

Client Sample ID: I-68

Lab Sample ID: 160-18907-3
Date Collected: 09/01/16 11:23
Matrix: Water
Date Received: 09/01/16 16:10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	41.0	U	164	165	500	293	pCi/L	09/23/16 15:38	09/26/16 18:06	1

Client Sample ID: PZ-204A-SS

Lab Sample ID: 160-18907-4
Date Collected: 09/01/16 13:31
Matrix: Water
Date Received: 09/01/16 16:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 20:03	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 20:03	1
Benzene	**1.2**	**J**	5.0	0.25	ug/L			09/08/16 20:03	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 20:03	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 20:03	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 20:03	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 20:03	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 20:03	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/08/16 20:03	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 20:03	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 20:03	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 20:03	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 20:03	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 20:03	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 20:03	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 20:03	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 20:03	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/08/16 20:03	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 20:03	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 20:03	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 20:03	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 20:03	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 20:03	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 20:03	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 20:03	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 20:03	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 20:03	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 20:03	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 20:03	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 20:03	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 20:03	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 20:03	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 20:03	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 20:03	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 20:03	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 20:03	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 20:03	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 20:03	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 20:03	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 20:03	1

Client Sample ID: PZ-204A-SS

Date Collected: 09/01/16 13:31
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 20:03	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 20:03	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 20:03	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 20:03	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 20:03	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 20:03	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 20:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*115*		*71 - 139*		*09/08/16 20:03*	*1*
Dibromofluoromethane (Surr)	*106*		*80 - 121*		*09/08/16 20:03*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*		*09/08/16 20:03*	*1*
Toluene-d8 (Surr)	*113*		*80 - 129*		*09/08/16 20:03*	*1*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.067**	**J**	0.20	0.020	mg/L			09/07/16 04:04	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**650**		25	2.5	mg/L			09/07/16 04:19	50

Method: 300.0 - Anions, Ion Chromatography - DL3

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**930**		100	10	mg/L			09/07/16 14:14	500

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:37	5
Arsenic	**28**	**J**	50	20	ug/L		09/12/16 11:53	09/13/16 18:37	5
Barium	**210**	**J**	250	75	ug/L		09/12/16 11:53	09/13/16 18:37	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:37	5
Boron	ND		500	130	ug/L		09/12/16 11:53	09/13/16 18:37	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:37	5
CaHard	**1300000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:37	5
Calcium	**530000**		10000	3000	ug/L		09/12/16 11:53	09/14/16 20:14	10
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:37	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:37	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:37	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:37	5
Magnesium	**210**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:37	5
Manganese	**4800**		75	13	ug/L		09/12/16 11:53	09/13/16 18:37	5
MgHard	**860000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:37	5
Nickel	**0.062**	**J**	0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:37	5
Phosphorus	ND		1300	380	ug/L		09/12/16 11:53	09/13/16 18:37	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:37	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:37	5
Sodium	**280000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:37	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:37	5
Total Hardness	**2100000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:37	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:37	5

Client Sample ID: PZ-204A-SS

Date Collected: 09/01/16 13:31
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-4
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:37	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:30	09/12/16 18:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**3300**		50	35	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	**0.032**	**J H B**	0.050	0.011	mg/L			10/03/16 15:41	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**230**		50	11	mg/L		09/06/16 08:48	09/06/16 14:22	10

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.55**		0.050	0.022	mg/L			09/29/16 17:50	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	**8340**		538	910	500	265	pCi/L	09/23/16 15:38	09/26/16 18:28	1

Client Sample ID: PZ-302-AS

Date Collected: 09/01/16 13:55
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 20:28	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 20:28	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 20:28	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 20:28	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 20:28	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 20:28	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 20:28	1
Chlorobenzene	**97**		5.0	0.38	ug/L			09/08/16 20:28	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 20:28	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 20:28	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 20:28	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 20:28	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 20:28	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 20:28	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 20:28	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 20:28	1
1,4-Dichlorobenzene	**13**		5.0	0.35	ug/L			09/08/16 20:28	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 20:28	1
1,2-Dichloroethane	**0.42**	**J**	5.0	0.37	ug/L			09/08/16 20:28	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 20:28	1

Client Sample ID: PZ-302-AS
Date Collected: 09/01/16 13:55
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 20:28	1
Ethylbenzene	**59**		5.0	0.30	ug/L			09/08/16 20:28	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 20:28	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 20:28	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 20:28	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 20:28	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 20:28	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 20:28	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 20:28	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 20:28	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 20:28	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 20:28	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 20:28	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 20:28	1
Toluene	**110**		5.0	1.0	ug/L			09/08/16 20:28	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 20:28	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 20:28	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 20:28	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 20:28	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 20:28	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 20:28	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 20:28	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 20:28	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 20:28	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 20:28	1
Xylenes, Total	**54**		10	0.85	ug/L			09/08/16 20:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*71 - 139*		*09/08/16 20:28*	*1*
Dibromofluoromethane (Surr)	*87*		*80 - 121*		*09/08/16 20:28*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/08/16 20:28*	*1*
Toluene-d8 (Surr)	*100*		*80 - 129*		*09/08/16 20:28*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	**3400**		100	5.0	ug/L			09/15/16 21:42	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*100*		*71 - 139*		*09/15/16 21:42*	*20*
Dibromofluoromethane (Surr)	*94*		*80 - 121*		*09/15/16 21:42*	*20*
1,2-Dichloroethane-d4 (Surr)	*107*		*76 - 121*		*09/15/16 21:42*	*20*
Toluene-d8 (Surr)	*98*		*80 - 129*		*09/15/16 21:42*	*20*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.28**		0.20	0.020	mg/L			09/07/16 04:47	2
Sulfate	**0.40**	**J**	1.0	0.10	mg/L			09/07/16 04:47	2

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**33**		10	1.0	mg/L			09/07/16 05:02	50

Client Sample Results

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:42	5
Arsenic	**290**		100	40	ug/L		09/12/16 11:53	09/13/16 18:42	5
Barium	**1000**		500	150	ug/L		09/12/16 11:53	09/13/16 18:42	5
Beryllium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:42	5
Boron	**540**	**J**	1000	250	ug/L		09/12/16 11:53	09/13/16 18:42	5
Cadmium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:42	5
CaHard	**570000**		25000	7500	ug/L		09/12/16 11:53	09/13/16 18:42	5
Calcium	**230000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 18:42	5
Chromium	**61**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 18:42	5
Cobalt	ND		500	150	ug/L		09/12/16 11:53	09/13/16 18:42	5
Copper	ND		250	50	ug/L		09/12/16 11:53	09/13/16 18:42	5
Lead	**83**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 18:42	5
Magnesium	**88**		10	3.0	mg/L		09/12/16 11:53	09/13/16 18:42	5
Manganese	**8900**		150	25	ug/L		09/12/16 11:53	09/13/16 18:42	5
MgHard	**360000**		41000	12000	ug/L		09/12/16 11:53	09/13/16 18:42	5
Nickel	**0.15**	**J**	0.40	0.10	mg/L		09/12/16 11:53	09/13/16 18:42	5
Phosphorus	**3500**		2500	750	ug/L		09/12/16 11:53	09/13/16 18:42	5
Selenium	ND		150	50	ug/L		09/12/16 11:53	09/13/16 18:42	5
Silver	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:42	5
Sodium	**53000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 18:42	5
Thallium	ND		200	50	ug/L		09/12/16 11:53	09/13/16 18:42	5
Total Hardness	**930000**		66000	20000	ug/L		09/12/16 11:53	09/13/16 18:42	5
Vanadium	ND		500	150	ug/L		09/12/16 11:53	09/13/16 18:42	5
Zinc	**260**		200	60	ug/L		09/12/16 11:53	09/13/16 18:42	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		1.0	0.30	ug/L		09/12/16 09:30	09/12/16 18:18	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1000**		10	7.0	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	**0.067**	**H B**	0.050	0.011	mg/L			10/03/16 15:44	1
Chemical Oxygen Demand	**64**		5.0	1.1	mg/L		09/06/16 08:48	09/06/16 14:22	1

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**3.3**		0.50	0.22	mg/L			09/29/16 17:53	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	229	U	171	172	500	265	pCi/L	09/23/16 15:38	09/26/16 18:51	1

Client Sample ID: S-53

Date Collected: 09/01/16 14:25
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 20:53	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 20:53	1
Benzene	**0.90**	**J**	5.0	0.25	ug/L			09/08/16 20:53	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Client Sample ID: S-53
Date Collected: 09/01/16 14:25
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-6
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 20:53	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 20:53	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 20:53	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 20:53	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 20:53	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/08/16 20:53	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 20:53	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 20:53	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 20:53	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 20:53	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 20:53	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 20:53	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 20:53	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 20:53	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/08/16 20:53	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 20:53	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 20:53	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 20:53	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 20:53	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 20:53	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 20:53	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 20:53	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 20:53	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 20:53	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 20:53	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 20:53	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 20:53	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 20:53	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 20:53	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 20:53	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 20:53	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 20:53	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 20:53	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 20:53	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 20:53	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 20:53	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 20:53	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 20:53	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 20:53	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 20:53	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 20:53	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 20:53	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 20:53	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 20:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*71 - 139*		*09/08/16 20:53*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 121*		*09/08/16 20:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*98*		*76 - 121*		*09/08/16 20:53*	*1*
Toluene-d8 (Surr)	*110*		*80 - 129*		*09/08/16 20:53*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.15**		0.10	0.010	mg/L			09/07/16 06:00	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**66**		10	1.0	mg/L			09/07/16 06:14	20
Chloride	**35**		4.0	0.40	mg/L			09/07/16 06:14	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:46	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 18:46	5
Barium	**230**	**J**	250	75	ug/L		09/12/16 11:53	09/13/16 18:46	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:46	5
Boron	ND		500	130	ug/L		09/12/16 11:53	09/13/16 18:46	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:46	5
CaHard	**340000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:46	5
Calcium	**140000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:46	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:46	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:46	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:46	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:46	5
Magnesium	**41**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:46	5
Manganese	ND		75	13	ug/L		09/12/16 11:53	09/13/16 18:46	5
MgHard	**170000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:46	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:46	5
Phosphorus	ND		1300	380	ug/L		09/12/16 11:53	09/13/16 18:46	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:46	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:46	5
Sodium	**22000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:46	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:46	5
Total Hardness	**510000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:46	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:46	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 18:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:30	09/12/16 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**620**		5.0	3.5	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	ND	H	0.050	0.011	mg/L			10/03/16 15:47	1
Chemical Oxygen Demand	**4.0**	**J**	5.0	1.1	mg/L		09/06/16 08:50	09/06/16 14:22	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.027**	**J**	0.050	0.022	mg/L			09/29/16 17:55	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	19.4	U	160	160	500	288	pCi/L	09/23/16 15:38	09/26/16 19:14	1

Client Sample ID: LCS-6B

Date Collected: 09/01/16 15:15
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	**780**	**H**	200	67	ug/L			09/09/16 00:04	10
Acrylonitrile	ND	H	500	17	ug/L			09/09/16 00:04	10
Benzene	**14**	**J H**	50	2.5	ug/L			09/09/16 00:04	10
Bromochloromethane	ND	H	50	5.5	ug/L			09/09/16 00:04	10
Bromodichloromethane	ND	H	50	2.5	ug/L			09/09/16 00:04	10
Bromoform	ND	H	50	3.7	ug/L			09/09/16 00:04	10
Carbon disulfide	ND	H	50	3.7	ug/L			09/09/16 00:04	10
Carbon tetrachloride	ND	H	50	3.6	ug/L			09/09/16 00:04	10
Chlorobenzene	**4.3**	**J H**	50	3.8	ug/L			09/09/16 00:04	10
Chloroethane	ND	H	100	3.8	ug/L			09/09/16 00:04	10
Chloroform	ND	H	50	1.5	ug/L			09/09/16 00:04	10
cis-1,2-Dichloroethene	ND	H	50	1.6	ug/L			09/09/16 00:04	10
cis-1,3-Dichloropropene	ND	H	50	3.4	ug/L			09/09/16 00:04	10
Dibromochloromethane	ND	H	50	3.3	ug/L			09/09/16 00:04	10
1,2-Dibromo-3-Chloropropane	ND	H	100	12	ug/L			09/09/16 00:04	10
1,2-Dibromoethane (EDB)	ND	H	50	4.4	ug/L			09/09/16 00:04	10
1,2-Dichlorobenzene	ND	H	50	2.8	ug/L			09/09/16 00:04	10
1,4-Dichlorobenzene	**16**	**J H**	50	3.5	ug/L			09/09/16 00:04	10
1,1-Dichloroethane	ND	H	50	3.9	ug/L			09/09/16 00:04	10
1,2-Dichloroethane	ND	H	50	3.7	ug/L			09/09/16 00:04	10
1,1-Dichloroethene	ND	H	50	3.7	ug/L			09/09/16 00:04	10
1,2-Dichloropropane	ND	H	50	3.2	ug/L			09/09/16 00:04	10
Ethylbenzene	**23**	**J H**	50	3.0	ug/L			09/09/16 00:04	10
2-Hexanone	ND	H	200	5.9	ug/L			09/09/16 00:04	10
Methyl bromide	ND	H	100	4.0	ug/L			09/09/16 00:04	10
Methyl chloride	ND	H	100	5.5	ug/L			09/09/16 00:04	10
Methylene bromide	ND	H	50	4.1	ug/L			09/09/16 00:04	10
Methylene Chloride	ND	H	50	17	ug/L			09/09/16 00:04	10
Methyl Ethyl Ketone	**470**	**H**	200	3.9	ug/L			09/09/16 00:04	10
Methyl iodide	ND	H	50	15	ug/L			09/09/16 00:04	10
4-Methyl-2-pentanone (MIBK)	**26**	**J H**	200	3.3	ug/L			09/09/16 00:04	10
Styrene	ND	H	50	3.5	ug/L			09/09/16 00:04	10
1,1,1,2-Tetrachloroethane	ND	H	50	2.5	ug/L			09/09/16 00:04	10
1,1,2,2-Tetrachloroethane	ND	H	50	4.3	ug/L			09/09/16 00:04	10
Tetrachloroethene	ND	H	50	2.8	ug/L			09/09/16 00:04	10
Toluene	**54**	**H**	50	10	ug/L			09/09/16 00:04	10
trans-1,4-Dichloro-2-butene	ND	H	100	9.5	ug/L			09/09/16 00:04	10
trans-1,2-Dichloroethene	ND	H	50	1.8	ug/L			09/09/16 00:04	10
trans-1,3-Dichloropropene	ND	H	50	3.5	ug/L			09/09/16 00:04	10
1,1,1-Trichloroethane	ND	H	50	2.9	ug/L			09/09/16 00:04	10
1,1,2-Trichloroethane	ND	H	50	5.7	ug/L			09/09/16 00:04	10
Trichloroethene	ND	H	50	2.9	ug/L			09/09/16 00:04	10
Trichlorofluoromethane	ND	H	50	2.2	ug/L			09/09/16 00:04	10
1,2,3-Trichloropropane	ND	H	50	5.6	ug/L			09/09/16 00:04	10
Vinyl acetate	ND	H	50	6.1	ug/L			09/09/16 00:04	10
Vinyl chloride	ND	H	50	4.3	ug/L			09/09/16 00:04	10
Xylenes, Total	**59**	**J H**	100	8.5	ug/L			09/09/16 00:04	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*111*		*71 - 139*		*09/09/16 00:04*	*10*

Client Sample ID: LCS-6B

Date Collected: 09/01/16 15:15
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-7

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL2 (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*93*		*80 - 121*		*09/09/16 00:04*	*10*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/09/16 00:04*	*10*
Toluene-d8 (Surr)	*106*		*80 - 129*		*09/09/16 00:04*	*10*

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.50	0.050	mg/L			09/07/16 06:43	5
Sulfate	**2.0**	**J**	2.5	0.25	mg/L			09/07/16 06:43	5

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2000**		400	40	mg/L			09/07/16 07:12	2000

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	**180**	**J**	400	120	ug/L		09/12/16 11:53	09/13/16 18:51	20
Arsenic	**760**		400	160	ug/L		09/12/16 11:53	09/13/16 18:51	20
Barium	**1100**	**J**	2000	600	ug/L		09/12/16 11:53	09/13/16 18:51	20
Beryllium	ND		200	60	ug/L		09/12/16 11:53	09/13/16 18:51	20
Boron	**10000**		4000	1000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Cadmium	ND		200	60	ug/L		09/12/16 11:53	09/13/16 18:51	20
CaHard	**120000**		100000	30000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Calcium	**48000**		40000	12000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Chromium	**160**	**J**	400	120	ug/L		09/12/16 11:53	09/13/16 18:51	20
Cobalt	ND		2000	600	ug/L		09/12/16 11:53	09/13/16 18:51	20
Copper	ND		1000	200	ug/L		09/12/16 11:53	09/13/16 18:51	20
Lead	ND		400	120	ug/L		09/12/16 11:53	09/13/16 18:51	20
Magnesium	**43**		40	12	mg/L		09/12/16 11:53	09/13/16 18:51	20
Manganese	**270**	**J**	600	100	ug/L		09/12/16 11:53	09/13/16 18:51	20
MgHard	**180000**		160000	49000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Nickel	ND		1.6	0.40	mg/L		09/12/16 11:53	09/13/16 18:51	20
Phosphorus	**6900**	**J**	10000	3000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Selenium	ND		600	200	ug/L		09/12/16 11:53	09/13/16 18:51	20
Silver	ND		400	120	ug/L		09/12/16 11:53	09/13/16 18:51	20
Sodium	**1900000**		40000	12000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Thallium	ND		800	200	ug/L		09/12/16 11:53	09/13/16 18:51	20
Total Hardness	**300000**		260000	79000	ug/L		09/12/16 11:53	09/13/16 18:51	20
Vanadium	ND		2000	600	ug/L		09/12/16 11:53	09/13/16 18:51	20
Zinc	**300**	**J**	800	240	ug/L		09/12/16 11:53	09/13/16 18:51	20

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.8	ug/L		09/12/16 09:30	09/12/16 18:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**8600**		100	70	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	**0.20**	**H B**	0.050	0.011	mg/L			10/03/16 15:51	1

Client Sample ID: LCS-6B

Lab Sample ID: 160-18907-7

Date Collected: 09/01/16 15:15

Matrix: Water

Date Received: 09/01/16 16:10

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	4000		250	56	mg/L		09/06/16 08:50	09/06/16 14:22	50

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	1500		250	110	mg/L			09/29/16 17:57	5000

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	375000		5630	33500	500	414	pCi/L	09/23/16 15:38	09/26/16 19:36	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18907-8

Date Collected: 09/01/16 08:00

Matrix: Water

Date Received: 09/01/16 16:10

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 18:47	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 18:47	1
Benzene	ND		5.0	0.25	ug/L			09/08/16 18:47	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 18:47	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 18:47	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 18:47	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 18:47	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 18:47	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/08/16 18:47	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 18:47	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 18:47	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 18:47	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 18:47	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 18:47	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 18:47	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 18:47	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 18:47	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/08/16 18:47	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 18:47	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 18:47	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 18:47	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 18:47	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 18:47	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 18:47	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 18:47	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 18:47	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 18:47	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 18:47	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 18:47	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 18:47	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 18:47	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 18:47	1

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Client Sample ID: TRIP BLANK
Date Collected: 09/01/16 08:00
Date Received: 09/01/16 16:10

Lab Sample ID: 160-18907-8
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 18:47	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 18:47	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 18:47	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 18:47	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 18:47	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 18:47	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 18:47	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 18:47	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 18:47	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 18:47	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 18:47	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 18:47	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 18:47	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 18:47	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 18:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*71 - 139*		*09/08/16 18:47*	*1*
Dibromofluoromethane (Surr)	*95*		*80 - 121*		*09/08/16 18:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*		*09/08/16 18:47*	*1*
Toluene-d8 (Surr)	*107*		*80 - 129*		*09/08/16 18:47*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-268602/7
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/08/16 18:22	1
Acrylonitrile	ND		50	1.7	ug/L			09/08/16 18:22	1
Benzene	ND		5.0	0.25	ug/L			09/08/16 18:22	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/08/16 18:22	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/08/16 18:22	1
Bromoform	ND		5.0	0.37	ug/L			09/08/16 18:22	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/08/16 18:22	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/08/16 18:22	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/08/16 18:22	1
Chloroethane	ND		10	0.38	ug/L			09/08/16 18:22	1
Chloroform	ND		5.0	0.15	ug/L			09/08/16 18:22	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/08/16 18:22	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/08/16 18:22	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/08/16 18:22	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/08/16 18:22	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/08/16 18:22	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/08/16 18:22	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/08/16 18:22	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/08/16 18:22	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/08/16 18:22	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/08/16 18:22	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/08/16 18:22	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/08/16 18:22	1
2-Hexanone	ND		20	0.59	ug/L			09/08/16 18:22	1
Methyl bromide	ND		10	0.40	ug/L			09/08/16 18:22	1
Methyl chloride	ND		10	0.55	ug/L			09/08/16 18:22	1
Methylene bromide	ND		5.0	0.41	ug/L			09/08/16 18:22	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/08/16 18:22	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/08/16 18:22	1
Methyl iodide	ND		5.0	1.5	ug/L			09/08/16 18:22	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/08/16 18:22	1
Styrene	ND		5.0	0.35	ug/L			09/08/16 18:22	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/08/16 18:22	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/08/16 18:22	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/08/16 18:22	1
Toluene	ND		5.0	1.0	ug/L			09/08/16 18:22	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/08/16 18:22	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/08/16 18:22	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/08/16 18:22	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/08/16 18:22	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/08/16 18:22	1
Trichloroethene	ND		5.0	0.29	ug/L			09/08/16 18:22	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/08/16 18:22	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/08/16 18:22	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/08/16 18:22	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/08/16 18:22	1
Xylenes, Total	ND		10	0.85	ug/L			09/08/16 18:22	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-268602/7
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		71 - 139		09/08/16 18:22	1
Dibromofluoromethane (Surr)	96		80 - 121		09/08/16 18:22	1
1,2-Dichloroethane-d4 (Surr)	92		76 - 121		09/08/16 18:22	1
Toluene-d8 (Surr)	107		80 - 129		09/08/16 18:22	1

Lab Sample ID: LCS 160-268602/4
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	49.1		ug/L		98	63 - 131
Acrylonitrile	500	460		ug/L		92	81 - 117
Benzene	50.0	50.7		ug/L		101	80 - 120
Bromochloromethane	50.0	45.7		ug/L		91	80 - 120
Bromodichloromethane	50.0	48.8		ug/L		98	80 - 120
Bromoform	50.0	46.0		ug/L		92	80 - 120
Carbon disulfide	50.0	48.1		ug/L		96	79 - 126
Carbon tetrachloride	50.0	45.6		ug/L		91	73 - 123
Chlorobenzene	50.0	50.1		ug/L		100	80 - 120
Chloroethane	50.0	51.7		ug/L		103	52 - 140
Chloroform	50.0	46.1		ug/L		92	80 - 120
cis-1,2-Dichloroethene	50.0	46.2		ug/L		92	80 - 120
cis-1,3-Dichloropropene	50.0	49.9		ug/L		100	80 - 122
Dibromochloromethane	50.0	49.0		ug/L		98	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.4		ug/L		87	77 - 125
1,2-Dibromoethane (EDB)	50.0	47.8		ug/L		96	80 - 120
1,2-Dichlorobenzene	50.0	48.3		ug/L		97	80 - 120
1,4-Dichlorobenzene	50.0	52.7		ug/L		105	80 - 120
1,1-Dichloroethane	50.0	46.9		ug/L		94	80 - 120
1,2-Dichloroethane	50.0	47.2		ug/L		94	69 - 124
1,1-Dichloroethene	50.0	46.4		ug/L		93	77 - 126
1,2-Dichloropropane	50.0	48.3		ug/L		97	80 - 120
Ethylbenzene	50.0	47.4		ug/L		95	80 - 120
2-Hexanone	50.0	48.3		ug/L		97	64 - 136
Methyl bromide	50.0	53.8		ug/L		108	57 - 139
Methyl chloride	50.0	46.5		ug/L		93	70 - 127
Methylene bromide	50.0	48.3		ug/L		97	78 - 120
Methylene Chloride	50.0	45.9		ug/L		92	80 - 120
Methyl Ethyl Ketone	50.0	49.8		ug/L		100	70 - 130
Methyl iodide	50.0	45.8		ug/L		92	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	49.5		ug/L		99	76 - 129
Styrene	50.0	52.1		ug/L		104	80 - 120
1,1,1,2-Tetrachloroethane	50.0	47.6		ug/L		95	80 - 120
1,1,2,2-Tetrachloroethane	50.0	44.3		ug/L		89	80 - 120
Tetrachloroethene	50.0	46.8		ug/L		94	80 - 120
Toluene	50.0	49.6		ug/L		99	80 - 120
trans-1,4-Dichloro-2-butene	50.0	45.6		ug/L		91	75 - 127
trans-1,2-Dichloroethene	50.0	46.7		ug/L		93	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-268602/4
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	50.0		ug/L		100	80 - 130		
1,1,1-Trichloroethane			50.0	46.4		ug/L		93	76 - 120		
1,1,2-Trichloroethane			50.0	47.5		ug/L		95	80 - 120		
Trichloroethene			50.0	49.6		ug/L		99	73 - 120		
Trichlorofluoromethane			50.0	48.7		ug/L		97	74 - 130		
1,2,3-Trichloropropane			50.0	44.3		ug/L		89	80 - 120		
Vinyl acetate			50.0	48.6		ug/L		97	37 - 140		
Vinyl chloride			50.0	50.1		ug/L		100	51 - 140		
Xylenes, Total			100	90.7		ug/L		91	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*94*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*96*		*76 - 121*
Toluene-d8 (Surr)	*98*		*80 - 129*

Lab Sample ID: LCSD 160-268602/5
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	49.1		ug/L		98	63 - 131	0	20
Acrylonitrile			500	470		ug/L		94	81 - 117	2	20
Benzene			50.0	51.8		ug/L		104	80 - 120	2	20
Bromochloromethane			50.0	46.3		ug/L		93	80 - 120	1	20
Bromodichloromethane			50.0	50.3		ug/L		101	80 - 120	3	20
Bromoform			50.0	47.8		ug/L		96	80 - 120	4	20
Carbon disulfide			50.0	48.5		ug/L		97	79 - 126	1	20
Carbon tetrachloride			50.0	47.3		ug/L		95	73 - 123	4	20
Chlorobenzene			50.0	52.0		ug/L		104	80 - 120	4	20
Chloroethane			50.0	50.0		ug/L		100	52 - 140	3	20
Chloroform			50.0	46.8		ug/L		94	80 - 120	2	20
cis-1,2-Dichloroethene			50.0	47.3		ug/L		95	80 - 120	2	20
cis-1,3-Dichloropropene			50.0	52.1		ug/L		104	80 - 122	4	20
Dibromochloromethane			50.0	50.5		ug/L		101	80 - 120	3	20
1,2-Dibromo-3-Chloropropane			50.0	43.6		ug/L		87	77 - 125	0	20
1,2-Dibromoethane (EDB)			50.0	49.8		ug/L		100	80 - 120	4	20
1,2-Dichlorobenzene			50.0	48.4		ug/L		97	80 - 120	0	20
1,4-Dichlorobenzene			50.0	54.5		ug/L		109	80 - 120	3	20
1,1-Dichloroethane			50.0	47.6		ug/L		95	80 - 120	1	20
1,2-Dichloroethane			50.0	47.9		ug/L		96	69 - 124	2	20
1,1-Dichloroethene			50.0	47.4		ug/L		95	77 - 126	2	20
1,2-Dichloropropane			50.0	49.2		ug/L		98	80 - 120	2	20
Ethylbenzene			50.0	48.1		ug/L		96	80 - 120	1	20
2-Hexanone			50.0	49.7		ug/L		99	64 - 136	3	20
Methyl bromide			50.0	49.8		ug/L		100	57 - 139	8	20
Methyl chloride			50.0	47.0		ug/L		94	70 - 127	1	20
Methylene bromide			50.0	48.7		ug/L		97	78 - 120	1	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-268602/5
Matrix: Water
Analysis Batch: 268602

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	46.7		ug/L		93	80 - 120	2	20
Methyl Ethyl Ketone			50.0	50.7		ug/L		101	70 - 130	2	20
Methyl iodide			50.0	46.4		ug/L		93	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)			50.0	50.5		ug/L		101	76 - 129	2	20
Styrene			50.0	54.5		ug/L		109	80 - 120	4	20
1,1,1,2-Tetrachloroethane			50.0	48.6		ug/L		97	80 - 120	2	20
1,1,2,2-Tetrachloroethane			50.0	45.9		ug/L		92	80 - 120	4	20
Tetrachloroethene			50.0	48.5		ug/L		97	80 - 120	4	20
Toluene			50.0	50.4		ug/L		101	80 - 120	2	20
trans-1,4-Dichloro-2-butene			50.0	46.7		ug/L		93	75 - 127	2	20
trans-1,2-Dichloroethene			50.0	47.3		ug/L		95	80 - 120	1	20
trans-1,3-Dichloropropene			50.0	52.6		ug/L		105	80 - 130	5	20
1,1,1-Trichloroethane			50.0	46.7		ug/L		93	76 - 120	1	20
1,1,2-Trichloroethane			50.0	49.5		ug/L		99	80 - 120	4	20
Trichloroethene			50.0	50.5		ug/L		101	73 - 120	2	20
Trichlorofluoromethane			50.0	47.8		ug/L		96	74 - 130	2	20
1,2,3-Trichloropropane			50.0	45.8		ug/L		92	80 - 120	3	20
Vinyl acetate			50.0	49.0		ug/L		98	37 - 140	1	20
Vinyl chloride			50.0	48.6		ug/L		97	51 - 140	3	20
Xylenes, Total			100	93.4		ug/L		93	80 - 121	3	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*95*		*76 - 121*
Toluene-d8 (Surr)	*99*		*80 - 129*

Lab Sample ID: 160-18907-3 MS
Matrix: Water
Analysis Batch: 268602

Client Sample ID: I-68
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	41.2		ug/L		82	52 - 138
Acrylonitrile	ND		500	438		ug/L		88	58 - 142
Benzene	ND		50.0	50.4		ug/L		101	80 - 120
Bromochloromethane	ND		50.0	45.2		ug/L		90	72 - 125
Bromodichloromethane	ND		50.0	46.5		ug/L		93	71 - 128
Bromoform	ND		50.0	42.4		ug/L		85	65 - 133
Carbon disulfide	ND		50.0	48.8		ug/L		98	69 - 139
Carbon tetrachloride	ND		50.0	46.1		ug/L		92	70 - 126
Chlorobenzene	1.1	J	50.0	50.0		ug/L		98	80 - 120
Chloroethane	ND		50.0	61.3		ug/L		123	59 - 144
Chloroform	ND		50.0	45.5		ug/L		91	80 - 120
cis-1,2-Dichloroethene	ND		50.0	45.9		ug/L		92	80 - 124
cis-1,3-Dichloropropene	ND		50.0	48.0		ug/L		96	67 - 130
Dibromochloromethane	ND		50.0	45.9		ug/L		92	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	42.3		ug/L		85	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	44.5		ug/L		89	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18907-3 MS
Matrix: Water
Analysis Batch: 268602

Client Sample ID: I-68
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	48.0		ug/L		96	80 - 124
1,4-Dichlorobenzene	ND		50.0	53.4		ug/L		107	80 - 120
1,1-Dichloroethane	ND		50.0	46.7		ug/L		93	80 - 120
1,2-Dichloroethane	ND		50.0	44.4		ug/L		89	56 - 136
1,1-Dichloroethene	ND		50.0	46.9		ug/L		94	66 - 137
1,2-Dichloropropane	ND		50.0	46.7		ug/L		93	80 - 123
Ethylbenzene	ND		50.0	48.4		ug/L		97	80 - 121
2-Hexanone	ND		50.0	41.2		ug/L		82	47 - 150
Methyl bromide	ND		50.0	58.3		ug/L		117	53 - 146
Methyl chloride	ND		50.0	47.9		ug/L		96	61 - 137
Methylene bromide	ND		50.0	43.8		ug/L		88	61 - 136
Methylene Chloride	ND		50.0	45.5		ug/L		91	80 - 120
Methyl Ethyl Ketone	ND		50.0	43.8		ug/L		88	58 - 143
Methyl iodide	ND		50.0	45.6		ug/L		91	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	45.3		ug/L		91	53 - 150
Styrene	ND		50.0	52.1		ug/L		104	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	46.6		ug/L		93	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	43.2		ug/L		86	60 - 150
Tetrachloroethene	ND		50.0	47.0		ug/L		94	66 - 132
Toluene	ND		50.0	49.1		ug/L		98	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	42.4		ug/L		85	55 - 146
trans-1,2-Dichloroethene	ND		50.0	46.8		ug/L		94	79 - 121
trans-1,3-Dichloropropene	ND		50.0	46.6		ug/L		93	68 - 143
1,1,1-Trichloroethane	ND		50.0	46.9		ug/L		94	74 - 123
1,1,2-Trichloroethane	ND		50.0	46.3		ug/L		93	70 - 134
Trichloroethene	ND		50.0	48.3		ug/L		97	63 - 120
Trichlorofluoromethane	ND		50.0	54.6		ug/L		109	53 - 150
1,2,3-Trichloropropane	ND		50.0	40.8		ug/L		82	62 - 137
Vinyl acetate	ND		50.0	47.3		ug/L		95	63 - 150
Vinyl chloride	ND		50.0	58.2		ug/L		116	54 - 140
Xylenes, Total	ND		100	92.3		ug/L		92	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*92*		*71 - 139*
Dibromofluoromethane (Surr)	*93*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*93*		*76 - 121*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: 160-18907-3 MSD
Matrix: Water
Analysis Batch: 268602

Client Sample ID: I-68
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	44.7		ug/L		89	52 - 138	8	20
Acrylonitrile	ND		500	460		ug/L		92	58 - 142	5	20
Benzene	ND		50.0	51.9		ug/L		104	80 - 120	3	20
Bromochloromethane	ND		50.0	46.3		ug/L		93	72 - 125	2	20
Bromodichloromethane	ND		50.0	49.1		ug/L		98	71 - 128	5	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18907-3 MSD
Matrix: Water
Analysis Batch: 268602

Client Sample ID: I-68
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	45.1		ug/L		90	65 - 133	6	20
Carbon disulfide	ND		50.0	49.2		ug/L		98	69 - 139	1	20
Carbon tetrachloride	ND		50.0	47.4		ug/L		95	70 - 126	3	20
Chlorobenzene	1.1	J	50.0	51.7		ug/L		101	80 - 120	3	20
Chloroethane	ND		50.0	56.4		ug/L		113	59 - 144	8	20
Chloroform	ND		50.0	47.3		ug/L		95	80 - 120	4	20
cis-1,2-Dichloroethene	ND		50.0	47.4		ug/L		95	80 - 124	3	20
cis-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	67 - 130	5	20
Dibromochloromethane	ND		50.0	49.1		ug/L		98	68 - 133	7	20
1,2-Dibromo-3-Chloropropane	ND		50.0	44.2		ug/L		88	58 - 148	4	20
1,2-Dibromoethane (EDB)	ND		50.0	48.4		ug/L		97	65 - 138	8	20
1,2-Dichlorobenzene	ND		50.0	48.5		ug/L		97	80 - 124	1	20
1,4-Dichlorobenzene	ND		50.0	54.4		ug/L		109	80 - 120	2	20
1,1-Dichloroethane	ND		50.0	48.0		ug/L		96	80 - 120	3	20
1,2-Dichloroethane	ND		50.0	47.9		ug/L		96	56 - 136	8	20
1,1-Dichloroethene	ND		50.0	47.3		ug/L		95	66 - 137	1	20
1,2-Dichloropropane	ND		50.0	48.8		ug/L		98	80 - 123	4	20
Ethylbenzene	ND		50.0	49.0		ug/L		98	80 - 121	1	20
2-Hexanone	ND		50.0	46.9		ug/L		94	47 - 150	13	20
Methyl bromide	ND		50.0	55.1		ug/L		110	53 - 146	6	20
Methyl chloride	ND		50.0	48.5		ug/L		97	61 - 137	1	20
Methylene bromide	ND		50.0	47.3		ug/L		95	61 - 136	8	20
Methylene Chloride	ND		50.0	46.5		ug/L		93	80 - 120	2	20
Methyl Ethyl Ketone	ND		50.0	46.7		ug/L		93	58 - 143	6	20
Methyl iodide	ND		50.0	46.3		ug/L		93	69 - 124	2	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	48.8		ug/L		98	53 - 150	7	20
Styrene	ND		50.0	53.7		ug/L		107	44 - 150	3	20
1,1,1,2-Tetrachloroethane	ND		50.0	48.8		ug/L		98	80 - 120	5	20
1,1,2,2-Tetrachloroethane	ND		50.0	45.9		ug/L		92	60 - 150	6	20
Tetrachloroethene	ND		50.0	47.6		ug/L		95	66 - 132	1	20
Toluene	ND		50.0	49.7		ug/L		99	75 - 134	1	20
trans-1,4-Dichloro-2-butene	ND		50.0	45.1		ug/L		90	55 - 146	6	20
trans-1,2-Dichloroethene	ND		50.0	48.4		ug/L		97	79 - 121	3	20
trans-1,3-Dichloropropene	ND		50.0	50.6		ug/L		101	68 - 143	8	20
1,1,1-Trichloroethane	ND		50.0	47.8		ug/L		96	74 - 123	2	20
1,1,2-Trichloroethane	ND		50.0	47.7		ug/L		95	70 - 134	3	20
Trichloroethene	ND		50.0	50.1		ug/L		100	63 - 120	4	20
Trichlorofluoromethane	ND		50.0	52.5		ug/L		105	53 - 150	4	20
1,2,3-Trichloropropane	ND		50.0	43.3		ug/L		87	62 - 137	6	20
Vinyl acetate	ND		50.0	51.1		ug/L		102	63 - 150	8	20
Vinyl chloride	ND		50.0	53.9		ug/L		108	54 - 140	8	20
Xylenes, Total	ND		100	94.5		ug/L		95	80 - 124	2	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*96*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*97*		*76 - 121*
Toluene-d8 (Surr)	*99*		*80 - 129*

Lab Sample ID: MB 160-270088/7
Matrix: Water
Analysis Batch: 270088

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/15/16 18:46	1
Acrylonitrile	ND		50	1.7	ug/L			09/15/16 18:46	1
Benzene	ND		5.0	0.25	ug/L			09/15/16 18:46	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/15/16 18:46	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/15/16 18:46	1
Bromoform	ND		5.0	0.37	ug/L			09/15/16 18:46	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/15/16 18:46	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/15/16 18:46	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/15/16 18:46	1
Chloroethane	ND		10	0.38	ug/L			09/15/16 18:46	1
Chloroform	ND		5.0	0.15	ug/L			09/15/16 18:46	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/15/16 18:46	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/15/16 18:46	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/15/16 18:46	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/15/16 18:46	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/15/16 18:46	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/15/16 18:46	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/15/16 18:46	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/15/16 18:46	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/15/16 18:46	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/15/16 18:46	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/15/16 18:46	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/15/16 18:46	1
2-Hexanone	ND		20	0.59	ug/L			09/15/16 18:46	1
Methyl bromide	ND		10	0.40	ug/L			09/15/16 18:46	1
Methyl chloride	ND		10	0.55	ug/L			09/15/16 18:46	1
Methylene bromide	ND		5.0	0.41	ug/L			09/15/16 18:46	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/15/16 18:46	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/15/16 18:46	1
Methyl iodide	ND		5.0	1.5	ug/L			09/15/16 18:46	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/15/16 18:46	1
Styrene	ND		5.0	0.35	ug/L			09/15/16 18:46	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/15/16 18:46	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/15/16 18:46	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/15/16 18:46	1
Toluene	ND		5.0	1.0	ug/L			09/15/16 18:46	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/15/16 18:46	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/15/16 18:46	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/15/16 18:46	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/15/16 18:46	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/15/16 18:46	1
Trichloroethene	ND		5.0	0.29	ug/L			09/15/16 18:46	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/15/16 18:46	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/15/16 18:46	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/15/16 18:46	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/15/16 18:46	1
Xylenes, Total	ND		10	0.85	ug/L			09/15/16 18:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*		*09/15/16 18:46*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-270088/7
Matrix: Water
Analysis Batch: 270088

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	*96*		*80 - 121*		*09/15/16 18:46*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*76 - 121*		*09/15/16 18:46*	*1*
Toluene-d8 (Surr)	*98*		*80 - 129*		*09/15/16 18:46*	*1*

Lab Sample ID: LCS 160-270088/4
Matrix: Water
Analysis Batch: 270088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	48.9		ug/L		98	63 - 131
Acrylonitrile	500	493		ug/L		99	81 - 117
Benzene	50.0	45.3		ug/L		91	80 - 120
Bromochloromethane	50.0	46.8		ug/L		94	80 - 120
Bromodichloromethane	50.0	50.2		ug/L		100	80 - 120
Bromoform	50.0	46.1		ug/L		92	80 - 120
Carbon disulfide	50.0	47.6		ug/L		95	79 - 126
Carbon tetrachloride	50.0	47.9		ug/L		96	73 - 123
Chlorobenzene	50.0	48.2		ug/L		96	80 - 120
Chloroethane	50.0	47.7		ug/L		95	52 - 140
Chloroform	50.0	48.5		ug/L		97	80 - 120
cis-1,2-Dichloroethene	50.0	46.3		ug/L		93	80 - 120
cis-1,3-Dichloropropene	50.0	50.3		ug/L		101	80 - 122
Dibromochloromethane	50.0	47.4		ug/L		95	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.3		ug/L		95	77 - 125
1,2-Dibromoethane (EDB)	50.0	46.7		ug/L		93	80 - 120
1,2-Dichlorobenzene	50.0	47.3		ug/L		95	80 - 120
1,4-Dichlorobenzene	50.0	48.4		ug/L		97	80 - 120
1,1-Dichloroethane	50.0	48.4		ug/L		97	80 - 120
1,2-Dichloroethane	50.0	48.3		ug/L		97	69 - 124
1,1-Dichloroethene	50.0	45.4		ug/L		91	77 - 126
1,2-Dichloropropane	50.0	49.1		ug/L		98	80 - 120
Ethylbenzene	50.0	47.7		ug/L		95	80 - 120
2-Hexanone	50.0	47.1		ug/L		94	64 - 136
Methyl bromide	50.0	43.0		ug/L		86	57 - 139
Methyl chloride	50.0	47.6		ug/L		95	70 - 127
Methylene bromide	50.0	47.7		ug/L		95	78 - 120
Methylene Chloride	50.0	47.6		ug/L		95	80 - 120
Methyl Ethyl Ketone	50.0	47.2		ug/L		94	70 - 130
Methyl iodide	50.0	38.7		ug/L		77	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	49.5		ug/L		99	76 - 129
Styrene	50.0	48.7		ug/L		97	80 - 120
1,1,1,2-Tetrachloroethane	50.0	48.5		ug/L		97	80 - 120
1,1,2,2-Tetrachloroethane	50.0	46.9		ug/L		94	80 - 120
Tetrachloroethene	50.0	46.6		ug/L		93	80 - 120
Toluene	50.0	46.4		ug/L		93	80 - 120
trans-1,4-Dichloro-2-butene	50.0	49.3		ug/L		99	75 - 127
trans-1,2-Dichloroethene	50.0	45.7		ug/L		91	80 - 120
trans-1,3-Dichloropropene	50.0	51.1		ug/L		102	80 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-270088/4
Matrix: Water
Analysis Batch: 270088

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,1,1-Trichloroethane			50.0	47.9		ug/L		96	76 - 120		
1,1,2-Trichloroethane			50.0	47.2		ug/L		94	80 - 120		
Trichloroethene			50.0	47.2		ug/L		94	73 - 120		
Trichlorofluoromethane			50.0	47.1		ug/L		94	74 - 130		
1,2,3-Trichloropropane			50.0	46.8		ug/L		94	80 - 120		
Vinyl acetate			50.0	57.7		ug/L		115	37 - 140		
Vinyl chloride			50.0	47.5		ug/L		95	51 - 140		
Xylenes, Total			100	95.3		ug/L		95	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*
Dibromofluoromethane (Surr)	*101*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*105*		*76 - 121*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: LCSD 160-270088/5
Matrix: Water
Analysis Batch: 270088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	43.5		ug/L		87	63 - 131	12	20
Acrylonitrile			500	492		ug/L		98	81 - 117	0	20
Benzene			50.0	45.6		ug/L		91	80 - 120	1	20
Bromochloromethane			50.0	47.4		ug/L		95	80 - 120	1	20
Bromodichloromethane			50.0	48.9		ug/L		98	80 - 120	3	20
Bromoform			50.0	46.2		ug/L		92	80 - 120	0	20
Carbon disulfide			50.0	48.0		ug/L		96	79 - 126	1	20
Carbon tetrachloride			50.0	48.3		ug/L		97	73 - 123	1	20
Chlorobenzene			50.0	48.3		ug/L		97	80 - 120	0	20
Chloroethane			50.0	48.6		ug/L		97	52 - 140	2	20
Chloroform			50.0	48.5		ug/L		97	80 - 120	0	20
cis-1,2-Dichloroethene			50.0	46.3		ug/L		93	80 - 120	0	20
cis-1,3-Dichloropropene			50.0	50.4		ug/L		101	80 - 122	0	20
Dibromochloromethane			50.0	47.6		ug/L		95	80 - 120	0	20
1,2-Dibromo-3-Chloropropane			50.0	47.4		ug/L		95	77 - 125	0	20
1,2-Dibromoethane (EDB)			50.0	46.6		ug/L		93	80 - 120	0	20
1,2-Dichlorobenzene			50.0	47.9		ug/L		96	80 - 120	1	20
1,4-Dichlorobenzene			50.0	48.7		ug/L		97	80 - 120	1	20
1,1-Dichloroethane			50.0	48.7		ug/L		97	80 - 120	1	20
1,2-Dichloroethane			50.0	48.1		ug/L		96	69 - 124	0	20
1,1-Dichloroethene			50.0	45.6		ug/L		91	77 - 126	0	20
1,2-Dichloropropane			50.0	49.5		ug/L		99	80 - 120	1	20
Ethylbenzene			50.0	48.1		ug/L		96	80 - 120	1	20
2-Hexanone			50.0	47.5		ug/L		95	64 - 136	1	20
Methyl bromide			50.0	43.0		ug/L		86	57 - 139	0	20
Methyl chloride			50.0	47.7		ug/L		95	70 - 127	0	20
Methylene bromide			50.0	47.7		ug/L		95	78 - 120	0	20
Methylene Chloride			50.0	47.4		ug/L		95	80 - 120	0	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-270088/5
Matrix: Water
Analysis Batch: 270088

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl Ethyl Ketone	50.0	46.8		ug/L		94	70 - 130	1	20
Methyl iodide	50.0	39.2		ug/L		78	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)	50.0	50.2		ug/L		100	76 - 129	1	20
Styrene	50.0	49.1		ug/L		98	80 - 120	1	20
1,1,1,2-Tetrachloroethane	50.0	48.5		ug/L		97	80 - 120	0	20
1,1,2,2-Tetrachloroethane	50.0	47.9		ug/L		96	80 - 120	2	20
Tetrachloroethene	50.0	46.8		ug/L		94	80 - 120	0	20
Toluene	50.0	47.1		ug/L		94	80 - 120	2	20
trans-1,4-Dichloro-2-butene	50.0	49.5		ug/L		99	75 - 127	0	20
trans-1,2-Dichloroethene	50.0	46.0		ug/L		92	80 - 120	1	20
trans-1,3-Dichloropropene	50.0	51.0		ug/L		102	80 - 130	0	20
1,1,1-Trichloroethane	50.0	48.1		ug/L		96	76 - 120	0	20
1,1,2-Trichloroethane	50.0	47.4		ug/L		95	80 - 120	0	20
Trichloroethene	50.0	47.4		ug/L		95	73 - 120	0	20
Trichlorofluoromethane	50.0	47.6		ug/L		95	74 - 130	1	20
1,2,3-Trichloropropane	50.0	47.2		ug/L		94	80 - 120	1	20
Vinyl acetate	50.0	58.0		ug/L		116	37 - 140	0	20
Vinyl chloride	50.0	48.0		ug/L		96	51 - 140	1	20
Xylenes, Total	100	96.4		ug/L		96	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*99*		*71 - 139*
Dibromofluoromethane (Surr)	*100*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-268208/18
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/06/16 17:01	1
Sulfate	ND		0.50	0.050	mg/L			09/06/16 17:01	1
Chloride	ND		0.20	0.020	mg/L			09/06/16 17:01	1

Lab Sample ID: LCS 160-268208/19
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	1.01		mg/L		101	90 - 110
Sulfate	8.00	7.67		mg/L		96	90 - 110
Chloride	2.00	1.95		mg/L		97	90 - 110

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-18897-D-1 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride - DL	0.056	J F1	4.00	3.46	F1	mg/L		85	90 - 110
Sulfate - DL	1.8		8.00	9.27		mg/L		94	90 - 110

Lab Sample ID: 160-18897-D-1 DU
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride - DL	0.056	J F1	0.0641	J	mg/L		14	20
Sulfate - DL	1.8		1.71		mg/L		4	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Lab Sample ID: 160-18897-D-1 MS
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride - DL2	980		1000	1940		mg/L		97	90 - 110

Lab Sample ID: 160-18897-D-1 DU
Matrix: Water
Analysis Batch: 268208

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride - DL2	980		976		mg/L		0.2	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-269134/1-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Arsenic	ND		10	4.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Barium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Beryllium	ND		5.0	1.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
Boron	ND		100	25	ug/L		09/12/16 11:53	09/13/16 17:30	1
Cadmium	ND		5.0	1.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
CaHard	ND		2500	750	ug/L		09/12/16 11:53	09/13/16 17:30	1
Calcium	ND		1000	300	ug/L		09/12/16 11:53	09/13/16 17:30	1
Chromium	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Cobalt	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Copper	ND		25	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Lead	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Magnesium	ND		1.0	0.30	mg/L		09/12/16 11:53	09/13/16 17:30	1
Manganese	ND		15	2.5	ug/L		09/12/16 11:53	09/13/16 17:30	1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: MB 160-269134/1-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
MgHard	ND		4100	1200	ug/L		09/12/16 11:53	09/13/16 17:30	1
Nickel	ND		0.040	0.010	mg/L		09/12/16 11:53	09/13/16 17:30	1
Phosphorus	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:30	1
Selenium	ND		15	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Silver	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Sodium	ND		1000	300	ug/L		09/12/16 11:53	09/13/16 17:30	1
Thallium	ND		20	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Total Hardness	ND		6600	2000	ug/L		09/12/16 11:53	09/13/16 17:30	1
Vanadium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Zinc	ND		20	6.0	ug/L		09/12/16 11:53	09/13/16 17:30	1

Lab Sample ID: LCS 160-269134/2-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	489		ug/L		98	80 - 120
Arsenic	1000	956		ug/L		96	80 - 120
Barium	1000	1000		ug/L		100	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Boron	2000	2080	E	ug/L		104	80 - 120
Cadmium	1000	976		ug/L		98	80 - 120
Calcium	10000	10200		ug/L		102	80 - 120
Chromium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	1020		ug/L		102	80 - 120
Copper	1000	992		ug/L		99	80 - 120
Lead	1000	1030		ug/L		103	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Manganese	1000	1050		ug/L		105	80 - 120
Nickel	1.00	1.02		mg/L		102	80 - 120
Phosphorus	1000	1100		ug/L		110	80 - 120
Selenium	500	489		ug/L		98	80 - 120
Silver	200	206		ug/L		103	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120
Thallium	200	214		ug/L		107	80 - 120
Vanadium	1000	1010		ug/L		101	80 - 120
Zinc	1000	966		ug/L		97	80 - 120

Lab Sample ID: 160-18933-B-4-B MS ^5
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	487		ug/L		97	75 - 125
Arsenic	74		1000	1030		ug/L		95	75 - 125
Barium	770		1000	1730		ug/L		96	75 - 125
Beryllium	ND		1000	1020		ug/L		102	75 - 125
Boron	270	J	2000	2340		ug/L		103	75 - 125
Cadmium	ND		1000	978		ug/L		98	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18933-B-4-B MS ^5
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	310000		10000	311000	4	ug/L		-9	75 - 125
Chromium	ND		1000	999		ug/L		100	75 - 125
Cobalt	ND		1000	999		ug/L		100	75 - 125
Copper	ND		1000	977		ug/L		98	75 - 125
Lead	ND		1000	1020		ug/L		102	75 - 125
Magnesium	72		10.0	80.4	4	mg/L		81	75 - 125
Manganese	2300		1000	3280		ug/L		96	75 - 125
Nickel	ND		1.00	1.02		mg/L		102	75 - 125
Phosphorus	1700		1000	2770		ug/L		104	75 - 125
Selenium	ND		500	488		ug/L		98	75 - 125
Silver	ND		200	208		ug/L		104	75 - 125
Sodium	60000		10000	68200	4	ug/L		83	75 - 125
Thallium	ND		200	219		ug/L		110	75 - 125
Vanadium	ND		1000	991		ug/L		99	75 - 125
Zinc	ND		1000	972		ug/L		97	75 - 125

Lab Sample ID: 160-18933-B-4-C MSD ^5
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	495		ug/L		99	75 - 125	2	20
Arsenic	74		1000	1050		ug/L		98	75 - 125	2	20
Barium	770		1000	1730		ug/L		96	75 - 125	0	20
Beryllium	ND		1000	1000		ug/L		100	75 - 125	1	20
Boron	270	J	2000	2290		ug/L		101	75 - 125	2	20
Cadmium	ND		1000	991		ug/L		99	75 - 125	1	20
Calcium	310000		10000	323000	4	ug/L		112	75 - 125	4	20
Chromium	ND		1000	1010		ug/L		101	75 - 125	1	20
Cobalt	ND		1000	1010		ug/L		101	75 - 125	2	20
Copper	ND		1000	996		ug/L		100	75 - 125	2	20
Lead	ND		1000	1020		ug/L		102	75 - 125	1	20
Magnesium	72		10.0	81.9	4	mg/L		96	75 - 125	2	20
Manganese	2300		1000	3290		ug/L		98	75 - 125	0	20
Nickel	ND		1.00	1.04		mg/L		104	75 - 125	2	20
Phosphorus	1700		1000	2860		ug/L		113	75 - 125	3	20
Selenium	ND		500	496		ug/L		99	75 - 125	2	20
Silver	ND		200	208		ug/L		104	75 - 125	0	20
Sodium	60000		10000	69300	4	ug/L		94	75 - 125	2	20
Thallium	ND		200	224		ug/L		112	75 - 125	2	20
Vanadium	ND		1000	981		ug/L		98	75 - 125	1	20
Zinc	ND		1000	984		ug/L		98	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-269108/1-A
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269108

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:28	09/12/16 16:34	1

Lab Sample ID: LCS 160-269108/2-A
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269108

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.22		ug/L		84	80 - 120

Lab Sample ID: 160-18807-G-1-C MS
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269108

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.11	J	5.00	4.78		ug/L		93	80 - 120

Lab Sample ID: 160-18807-G-1-D MSD
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 269108

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11	J	5.00	4.71		ug/L		92	80 - 120	1	20

Lab Sample ID: MB 160-269109/1-A
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269109

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/12/16 09:30	09/12/16 17:34	1

Lab Sample ID: LCS 160-269109/2-A
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269109

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	4.51		ug/L		90	80 - 120

Lab Sample ID: 160-18861-A-6-B MS
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 269109

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.71		ug/L		94	80 - 120

Lab Sample ID: 160-18861-A-6-C MSD
Matrix: Water
Analysis Batch: 269210

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 269109

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.59		ug/L		92	80 - 120	2	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-268258/1
Matrix: Water
Analysis Batch: 268258

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			09/07/16 08:25	1

Lab Sample ID: LCS 160-268258/2
Matrix: Water
Analysis Batch: 268258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	505		mg/L		101	90 - 110

Lab Sample ID: 160-18907-1 DU
Matrix: Water
Analysis Batch: 268258

Client Sample ID: MW-1204
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	3900		3840		mg/L		NC	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-272554/25
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/29/16 17:13	1

Lab Sample ID: LCS 160-272554/26
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.535		mg/L		107	90 - 110

Method: 350.1 - Nitrogen, Ammonia - RADL

Lab Sample ID: 160-18897-E-1 MS ^100
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia - RADL	26		0.500	26.8	4	mg/L		72	90 - 110

Lab Sample ID: 160-18897-E-1 DU ^100
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia - RADL	26		26.6		mg/L		0.5	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-272820/13
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0115	J	0.050	0.011	mg/L			10/03/16 14:51	1

Lab Sample ID: LCS 160-272820/14
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.508		mg/L		102	90 - 110

Lab Sample ID: 160-18897-E-1 MS
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.062	B F1	0.500	0.0586	F1	mg/L		-0.7	90 - 110

Lab Sample ID: 160-18897-E-1 DU
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.062	B F1	0.0500	F5	mg/L		22	20

Method: 410.4 - COD

Lab Sample ID: MB 160-268158/3-A
Matrix: Water
Analysis Batch: 268216

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268158

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/06/16 08:48	09/06/16 14:22	1

Lab Sample ID: LCS 160-268158/4-A
Matrix: Water
Analysis Batch: 268216

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268158

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	51.0		mg/L		102	90 - 110

Lab Sample ID: 160-18907-6 MS
Matrix: Water
Analysis Batch: 268216

Client Sample ID: S-53
Prep Type: Total/NA
Prep Batch: 268158

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	4.0	J	50.0	57.0		mg/L		106	90 - 110

Method: 410.4 - COD (Continued)

Lab Sample ID: 160-18897-E-3-B DU
Matrix: Water
Analysis Batch: 268216

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 268158

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Chemical Oxygen Demand	96			95.0		mg/L				1	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-271438/1-A
Matrix: Water
Analysis Batch: 272035

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271438

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-124.8	U	134	134	500	264	pCi/L	09/23/16 15:38	09/26/16 15:50	1

Lab Sample ID: LCS 160-271438/2-A
Matrix: Water
Analysis Batch: 272035

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271438

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium			3020	2693		410	500	273	pCi/L	89	74 - 114		

Lab Sample ID: 160-18907-2 MS
Matrix: Water
Analysis Batch: 272035

Client Sample ID: PZ-112-AS
Prep Type: Total/NA
Prep Batch: 271438

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Tritium	112	U	3020	3256		469	500	288	pCi/L	108	67 - 130		

Lab Sample ID: 160-18907-1 DU
Matrix: Water
Analysis Batch: 272035

Client Sample ID: MW-1204
Prep Type: Total/NA
Prep Batch: 271438

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	9020			8612		945	500	283	pCi/L			0.21	1

GC/MS VOA

Analysis Batch: 268602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1 - DL2	MW-1204	Total/NA	Water	8260C	
160-18907-2	PZ-112-AS	Total/NA	Water	8260C	
160-18907-3	I-68	Total/NA	Water	8260C	
160-18907-4	PZ-204A-SS	Total/NA	Water	8260C	
160-18907-5	PZ-302-AS	Total/NA	Water	8260C	
160-18907-6	S-53	Total/NA	Water	8260C	
160-18907-7 - DL2	LCS-6B	Total/NA	Water	8260C	
160-18907-8	TRIP BLANK	Total/NA	Water	8260C	
MB 160-268602/7	Method Blank	Total/NA	Water	8260C	
LCS 160-268602/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-268602/5	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18907-3 MS	I-68	Total/NA	Water	8260C	
160-18907-3 MSD	I-68	Total/NA	Water	8260C	

Analysis Batch: 270088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-2 - DL	PZ-112-AS	Total/NA	Water	8260C	
160-18907-5 - DL	PZ-302-AS	Total/NA	Water	8260C	
MB 160-270088/7	Method Blank	Total/NA	Water	8260C	
LCS 160-270088/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-270088/5	Lab Control Sample Dup	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 268208

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1 - DL	MW-1204	Total/NA	Water	300.0	
160-18907-1 - DL2	MW-1204	Total/NA	Water	300.0	
160-18907-2 - DL	PZ-112-AS	Total/NA	Water	300.0	
160-18907-2 - DL2	PZ-112-AS	Total/NA	Water	300.0	
160-18907-3 - DL	I-68	Total/NA	Water	300.0	
160-18907-3 - DL2	I-68	Total/NA	Water	300.0	
160-18907-3 - DL3	I-68	Total/NA	Water	300.0	
160-18907-4 - DL	PZ-204A-SS	Total/NA	Water	300.0	
160-18907-4 - DL2	PZ-204A-SS	Total/NA	Water	300.0	
160-18907-4 - DL3	PZ-204A-SS	Total/NA	Water	300.0	
160-18907-5 - DL	PZ-302-AS	Total/NA	Water	300.0	
160-18907-5 - DL2	PZ-302-AS	Total/NA	Water	300.0	
160-18907-6	S-53	Total/NA	Water	300.0	
160-18907-6 - DL	S-53	Total/NA	Water	300.0	
160-18907-7 - DL	LCS-6B	Total/NA	Water	300.0	
160-18907-7 - DL2	LCS-6B	Total/NA	Water	300.0	
MB 160-268208/18	Method Blank	Total/NA	Water	300.0	
LCS 160-268208/19	Lab Control Sample	Total/NA	Water	300.0	
160-18897-D-1 MS - DL	Matrix Spike	Total/NA	Water	300.0	
160-18897-D-1 MS - DL2	Matrix Spike	Total/NA	Water	300.0	
160-18897-D-1 DU - DL	Duplicate	Total/NA	Water	300.0	
160-18897-D-1 DU - DL2	Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 269108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	7470A	
160-18907-2	PZ-112-AS	Total/NA	Water	7470A	
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18807-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	
160-18807-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 269109

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-3	I-68	Total/NA	Water	7470A	
160-18907-4	PZ-204A-SS	Total/NA	Water	7470A	
160-18907-5	PZ-302-AS	Total/NA	Water	7470A	
160-18907-6	S-53	Total/NA	Water	7470A	
160-18907-7	LCS-6B	Total/NA	Water	7470A	
MB 160-269109/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-269109/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18861-A-6-B MS	Matrix Spike	Total/NA	Water	7470A	
160-18861-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 269134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	3010A	
160-18907-2	PZ-112-AS	Total/NA	Water	3010A	
160-18907-3	I-68	Total/NA	Water	3010A	
160-18907-4	PZ-204A-SS	Total/NA	Water	3010A	
160-18907-5	PZ-302-AS	Total/NA	Water	3010A	
160-18907-6	S-53	Total/NA	Water	3010A	
160-18907-7	LCS-6B	Total/NA	Water	3010A	
MB 160-269134/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-269134/2-A	Lab Control Sample	Total/NA	Water	3010A	
160-18933-B-4-B MS ^5	Matrix Spike	Total/NA	Water	3010A	
160-18933-B-4-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	3010A	

Analysis Batch: 269210

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	7470A	269108
160-18907-2	PZ-112-AS	Total/NA	Water	7470A	269108
160-18907-3	I-68	Total/NA	Water	7470A	269109
160-18907-4	PZ-204A-SS	Total/NA	Water	7470A	269109
160-18907-5	PZ-302-AS	Total/NA	Water	7470A	269109
160-18907-6	S-53	Total/NA	Water	7470A	269109
160-18907-7	LCS-6B	Total/NA	Water	7470A	269109
MB 160-269108/1-A	Method Blank	Total/NA	Water	7470A	269108
MB 160-269109/1-A	Method Blank	Total/NA	Water	7470A	269109
LCS 160-269108/2-A	Lab Control Sample	Total/NA	Water	7470A	269108
LCS 160-269109/2-A	Lab Control Sample	Total/NA	Water	7470A	269109
160-18807-G-1-C MS	Matrix Spike	Total/NA	Water	7470A	269108
160-18807-G-1-D MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	269108
160-18861-A-6-B MS	Matrix Spike	Total/NA	Water	7470A	269109
160-18861-A-6-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	269109

Metals (Continued)

Analysis Batch: 269399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	6010C	269134
160-18907-2	PZ-112-AS	Total/NA	Water	6010C	269134
160-18907-3	I-68	Total/NA	Water	6010C	269134
160-18907-4	PZ-204A-SS	Total/NA	Water	6010C	269134
160-18907-5	PZ-302-AS	Total/NA	Water	6010C	269134
160-18907-6	S-53	Total/NA	Water	6010C	269134
160-18907-7	LCS-6B	Total/NA	Water	6010C	269134
MB 160-269134/1-A	Method Blank	Total/NA	Water	6010C	269134
LCS 160-269134/2-A	Lab Control Sample	Total/NA	Water	6010C	269134
160-18933-B-4-B MS ^5	Matrix Spike	Total/NA	Water	6010C	269134
160-18933-B-4-C MSD ^5	Matrix Spike Duplicate	Total/NA	Water	6010C	269134

Analysis Batch: 269953

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-4	PZ-204A-SS	Total/NA	Water	6010C	269134

General Chemistry

Prep Batch: 268158

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1 - DL	MW-1204	Total/NA	Water	410.4	
160-18907-2	PZ-112-AS	Total/NA	Water	410.4	
160-18907-3	I-68	Total/NA	Water	410.4	
160-18907-4 - DL	PZ-204A-SS	Total/NA	Water	410.4	
160-18907-5	PZ-302-AS	Total/NA	Water	410.4	
160-18907-6	S-53	Total/NA	Water	410.4	
160-18907-7 - DL	LCS-6B	Total/NA	Water	410.4	
MB 160-268158/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-268158/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-18907-6 MS	S-53	Total/NA	Water	410.4	
160-18897-E-3-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 268216

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1 - DL	MW-1204	Total/NA	Water	410.4	268158
160-18907-2	PZ-112-AS	Total/NA	Water	410.4	268158
160-18907-3	I-68	Total/NA	Water	410.4	268158
160-18907-4 - DL	PZ-204A-SS	Total/NA	Water	410.4	268158
160-18907-5	PZ-302-AS	Total/NA	Water	410.4	268158
160-18907-6	S-53	Total/NA	Water	410.4	268158
160-18907-7 - DL	LCS-6B	Total/NA	Water	410.4	268158
MB 160-268158/3-A	Method Blank	Total/NA	Water	410.4	268158
LCS 160-268158/4-A	Lab Control Sample	Total/NA	Water	410.4	268158
160-18907-6 MS	S-53	Total/NA	Water	410.4	268158
160-18897-E-3-B DU	Duplicate	Total/NA	Water	410.4	268158

Analysis Batch: 268258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	160.1	
160-18907-2	PZ-112-AS	Total/NA	Water	160.1	

General Chemistry (Continued)

Analysis Batch: 268258 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-3	I-68	Total/NA	Water	160.1	
160-18907-4	PZ-204A-SS	Total/NA	Water	160.1	
160-18907-5	PZ-302-AS	Total/NA	Water	160.1	
160-18907-6	S-53	Total/NA	Water	160.1	
160-18907-7	LCS-6B	Total/NA	Water	160.1	
MB 160-268258/1	Method Blank	Total/NA	Water	160.1	
LCS 160-268258/2	Lab Control Sample	Total/NA	Water	160.1	
160-18907-1 DU	MW-1204	Total/NA	Water	160.1	

Analysis Batch: 272554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1 - RADL	MW-1204	Total/NA	Water	350.1	
160-18907-2 - RADL	PZ-112-AS	Total/NA	Water	350.1	
160-18907-3 - RA	I-68	Total/NA	Water	350.1	
160-18907-4 - RA	PZ-204A-SS	Total/NA	Water	350.1	
160-18907-5 - RADL	PZ-302-AS	Total/NA	Water	350.1	
160-18907-6 - RA	S-53	Total/NA	Water	350.1	
160-18907-7 - RADL	LCS-6B	Total/NA	Water	350.1	
MB 160-272554/25	Method Blank	Total/NA	Water	350.1	
LCS 160-272554/26	Lab Control Sample	Total/NA	Water	350.1	
160-18897-E-1 MS ^100 - RA	Matrix Spike	Total/NA	Water	350.1	
160-18897-E-1 DU ^100 - RA	Duplicate	Total/NA	Water	350.1	

Analysis Batch: 272820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	353.1 Preserved	
160-18907-2	PZ-112-AS	Total/NA	Water	353.1 Preserved	
160-18907-3	I-68	Total/NA	Water	353.1 Preserved	
160-18907-4	PZ-204A-SS	Total/NA	Water	353.1 Preserved	
160-18907-5	PZ-302-AS	Total/NA	Water	353.1 Preserved	
160-18907-6	S-53	Total/NA	Water	353.1 Preserved	
160-18907-7	LCS-6B	Total/NA	Water	353.1 Preserved	
MB 160-272820/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-272820/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18897-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18897-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

Rad

Prep Batch: 271438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-1	MW-1204	Total/NA	Water	LSC_Dist_Susp	
160-18907-2	PZ-112-AS	Total/NA	Water	LSC_Dist_Susp	
160-18907-3	I-68	Total/NA	Water	LSC_Dist_Susp	
160-18907-4	PZ-204A-SS	Total/NA	Water	LSC_Dist_Susp	
160-18907-5	PZ-302-AS	Total/NA	Water	LSC_Dist_Susp	
160-18907-6	S-53	Total/NA	Water	LSC_Dist_Susp	
160-18907-7	LCS-6B	Total/NA	Water	LSC_Dist_Susp	
MB 160-271438/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-271438/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	

Rad (Continued)

Prep Batch: 271438 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18907-2 MS	PZ-112-AS	Total/NA	Water	LSC_Dist_Susp	
160-18907-1 DU	MW-1204	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18907-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18907-1 - DL2	MW-1204	105	92	91	107
160-18907-2	PZ-112-AS	117	94	95	81
160-18907-2 - DL	PZ-112-AS	101	100	107	100
160-18907-3	I-68	113	104	102	112
160-18907-3 MS	I-68	92	93	93	100
160-18907-3 MSD	I-68	93	96	97	99
160-18907-4	PZ-204A-SS	115	106	104	113
160-18907-5	PZ-302-AS	112	87	96	100
160-18907-5 - DL	PZ-302-AS	100	94	107	98
160-18907-6	S-53	111	102	98	110
160-18907-7 - DL2	LCS-6B	111	93	96	106
160-18907-8	TRIP BLANK	112	95	96	107
LCS 160-268602/4	Lab Control Sample	93	94	96	98
LCS 160-270088/4	Lab Control Sample	99	101	105	100
LCSD 160-268602/5	Lab Control Sample Dup	95	95	95	99
LCSD 160-270088/5	Lab Control Sample Dup	99	100	104	101
MB 160-268602/7	Method Blank	109	96	92	107
MB 160-270088/7	Method Blank	99	96	106	98

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
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Earth City, MO 63045
Tel: (314)298-8566

TestAmerica Job ID: 160-18933-1
Client Project/Site: Groundwater - 3rd Quarter 2016

For:
Missouri Attorney General's Office
PO BOX 899
Jefferson City, Missouri 65102

Attn: Brenna McDonald

Authorized for release by:
10/7/2016 2:30:29 PM

Chenise Lambert-Sykes, Project Manager I
(314)298-8566
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This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Job ID: 160-18933-1

Laboratory: TestAmerica St. Louis

Narrative

CASE NARRATIVE

Client: Missouri Attorney General's Office

Project: Groundwater - 3rd Quarter 2016

Report Number: 160-18933-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica St. Louis attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results for Chemistry analyses are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header. All soil/sediment sample results for radiochemistry analyses are based upon sample as dried and disaggregated with the exception of tritium, carbon-14, and iodine-129 by gamma spectroscopy unless requested as wet weight by the client."

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 09/06/2016; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 7.2 C.

Receipt Exceptions

All samples were received at the laboratory outside the required temperature criteria: S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3), PZ-303-AS (160-18933-4) and TRIP BLANK (160-18933-5). The sample(s) is considered acceptable since it was collected and submitted to the laboratory on the same day and there is evidence that the chilling process has begun.

VOLATILE ORGANIC COMPOUNDS (GC MS)

Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3), PZ-303-AS (160-18933-4) and TRIP BLANK (160-18933-5) were analyzed for volatile organic compounds (GC MS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 09/11/2016, 09/12/2016 and 09/13/2016.

Analytical Batch: 269070

The continuing calibration verification (CCV) associated with batch 160-269070 recovered above the upper control limit for Methyl bromide, Chloroethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data

Job ID: 160-18933-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

have been reported. (CCVIS 160-269070/3)

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-269070: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-269070/3)

Analytical Batch: 269365
According to the COC, sample was presumed to be preserved to a pH < 2. Due to the potential loss of volatile constituents, VOA vials are not checked for pH preservation until the time of analysis. Sample pH was not less than 2. Sample was analyzed within the 7 day, unpreserved, holding time. PZ-303-AS (160-18933-4)

The following compounds did not meet the minimum relative response factor limits in the continuing calibration verification (CCV) associated with batch 160-269365: Acetone and Methyl Ethyl Ketone. A low-level LOQV was analyzed at the reporting limit (5ug/L) and the affected analytes were detected. Target analytes recovering above the reporting limit will be qualified and reported. (CCVIS 160-269365/2)

The following sample was analyzed at reduced volume due to high concentrations of target analytes: PZ-303-AS (160-18933-4). The reporting limits have been elevated by the appropriate factor.

Methyl bromide was detected in method blank MB 160-269365/6 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

The matrix spike (MS) recoveries for analytical batch 160-269365 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control samples' (LCS/LCSD) recoveries were within acceptance limits. (160-18944-B-8 MS)

The matrix spike / matrix spike duplicate (MS/MSD/DUP) precision for analytical batch 160-269365 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision was within acceptance limits. (160-18944-B-8 MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL METALS (ICP)
Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for total metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 09/12/2016 and analyzed on 09/13/2016.

Prep Batch: 269134
Due to difficult sample matrix dilutions were performed for the following samples: D-85 (160-18933-2). These dilutions were prepared as follows: 25mL to 50mL

Analytical Batch: 269399
The following samples were diluted due to the nature of the sample matrix. Samples are high in salts: S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3), PZ-303-AS (160-18933-4), (160-18933-B-4-B MS ^), (160-18933-B-4-C MSD) and (160-18933-B-4-A SD ^). Elevated reporting limits (RLs) are provided.

The Laboratory Control Sample (LCS) was above the upper calibration range for Boron. However, the percent recovery was within acceptable limits. Data will be reported. (LCS 160-269134/2-A)

Due to the high concentration of Calcium, the matrix spike / matrix spike duplicate (MS/MSD) for preparation batch 160-269134 and analytical batch 160-269399 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria. The presence of the '4' qualifier indicates analytes where the concentration in the unspiked sample exceeded four times the spiking amount. Refer to the QC report for details. (160-18933-B-4-B MS ^) and (160-18933-B-4-C MSD)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Job ID: 160-18933-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

TOTAL MERCURY

Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for total mercury in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 09/13/2016 and analyzed on 09/14/2016.

Prep Batch: 269325

Sample PZ-303-AS (160-18933-4) was diluted due to a strong petroleum smell.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TOTAL DISSOLVED SOLIDS

Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for total dissolved solids in accordance with EPA Method 160.1. The samples were analyzed on 09/07/2016.

Analytical Batch: 268258

The following samples in TDS batch 160-268258 were analyzed at reduced aliquot due to high concentrations of the target analyte: S-84 (160-18933-1), D-85 (160-18933-2) and PZ-303-AS (160-18933-4). The reporting limit has been adjusted for the reduced aliquot.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

ANIONS, ION CHROMATOGRAPHY

Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for Anions, Ion Chromatography in accordance with EPA Method 300.0. The samples were analyzed on 09/30/2016.

Analytical Batch: 272390

The following samples in Anion batch 160-272390 were diluted to bring the concentrations of target analytes within the calibration range: S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4). Elevated reporting limits (RLs) are provided.

The following matrix spike (MS) recovered outside control limits for Fluoride (87%) in Anion batch 160-272390: (160-19135-J-1 MS). Sample matrix interference is suspected, because the associated laboratory control sample (LCS) recovery was within acceptance limits.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

AMMONIA

Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for ammonia in accordance with EPA Method 350.1. The samples were analyzed on 09/29/2016.

Analytical Batch: 272554

The following samples in NH3 analytical batch 160-272554 were diluted to bring the concentration of the target analyte within the calibration range: S-84 (160-18933-1) and D-85 (160-18933-2). Elevated reporting limits (RLs) are provided.

Due to the high concentration of NH3 in the parent samples, which required dilution, the following matrix spikes (MS) for analytical batch 160-272554 were diluted below reliable detection limits: (160-18897-E-1 MS ^10) and (160-18933-D-1 MS ^10). The associated laboratory control sample (LCS) met acceptance criteria.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

NITROGEN, NITRATE-NITRITE

Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for Nitrogen, Nitrate-Nitrite in accordance with Method 353.1 Preserved. The samples were analyzed on 10/03/2016 and 10/06/2016.

Analytical Batch: 272820

Nitrate/Nitrite was detected in method blank MB 160-272820/13 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged. Refer to the QC report for details.

Job ID: 160-18933-1 (Continued)

Laboratory: TestAmerica St. Louis (Continued)

The following sample/sample duplicate (DU) RPD in NO3-NO2 analytical batch 160-272820 is slightly outside of acceptance criteria: (160-18897-E-1) and (160-18897-E-1 DU). RPD determinations for results that are less than 5X the reporting limit (RL), and are within the RL from each other are considered to be approximate, and therefore the data are reported.

The following matrix spike (MS) recovery for NO3-NO2 analytical batch 160-272820 was outside control limits: (160-18897-E-1 MS). Sample matrix interference is suspected because of the historical data associated with MS recoveries from this client, as well as the associated laboratory control sample (LCS) recovery being within acceptance limits.

The continuing calibration verification (CCV) associated with batch 160-272820 recovered above the upper control limit for NO3-NO2. The following sample associated with this CCV was non-detect for the affected analyte; therefore, the data are reported: PZ-208-SS (160-18933-3).

Analytical Batch: 273534
Reanalysis of the following samples in NO3-NO2 analytical batch 160-273534 was performed outside of the analytical holding time due to failed QC criteria in the original, in hold analysis: D-85 (160-18933-2) and PZ-303-AS (160-18933-4). Reanalysis was performed within two times the holding time.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

CHEMICAL OXYGEN DEMAND
Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for chemical oxygen demand in accordance with EPA Method 410.4. The samples were prepared on 09/19/2016 and analyzed on 09/20/2016.

Analytical Batch: 270576
The following samples in COD batch 270576 were diluted to bring the concentration of target analytes within the calibration range: S-84 (160-18933-1), D-85 (160-18933-2) and PZ-303-AS (160-18933-4). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TRITIUM, TOTAL (LSC)
Samples S-84 (160-18933-1), D-85 (160-18933-2), PZ-208-SS (160-18933-3) and PZ-303-AS (160-18933-4) were analyzed for Tritium, Total (LSC) in accordance with USEPA 906.0. The samples were prepared on 09/20/2016 and analyzed on 09/21/2016.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

TestAmerica St. Louis
13715 Rider Trail North
Earth City, MO 63045
Phone (314) 298-8566 Fax (314) 298-8757

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Brenna McDonald	Lab PM: Lambert-Sykes, Chenise Y	Carrier Tracking No(s):	COC No: 160-4493-2213.6
Client Contact: Brenna McDonald	Phone: 573-453-4329	E-Mail: chenise.lambert-sykes@testamericainc.com		Page: Page 6 of 6
Company: Missouri Attorney General's Office				Job #:
Address: PO BOX 899	Due Date Requested:			
City: Jefferson City	TAT Requested (days): Standard			
State, Zip: MO, 65102				
Phone: 573-368-2163(Tel)	PO #: Purchase Order not required			
Email: brenna.mcdonald@dnr.mo.gov	WO #:			
Project Name: Groundwater - 3rd Quarter 2016	Project #: 16005539			
Site: Bridgeton Landfill	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - pH 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	906.0 - Tritium	350.1, 353.1_Pres, 410.4	160.1_Calcd, 300_ORGFM_28D	6010C, 7470A	8260C - (MOD) OLM 4.2	376.1 - Sulfide → No Sulfide	Total Number of containers	Special Instructions/Note:
			Preservation Code:			N	S	N	D	A	CB		
S-84	9/6/16	0836	G	Water	N	N	✓	✓	✓	✓	✓	7	
D-85	09/6/16	0927	G	Water	N	N	✓	✓	✓	✓	✓	7	
PZ-208-SS	9/6/16	1049	G	Water	N	N	✓	✓	✓	✓	✓	7	
PZ-303-AS	9/6/16	1217	G	Water	N	N	✓	✓	✓	✓	✓		Strong petroleum odor, sheen
Trip blank	9/6/16	0800	G	Water	N	N	⊗				✓		
				Water									

160-18933 Chain of Custody

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1	Brenna McDonald	9/6/16 1430			9/6/16 1430	TA
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Missouri Attorney General's Office

Job Number: 160-18933-1

Login Number: 18933
List Number: 1
Creator: Daniels, Brian J

List Source: TestAmerica St. Louis

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Definitions/Glossary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

HPLC/IC

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
F1	MS and/or MSD Recovery is outside acceptance limits.
B	Compound was found in the blank and sample.
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL SL
300.0	Anions, Ion Chromatography	MCAWW	TAL SL
6010C	Metals (ICP)	SW846	TAL SL
7470A	Mercury (CVAA)	SW846	TAL SL
160.1	Solids, Total Dissolved (TDS)	MCAWW	TAL SL
350.1	Nitrogen, Ammonia	MCAWW	TAL SL
353.1 Preserved	Nitrogen, Nitrate-Nitrite	MCAWW	TAL SL
410.4	COD	MCAWW	TAL SL
906.0	Tritium, Total (LSC)	EPA	TAL SL

Protocol References:

EPA = US Environmental Protection Agency

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL SL = TestAmerica St. Louis, 13715 Rider Trail North, Earth City, MO 63045, TEL (314)298-8566

Sample Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
160-18933-1	S-84	Water	09/06/16 08:36	09/06/16 14:30
160-18933-2	D-85	Water	09/06/16 09:27	09/06/16 14:30
160-18933-3	PZ-208-SS	Water	09/06/16 10:49	09/06/16 14:30
160-18933-4	PZ-303-AS	Water	09/06/16 12:17	09/06/16 14:30
160-18933-5	TRIP BLANK	Water	09/06/16 08:00	09/06/16 14:30

Detection Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Client Sample ID: S-84 — Lab Sample ID: 160-18933-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.95	J	5.0	0.25	ug/L	1		8260C	Total/NA
Chlorobenzene	6.8		5.0	0.38	ug/L	1		8260C	Total/NA
Fluoride	0.23		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate	0.61		0.50	0.050	mg/L	1		300.0	Total/NA
Chloride - DL	73		4.0	0.40	mg/L	20		300.0	Total/NA
Arsenic	340		50	20	ug/L	5		6010C	Total/NA
Barium	1400		250	75	ug/L	5		6010C	Total/NA
Boron	200	J	500	130	ug/L	5		6010C	Total/NA
CaHard	520000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	210000		5000	1500	ug/L	5		6010C	Total/NA
Chromium	22	J	50	15	ug/L	5		6010C	Total/NA
Lead	58		50	15	ug/L	5		6010C	Total/NA
Magnesium	79		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	1700		75	13	ug/L	5		6010C	Total/NA
MgHard	330000		21000	6200	ug/L	5		6010C	Total/NA
Nickel	0.11	J	0.20	0.050	mg/L	5		6010C	Total/NA
Phosphorus	3000		1300	380	ug/L	5		6010C	Total/NA
Sodium	53000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	850000		33000	9900	ug/L	5		6010C	Total/NA
Zinc	180		100	30	ug/L	5		6010C	Total/NA
Total Dissolved Solids (TDS)	750		10	7.0	mg/L	1		160.1	Total/NA
Nitrate/Nitrite	0.064	B F1	0.050	0.011	mg/L	1		353.1 Preserved	Total/NA
Chemical Oxygen Demand - DL	160		50	11	mg/L	10		410.4	Total/NA
Ammonia - RADL	1.8	F1	0.50	0.22	mg/L	10		350.1	Total/NA

Client Sample ID: D-85 — Lab Sample ID: 160-18933-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chlorobenzene	50		5.0	0.38	ug/L	1		8260C	Total/NA
Fluoride	0.13		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate - DL	68		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	400		40	4.0	mg/L	200		300.0	Total/NA
Barium	3700		500	150	ug/L	5		6010C	Total/NA
CaHard	1100000		25000	7500	ug/L	5		6010C	Total/NA
Calcium	440000		10000	3000	ug/L	5		6010C	Total/NA
Chromium	39	J	100	30	ug/L	5		6010C	Total/NA
Lead	92	J	100	30	ug/L	5		6010C	Total/NA
Magnesium	110		10	3.0	mg/L	5		6010C	Total/NA
Manganese	4100		150	25	ug/L	5		6010C	Total/NA
MgHard	470000		41000	12000	ug/L	5		6010C	Total/NA
Nickel	0.18	J	0.40	0.10	mg/L	5		6010C	Total/NA
Phosphorus	2800		2500	750	ug/L	5		6010C	Total/NA
Sodium	140000		10000	3000	ug/L	5		6010C	Total/NA
Total Hardness	1600000		66000	20000	ug/L	5		6010C	Total/NA
Zinc	270		200	60	ug/L	5		6010C	Total/NA
Mercury	0.069	J	0.20	0.060	ug/L	1		7470A	Total/NA
Total Dissolved Solids (TDS)	1500		10	7.0	mg/L	1		160.1	Total/NA
Chemical Oxygen Demand - DL	70		50	11	mg/L	10		410.4	Total/NA
Ammonia - RADL	4.0		0.50	0.22	mg/L	10		350.1	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Client Sample ID: PZ-208-SS — Lab Sample ID: 160-18933-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.36		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate - DL	30		10	1.0	mg/L	20		300.0	Total/NA
Chloride - DL2	100		40	4.0	mg/L	200		300.0	Total/NA
Barium	170	J	250	75	ug/L	5		6010C	Total/NA
CaHard	280000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	110000		5000	1500	ug/L	5		6010C	Total/NA
Magnesium	55		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	26	J	75	13	ug/L	5		6010C	Total/NA
MgHard	230000		21000	6200	ug/L	5		6010C	Total/NA
Sodium	47000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	500000		33000	9900	ug/L	5		6010C	Total/NA
Total Dissolved Solids (TDS)	640		5.0	3.5	mg/L	1		160.1	Total/NA
Chemical Oxygen Demand	3.0	J	5.0	1.1	mg/L	1		410.4	Total/NA
Ammonia - RA	0.050		0.050	0.022	mg/L	1		350.1	Total/NA

Client Sample ID: PZ-303-AS — Lab Sample ID: 160-18933-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene - DL	37		13	0.63	ug/L	2.5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	4.7	J	13	0.40	ug/L	2.5		8260C	Total/NA
1,2-Dichlorobenzene - DL	2.2	J	13	0.70	ug/L	2.5		8260C	Total/NA
1,2-Dichloropropane - DL	0.88	J	13	0.80	ug/L	2.5		8260C	Total/NA
Ethylbenzene - DL	17		13	0.75	ug/L	2.5		8260C	Total/NA
Methyl bromide - DL	2.0	J B	25	1.0	ug/L	2.5		8260C	Total/NA
Toluene - DL	360		13	2.5	ug/L	2.5		8260C	Total/NA
trans-1,2-Dichloroethene - DL	0.54	J	13	0.45	ug/L	2.5		8260C	Total/NA
Trichloroethene - DL	0.95	J	13	0.73	ug/L	2.5		8260C	Total/NA
Vinyl chloride - DL	2.0	J	13	1.1	ug/L	2.5		8260C	Total/NA
Xylenes, Total - DL	350		25	2.1	ug/L	2.5		8260C	Total/NA
Fluoride	0.15		0.10	0.010	mg/L	1		300.0	Total/NA
Sulfate	0.40	J	0.50	0.050	mg/L	1		300.0	Total/NA
Chloride - DL	110		40	4.0	mg/L	200		300.0	Total/NA
Arsenic	74		50	20	ug/L	5		6010C	Total/NA
Barium	770		250	75	ug/L	5		6010C	Total/NA
Boron	270	J	500	130	ug/L	5		6010C	Total/NA
CaHard	780000		12000	3700	ug/L	5		6010C	Total/NA
Calcium	310000		5000	1500	ug/L	5		6010C	Total/NA
Magnesium	72		5.0	1.5	mg/L	5		6010C	Total/NA
Manganese	2300		75	13	ug/L	5		6010C	Total/NA
MgHard	300000		21000	6200	ug/L	5		6010C	Total/NA
Phosphorus	1700		1300	380	ug/L	5		6010C	Total/NA
Sodium	60000		5000	1500	ug/L	5		6010C	Total/NA
Total Hardness	1100000		33000	9900	ug/L	5		6010C	Total/NA
Total Dissolved Solids (TDS)	1400		10	7.0	mg/L	1		160.1	Total/NA
Chemical Oxygen Demand - DL	330		50	11	mg/L	10		410.4	Total/NA
Ammonia - RA	0.54		0.050	0.022	mg/L	1		350.1	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 160-18933-5

No Detections.

This Detection Summary does not include radiochemical test results.

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Client Sample ID: S-84
Date Collected: 09/06/16 08:36
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/11/16 23:56	1
Acrylonitrile	ND		50	1.7	ug/L			09/11/16 23:56	1
Benzene	**0.95**	**J**	5.0	0.25	ug/L			09/11/16 23:56	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/11/16 23:56	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/11/16 23:56	1
Bromoform	ND		5.0	0.37	ug/L			09/11/16 23:56	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/11/16 23:56	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/11/16 23:56	1
Chlorobenzene	**6.8**		5.0	0.38	ug/L			09/11/16 23:56	1
Chloroethane	ND		10	0.38	ug/L			09/11/16 23:56	1
Chloroform	ND		5.0	0.15	ug/L			09/11/16 23:56	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/11/16 23:56	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/11/16 23:56	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/11/16 23:56	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/11/16 23:56	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/11/16 23:56	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/11/16 23:56	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/11/16 23:56	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/11/16 23:56	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/11/16 23:56	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/11/16 23:56	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/11/16 23:56	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/11/16 23:56	1
2-Hexanone	ND		20	0.59	ug/L			09/11/16 23:56	1
Methyl bromide	ND		10	0.40	ug/L			09/11/16 23:56	1
Methyl chloride	ND		10	0.55	ug/L			09/11/16 23:56	1
Methylene bromide	ND		5.0	0.41	ug/L			09/11/16 23:56	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/11/16 23:56	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/11/16 23:56	1
Methyl iodide	ND		5.0	1.5	ug/L			09/11/16 23:56	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/11/16 23:56	1
Styrene	ND		5.0	0.35	ug/L			09/11/16 23:56	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/11/16 23:56	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/11/16 23:56	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/11/16 23:56	1
Toluene	ND		5.0	1.0	ug/L			09/11/16 23:56	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/11/16 23:56	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/11/16 23:56	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/11/16 23:56	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/11/16 23:56	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/11/16 23:56	1
Trichloroethene	ND		5.0	0.29	ug/L			09/11/16 23:56	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/11/16 23:56	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/11/16 23:56	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/11/16 23:56	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/11/16 23:56	1
Xylenes, Total	ND		10	0.85	ug/L			09/11/16 23:56	1

Client Sample Results

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Client Sample ID: S-84
Date Collected: 09/06/16 08:36
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-1
Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*108*		*71 - 139*		*09/11/16 23:56*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 121*		*09/11/16 23:56*	*1*
1,2-Dichloroethane-d4 (Surr)	*100*		*76 - 121*		*09/11/16 23:56*	*1*
Toluene-d8 (Surr)	*105*		*80 - 129*		*09/11/16 23:56*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.23**		0.10	0.010	mg/L			09/30/16 00:08	1
Sulfate	**0.61**		0.50	0.050	mg/L			09/30/16 00:08	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**73**		4.0	0.40	mg/L			09/30/16 00:24	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:55	5
Arsenic	**340**		50	20	ug/L		09/12/16 11:53	09/13/16 18:55	5
Barium	**1400**		250	75	ug/L		09/12/16 11:53	09/13/16 18:55	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:55	5
Boron	**200**	**J**	500	130	ug/L		09/12/16 11:53	09/13/16 18:55	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 18:55	5
CaHard	**520000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 18:55	5
Calcium	**210000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:55	5
Chromium	**22**	**J**	50	15	ug/L		09/12/16 11:53	09/13/16 18:55	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:55	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 18:55	5
Lead	**58**		50	15	ug/L		09/12/16 11:53	09/13/16 18:55	5
Magnesium	**79**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 18:55	5
Manganese	**1700**		75	13	ug/L		09/12/16 11:53	09/13/16 18:55	5
MgHard	**330000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 18:55	5
Nickel	**0.11**	**J**	0.20	0.050	mg/L		09/12/16 11:53	09/13/16 18:55	5
Phosphorus	**3000**		1300	380	ug/L		09/12/16 11:53	09/13/16 18:55	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 18:55	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 18:55	5
Sodium	**53000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 18:55	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 18:55	5
Total Hardness	**850000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 18:55	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 18:55	5
Zinc	**180**		100	30	ug/L		09/12/16 11:53	09/13/16 18:55	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/13/16 11:07	09/14/16 11:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**750**		10	7.0	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	**0.064**	**B F1**	0.050	0.011	mg/L			10/03/16 15:54	1

Client Sample ID: S-84

Lab Sample ID: 160-18933-1
Date Collected: 09/06/16 08:36
Matrix: Water
Date Received: 09/06/16 14:30

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	160		50	11	mg/L		09/19/16 11:26	09/20/16 07:58	10

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	1.8	F1	0.50	0.22	mg/L			09/29/16 18:04	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-51.4	U	173	173	500	320	pCi/L	09/20/16 14:24	09/21/16 04:20	1

Client Sample ID: D-85

Lab Sample ID: 160-18933-2
Date Collected: 09/06/16 09:27
Matrix: Water
Date Received: 09/06/16 14:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/12/16 01:34	1
Acrylonitrile	ND		50	1.7	ug/L			09/12/16 01:34	1
Benzene	ND		5.0	0.25	ug/L			09/12/16 01:34	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/12/16 01:34	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/12/16 01:34	1
Bromoform	ND		5.0	0.37	ug/L			09/12/16 01:34	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/12/16 01:34	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/12/16 01:34	1
Chlorobenzene	50		5.0	0.38	ug/L			09/12/16 01:34	1
Chloroethane	ND		10	0.38	ug/L			09/12/16 01:34	1
Chloroform	ND		5.0	0.15	ug/L			09/12/16 01:34	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/12/16 01:34	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/12/16 01:34	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/12/16 01:34	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/12/16 01:34	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/12/16 01:34	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/12/16 01:34	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/12/16 01:34	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/12/16 01:34	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/12/16 01:34	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/12/16 01:34	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/12/16 01:34	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/12/16 01:34	1
2-Hexanone	ND		20	0.59	ug/L			09/12/16 01:34	1
Methyl bromide	ND		10	0.40	ug/L			09/12/16 01:34	1
Methyl chloride	ND		10	0.55	ug/L			09/12/16 01:34	1
Methylene bromide	ND		5.0	0.41	ug/L			09/12/16 01:34	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/12/16 01:34	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/12/16 01:34	1
Methyl iodide	ND		5.0	1.5	ug/L			09/12/16 01:34	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/12/16 01:34	1
Styrene	ND		5.0	0.35	ug/L			09/12/16 01:34	1

Client Sample ID: D-85
Date Collected: 09/06/16 09:27
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-2
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/12/16 01:34	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/12/16 01:34	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/12/16 01:34	1
Toluene	ND		5.0	1.0	ug/L			09/12/16 01:34	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/12/16 01:34	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/12/16 01:34	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/12/16 01:34	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/12/16 01:34	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/12/16 01:34	1
Trichloroethene	ND		5.0	0.29	ug/L			09/12/16 01:34	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/12/16 01:34	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/12/16 01:34	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/12/16 01:34	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/12/16 01:34	1
Xylenes, Total	ND		10	0.85	ug/L			09/12/16 01:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*71 - 139*		*09/12/16 01:34*	*1*
Dibromofluoromethane (Surr)	*96*		*80 - 121*		*09/12/16 01:34*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*76 - 121*		*09/12/16 01:34*	*1*
Toluene-d8 (Surr)	*105*		*80 - 129*		*09/12/16 01:34*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.13**		0.10	0.010	mg/L			09/30/16 00:54	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**68**		10	1.0	mg/L			09/30/16 01:10	20

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**400**		40	4.0	mg/L			09/30/16 01:25	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		100	30	ug/L		09/12/16 11:53	09/13/16 19:00	5
Arsenic	ND		100	40	ug/L		09/12/16 11:53	09/13/16 19:00	5
Barium	**3700**		500	150	ug/L		09/12/16 11:53	09/13/16 19:00	5
Beryllium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:00	5
Boron	ND		1000	250	ug/L		09/12/16 11:53	09/13/16 19:00	5
Cadmium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:00	5
CaHard	**1100000**		25000	7500	ug/L		09/12/16 11:53	09/13/16 19:00	5
Calcium	**440000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 19:00	5
Chromium	**39**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 19:00	5
Cobalt	ND		500	150	ug/L		09/12/16 11:53	09/13/16 19:00	5
Copper	ND		250	50	ug/L		09/12/16 11:53	09/13/16 19:00	5
Lead	**92**	**J**	100	30	ug/L		09/12/16 11:53	09/13/16 19:00	5
Magnesium	**110**		10	3.0	mg/L		09/12/16 11:53	09/13/16 19:00	5
Manganese	**4100**		150	25	ug/L		09/12/16 11:53	09/13/16 19:00	5
MgHard	**470000**		41000	12000	ug/L		09/12/16 11:53	09/13/16 19:00	5

Client Sample ID: D-85

Date Collected: 09/06/16 09:27
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-2
Matrix: Water

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	**0.18**	**J**	0.40	0.10	mg/L		09/12/16 11:53	09/13/16 19:00	5
Phosphorus	**2800**		2500	750	ug/L		09/12/16 11:53	09/13/16 19:00	5
Selenium	ND		150	50	ug/L		09/12/16 11:53	09/13/16 19:00	5
Silver	ND		100	30	ug/L		09/12/16 11:53	09/13/16 19:00	5
Sodium	**140000**		10000	3000	ug/L		09/12/16 11:53	09/13/16 19:00	5
Thallium	ND		200	50	ug/L		09/12/16 11:53	09/13/16 19:00	5
Total Hardness	**1600000**		66000	20000	ug/L		09/12/16 11:53	09/13/16 19:00	5
Vanadium	ND		500	150	ug/L		09/12/16 11:53	09/13/16 19:00	5
Zinc	**270**		200	60	ug/L		09/12/16 11:53	09/13/16 19:00	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.069**	**J**	0.20	0.060	ug/L		09/13/16 11:07	09/14/16 11:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1500**		10	7.0	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	ND	H	0.050	0.011	mg/L			10/06/16 17:30	1

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	**70**		50	11	mg/L		09/19/16 11:26	09/20/16 07:58	10

General Chemistry - RADL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**4.0**		0.50	0.22	mg/L			09/29/16 18:09	10

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	54.1	U	186	186	500	326	pCi/L	09/20/16 14:24	09/21/16 04:40	1

Client Sample ID: PZ-208-SS

Date Collected: 09/06/16 10:49
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/12/16 01:59	1
Acrylonitrile	ND		50	1.7	ug/L			09/12/16 01:59	1
Benzene	ND		5.0	0.25	ug/L			09/12/16 01:59	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/12/16 01:59	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/12/16 01:59	1
Bromoform	ND		5.0	0.37	ug/L			09/12/16 01:59	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/12/16 01:59	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/12/16 01:59	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/12/16 01:59	1
Chloroethane	ND		10	0.38	ug/L			09/12/16 01:59	1
Chloroform	ND		5.0	0.15	ug/L			09/12/16 01:59	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/12/16 01:59	1

Client Sample ID: PZ-208-SS
Date Collected: 09/06/16 10:49
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-3
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/12/16 01:59	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/12/16 01:59	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/12/16 01:59	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/12/16 01:59	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/12/16 01:59	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/12/16 01:59	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/12/16 01:59	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/12/16 01:59	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/12/16 01:59	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/12/16 01:59	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/12/16 01:59	1
2-Hexanone	ND		20	0.59	ug/L			09/12/16 01:59	1
Methyl bromide	ND		10	0.40	ug/L			09/12/16 01:59	1
Methyl chloride	ND		10	0.55	ug/L			09/12/16 01:59	1
Methylene bromide	ND		5.0	0.41	ug/L			09/12/16 01:59	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/12/16 01:59	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/12/16 01:59	1
Methyl iodide	ND		5.0	1.5	ug/L			09/12/16 01:59	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/12/16 01:59	1
Styrene	ND		5.0	0.35	ug/L			09/12/16 01:59	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/12/16 01:59	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/12/16 01:59	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/12/16 01:59	1
Toluene	ND		5.0	1.0	ug/L			09/12/16 01:59	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/12/16 01:59	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/12/16 01:59	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/12/16 01:59	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/12/16 01:59	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/12/16 01:59	1
Trichloroethene	ND		5.0	0.29	ug/L			09/12/16 01:59	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/12/16 01:59	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/12/16 01:59	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/12/16 01:59	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/12/16 01:59	1
Xylenes, Total	ND		10	0.85	ug/L			09/12/16 01:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*112*		*71 - 139*		*09/12/16 01:59*	*1*
Dibromofluoromethane (Surr)	*102*		*80 - 121*		*09/12/16 01:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*		*09/12/16 01:59*	*1*
Toluene-d8 (Surr)	*112*		*80 - 129*		*09/12/16 01:59*	*1*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.36**		0.10	0.010	mg/L			09/30/16 01:41	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**30**		10	1.0	mg/L			09/30/16 01:56	20

Client Sample ID: PZ-208-SS

Date Collected: 09/06/16 10:49
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-3

Matrix: Water

Method: 300.0 - Anions, Ion Chromatography - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**100**		40	4.0	mg/L			09/30/16 02:12	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:04	5
Arsenic	ND		50	20	ug/L		09/12/16 11:53	09/13/16 19:04	5
Barium	**170**	**J**	250	75	ug/L		09/12/16 11:53	09/13/16 19:04	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 19:04	5
Boron	ND		500	130	ug/L		09/12/16 11:53	09/13/16 19:04	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 19:04	5
CaHard	**280000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 19:04	5
Calcium	**110000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 19:04	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:04	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 19:04	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 19:04	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:04	5
Magnesium	**55**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 19:04	5
Manganese	**26**	**J**	75	13	ug/L		09/12/16 11:53	09/13/16 19:04	5
MgHard	**230000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 19:04	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 19:04	5
Phosphorus	ND		1300	380	ug/L		09/12/16 11:53	09/13/16 19:04	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 19:04	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:04	5
Sodium	**47000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 19:04	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 19:04	5
Total Hardness	**500000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 19:04	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 19:04	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 19:04	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/13/16 11:07	09/14/16 11:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**640**		5.0	3.5	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	ND	^	0.050	0.011	mg/L			10/03/16 16:09	1
Chemical Oxygen Demand	**3.0**	**J**	5.0	1.1	mg/L		09/19/16 11:26	09/20/16 07:58	1

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	**0.050**		0.050	0.022	mg/L			09/29/16 18:11	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-27.0	U	176	176	500	322	pCi/L	09/20/16 14:24	09/21/16 05:01	1

Client Sample ID: PZ-303-AS
Date Collected: 09/06/16 12:17
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-4
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		50	17	ug/L			09/13/16 17:52	2.5
Acrylonitrile	ND		130	4.2	ug/L			09/13/16 17:52	2.5
Benzene	**37**		13	0.63	ug/L			09/13/16 17:52	2.5
Bromochloromethane	ND		13	1.4	ug/L			09/13/16 17:52	2.5
Bromodichloromethane	ND		13	0.63	ug/L			09/13/16 17:52	2.5
Bromoform	ND		13	0.93	ug/L			09/13/16 17:52	2.5
Carbon disulfide	ND		13	0.93	ug/L			09/13/16 17:52	2.5
Carbon tetrachloride	ND		13	0.90	ug/L			09/13/16 17:52	2.5
Chlorobenzene	ND		13	0.95	ug/L			09/13/16 17:52	2.5
Chloroethane	ND		25	0.95	ug/L			09/13/16 17:52	2.5
Chloroform	ND		13	0.38	ug/L			09/13/16 17:52	2.5
cis-1,2-Dichloroethene	**4.7**	**J**	13	0.40	ug/L			09/13/16 17:52	2.5
cis-1,3-Dichloropropene	ND		13	0.85	ug/L			09/13/16 17:52	2.5
Dibromochloromethane	ND		13	0.83	ug/L			09/13/16 17:52	2.5
1,2-Dibromo-3-Chloropropane	ND		25	2.9	ug/L			09/13/16 17:52	2.5
1,2-Dibromoethane (EDB)	ND		13	1.1	ug/L			09/13/16 17:52	2.5
1,2-Dichlorobenzene	**2.2**	**J**	13	0.70	ug/L			09/13/16 17:52	2.5
1,4-Dichlorobenzene	ND		13	0.88	ug/L			09/13/16 17:52	2.5
1,1-Dichloroethane	ND		13	0.98	ug/L			09/13/16 17:52	2.5
1,2-Dichloroethane	ND		13	0.93	ug/L			09/13/16 17:52	2.5
1,1-Dichloroethene	ND		13	0.93	ug/L			09/13/16 17:52	2.5
1,2-Dichloropropane	**0.88**	**J**	13	0.80	ug/L			09/13/16 17:52	2.5
Ethylbenzene	**17**		13	0.75	ug/L			09/13/16 17:52	2.5
2-Hexanone	ND		50	1.5	ug/L			09/13/16 17:52	2.5
Methyl bromide	**2.0**	**J B**	25	1.0	ug/L			09/13/16 17:52	2.5
Methyl chloride	ND		25	1.4	ug/L			09/13/16 17:52	2.5
Methylene bromide	ND		13	1.0	ug/L			09/13/16 17:52	2.5
Methylene Chloride	ND		13	4.2	ug/L			09/13/16 17:52	2.5
Methyl Ethyl Ketone	ND		50	0.98	ug/L			09/13/16 17:52	2.5
Methyl iodide	ND		13	3.8	ug/L			09/13/16 17:52	2.5
4-Methyl-2-pentanone (MIBK)	ND		50	0.83	ug/L			09/13/16 17:52	2.5
Styrene	ND		13	0.88	ug/L			09/13/16 17:52	2.5
1,1,1,2-Tetrachloroethane	ND		13	0.63	ug/L			09/13/16 17:52	2.5
1,1,2,2-Tetrachloroethane	ND		13	1.1	ug/L			09/13/16 17:52	2.5
Tetrachloroethene	ND		13	0.70	ug/L			09/13/16 17:52	2.5
Toluene	**360**		13	2.5	ug/L			09/13/16 17:52	2.5
trans-1,4-Dichloro-2-butene	ND		25	2.4	ug/L			09/13/16 17:52	2.5
trans-1,2-Dichloroethene	**0.54**	**J**	13	0.45	ug/L			09/13/16 17:52	2.5
trans-1,3-Dichloropropene	ND		13	0.88	ug/L			09/13/16 17:52	2.5
1,1,1-Trichloroethane	ND		13	0.73	ug/L			09/13/16 17:52	2.5
1,1,2-Trichloroethane	ND		13	1.4	ug/L			09/13/16 17:52	2.5
Trichloroethene	**0.95**	**J**	13	0.73	ug/L			09/13/16 17:52	2.5
Trichlorofluoromethane	ND		13	0.55	ug/L			09/13/16 17:52	2.5
1,2,3-Trichloropropane	ND		13	1.4	ug/L			09/13/16 17:52	2.5
Vinyl acetate	ND		13	1.5	ug/L			09/13/16 17:52	2.5
Vinyl chloride	**2.0**	**J**	13	1.1	ug/L			09/13/16 17:52	2.5
Xylenes, Total	**350**		25	2.1	ug/L			09/13/16 17:52	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*		*09/13/16 17:52*	*2.5*

Client Sample ID: PZ-303-AS

Date Collected: 09/06/16 12:17
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-4

Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS - DL (Continued)

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*96*		*80 - 121*		*09/13/16 17:52*	*2.5*
1,2-Dichloroethane-d4 (Surr)	*101*		*76 - 121*		*09/13/16 17:52*	*2.5*
Toluene-d8 (Surr)	*94*		*80 - 129*		*09/13/16 17:52*	*2.5*

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.15**		0.10	0.010	mg/L			09/30/16 02:58	1
Sulfate	**0.40**	**J**	0.50	0.050	mg/L			09/30/16 02:58	1

Method: 300.0 - Anions, Ion Chromatography - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110**		40	4.0	mg/L			09/30/16 03:29	200

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:09	5
Arsenic	**74**		50	20	ug/L		09/12/16 11:53	09/13/16 19:09	5
Barium	**770**		250	75	ug/L		09/12/16 11:53	09/13/16 19:09	5
Beryllium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 19:09	5
Boron	**270**	**J**	500	130	ug/L		09/12/16 11:53	09/13/16 19:09	5
Cadmium	ND		25	7.5	ug/L		09/12/16 11:53	09/13/16 19:09	5
CaHard	**780000**		12000	3700	ug/L		09/12/16 11:53	09/13/16 19:09	5
Calcium	**310000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 19:09	5
Chromium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:09	5
Cobalt	ND		250	75	ug/L		09/12/16 11:53	09/13/16 19:09	5
Copper	ND		130	25	ug/L		09/12/16 11:53	09/13/16 19:09	5
Lead	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:09	5
Magnesium	**72**		5.0	1.5	mg/L		09/12/16 11:53	09/13/16 19:09	5
Manganese	**2300**		75	13	ug/L		09/12/16 11:53	09/13/16 19:09	5
MgHard	**300000**		21000	6200	ug/L		09/12/16 11:53	09/13/16 19:09	5
Nickel	ND		0.20	0.050	mg/L		09/12/16 11:53	09/13/16 19:09	5
Phosphorus	**1700**		1300	380	ug/L		09/12/16 11:53	09/13/16 19:09	5
Selenium	ND		75	25	ug/L		09/12/16 11:53	09/13/16 19:09	5
Silver	ND		50	15	ug/L		09/12/16 11:53	09/13/16 19:09	5
Sodium	**60000**		5000	1500	ug/L		09/12/16 11:53	09/13/16 19:09	5
Thallium	ND		100	25	ug/L		09/12/16 11:53	09/13/16 19:09	5
Total Hardness	**1100000**		33000	9900	ug/L		09/12/16 11:53	09/13/16 19:09	5
Vanadium	ND		250	75	ug/L		09/12/16 11:53	09/13/16 19:09	5
Zinc	ND		100	30	ug/L		09/12/16 11:53	09/13/16 19:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		6.0	1.8	ug/L		09/13/16 11:07	09/14/16 11:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	**1400**		10	7.0	mg/L			09/07/16 08:25	1
Nitrate/Nitrite	ND	H	0.050	0.011	mg/L			10/06/16 17:33	1

Client Sample ID: PZ-303-AS

Lab Sample ID: 160-18933-4
Matrix: Water
Date Collected: 09/06/16 12:17
Date Received: 09/06/16 14:30

General Chemistry - DL

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	330		50	11	mg/L		09/19/16 11:26	09/20/16 07:58	10

General Chemistry - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	0.54		0.050	0.022	mg/L			09/29/16 18:14	1

Method: 906.0 - Tritium, Total (LSC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-11.7	U	178	178	500	324	pCi/L	09/20/16 14:24	09/21/16 05:22	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 160-18933-5
Matrix: Water
Date Collected: 09/06/16 08:00
Date Received: 09/06/16 14:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/11/16 23:31	1
Acrylonitrile	ND		50	1.7	ug/L			09/11/16 23:31	1
Benzene	ND		5.0	0.25	ug/L			09/11/16 23:31	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/11/16 23:31	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/11/16 23:31	1
Bromoform	ND		5.0	0.37	ug/L			09/11/16 23:31	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/11/16 23:31	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/11/16 23:31	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/11/16 23:31	1
Chloroethane	ND		10	0.38	ug/L			09/11/16 23:31	1
Chloroform	ND		5.0	0.15	ug/L			09/11/16 23:31	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/11/16 23:31	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/11/16 23:31	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/11/16 23:31	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/11/16 23:31	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/11/16 23:31	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/11/16 23:31	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/11/16 23:31	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/11/16 23:31	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/11/16 23:31	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/11/16 23:31	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/11/16 23:31	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/11/16 23:31	1
2-Hexanone	ND		20	0.59	ug/L			09/11/16 23:31	1
Methyl bromide	ND		10	0.40	ug/L			09/11/16 23:31	1
Methyl chloride	ND		10	0.55	ug/L			09/11/16 23:31	1
Methylene bromide	ND		5.0	0.41	ug/L			09/11/16 23:31	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/11/16 23:31	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/11/16 23:31	1
Methyl iodide	ND		5.0	1.5	ug/L			09/11/16 23:31	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/11/16 23:31	1
Styrene	ND		5.0	0.35	ug/L			09/11/16 23:31	1

Client Sample ID: TRIP BLANK
Date Collected: 09/06/16 08:00
Date Received: 09/06/16 14:30

Lab Sample ID: 160-18933-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/11/16 23:31	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/11/16 23:31	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/11/16 23:31	1
Toluene	ND		5.0	1.0	ug/L			09/11/16 23:31	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/11/16 23:31	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/11/16 23:31	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/11/16 23:31	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/11/16 23:31	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/11/16 23:31	1
Trichloroethene	ND		5.0	0.29	ug/L			09/11/16 23:31	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/11/16 23:31	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/11/16 23:31	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/11/16 23:31	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/11/16 23:31	1
Xylenes, Total	ND		10	0.85	ug/L			09/11/16 23:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*105*		*71 - 139*		*09/11/16 23:31*	*1*
Dibromofluoromethane (Surr)	*98*		*80 - 121*		*09/11/16 23:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*76 - 121*		*09/11/16 23:31*	*1*
Toluene-d8 (Surr)	*109*		*80 - 129*		*09/11/16 23:31*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 160-269070/7
Matrix: Water
Analysis Batch: 269070

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/11/16 18:08	1
Acrylonitrile	ND		50	1.7	ug/L			09/11/16 18:08	1
Benzene	ND		5.0	0.25	ug/L			09/11/16 18:08	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/11/16 18:08	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/11/16 18:08	1
Bromoform	ND		5.0	0.37	ug/L			09/11/16 18:08	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/11/16 18:08	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/11/16 18:08	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/11/16 18:08	1
Chloroethane	ND		10	0.38	ug/L			09/11/16 18:08	1
Chloroform	ND		5.0	0.15	ug/L			09/11/16 18:08	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/11/16 18:08	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/11/16 18:08	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/11/16 18:08	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/11/16 18:08	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/11/16 18:08	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/11/16 18:08	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/11/16 18:08	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/11/16 18:08	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/11/16 18:08	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/11/16 18:08	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/11/16 18:08	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/11/16 18:08	1
2-Hexanone	ND		20	0.59	ug/L			09/11/16 18:08	1
Methyl bromide	ND		10	0.40	ug/L			09/11/16 18:08	1
Methyl chloride	ND		10	0.55	ug/L			09/11/16 18:08	1
Methylene bromide	ND		5.0	0.41	ug/L			09/11/16 18:08	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/11/16 18:08	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/11/16 18:08	1
Methyl iodide	ND		5.0	1.5	ug/L			09/11/16 18:08	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/11/16 18:08	1
Styrene	ND		5.0	0.35	ug/L			09/11/16 18:08	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/11/16 18:08	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/11/16 18:08	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/11/16 18:08	1
Toluene	ND		5.0	1.0	ug/L			09/11/16 18:08	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/11/16 18:08	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/11/16 18:08	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/11/16 18:08	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/11/16 18:08	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/11/16 18:08	1
Trichloroethene	ND		5.0	0.29	ug/L			09/11/16 18:08	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/11/16 18:08	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/11/16 18:08	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/11/16 18:08	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/11/16 18:08	1
Xylenes, Total	ND		10	0.85	ug/L			09/11/16 18:08	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-269070/7
Matrix: Water
Analysis Batch: 269070

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	109		71 - 139		09/11/16 18:08	1
Dibromofluoromethane (Surr)	95		80 - 121		09/11/16 18:08	1
1,2-Dichloroethane-d4 (Surr)	94		76 - 121		09/11/16 18:08	1
Toluene-d8 (Surr)	106		80 - 129		09/11/16 18:08	1

Lab Sample ID: LCS 160-269070/4
Matrix: Water
Analysis Batch: 269070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	58.0		ug/L		116	63 - 131
Acrylonitrile	500	539		ug/L		108	81 - 117
Benzene	50.0	53.6		ug/L		107	80 - 120
Bromochloromethane	50.0	49.2		ug/L		98	80 - 120
Bromodichloromethane	50.0	51.6		ug/L		103	80 - 120
Bromoform	50.0	50.8		ug/L		102	80 - 120
Carbon disulfide	50.0	52.8		ug/L		106	79 - 126
Carbon tetrachloride	50.0	49.5		ug/L		99	73 - 123
Chlorobenzene	50.0	53.2		ug/L		106	80 - 120
Chloroethane	50.0	60.3		ug/L		121	52 - 140
Chloroform	50.0	49.1		ug/L		98	80 - 120
cis-1,2-Dichloroethene	50.0	49.0		ug/L		98	80 - 120
cis-1,3-Dichloropropene	50.0	53.4		ug/L		107	80 - 122
Dibromochloromethane	50.0	53.1		ug/L		106	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.5		ug/L		95	77 - 125
1,2-Dibromoethane (EDB)	50.0	53.0		ug/L		106	80 - 120
1,2-Dichlorobenzene	50.0	49.8		ug/L		100	80 - 120
1,4-Dichlorobenzene	50.0	54.7		ug/L		109	80 - 120
1,1-Dichloroethane	50.0	50.1		ug/L		100	80 - 120
1,2-Dichloroethane	50.0	50.9		ug/L		102	69 - 124
1,1-Dichloroethene	50.0	49.8		ug/L		100	77 - 126
1,2-Dichloropropane	50.0	51.1		ug/L		102	80 - 120
Ethylbenzene	50.0	50.7		ug/L		101	80 - 120
2-Hexanone	50.0	56.7		ug/L		113	64 - 136
Methyl bromide	50.0	64.1		ug/L		128	57 - 139
Methyl chloride	50.0	53.3		ug/L		107	70 - 127
Methylene bromide	50.0	50.2		ug/L		100	78 - 120
Methylene Chloride	50.0	49.4		ug/L		99	80 - 120
Methyl Ethyl Ketone	50.0	57.3		ug/L		115	70 - 130
Methyl iodide	50.0	49.7		ug/L		99	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	57.7		ug/L		115	76 - 129
Styrene	50.0	55.5		ug/L		111	80 - 120
1,1,1,2-Tetrachloroethane	50.0	50.5		ug/L		101	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.3		ug/L		101	80 - 120
Tetrachloroethene	50.0	48.4		ug/L		97	80 - 120
Toluene	50.0	51.9		ug/L		104	80 - 120
trans-1,4-Dichloro-2-butene	50.0	53.4		ug/L		107	75 - 127
trans-1,2-Dichloroethene	50.0	49.7		ug/L		99	80 - 120

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-269070/4
Matrix: Water
Analysis Batch: 269070

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
trans-1,3-Dichloropropene			50.0	53.9		ug/L		108	80 - 130		
1,1,1-Trichloroethane			50.0	49.2		ug/L		98	76 - 120		
1,1,2-Trichloroethane			50.0	54.4		ug/L		109	80 - 120		
Trichloroethene			50.0	50.6		ug/L		101	73 - 120		
Trichlorofluoromethane			50.0	57.4		ug/L		115	74 - 130		
1,2,3-Trichloropropane			50.0	48.0		ug/L		96	80 - 120		
Vinyl acetate			50.0	54.5		ug/L		109	37 - 140		
Vinyl chloride			50.0	60.4		ug/L		121	51 - 140		
Xylenes, Total			100	96.0		ug/L		96	80 - 121		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*98*		*76 - 121*
Toluene-d8 (Surr)	*100*		*80 - 129*

Lab Sample ID: LCSD 160-269070/5
Matrix: Water
Analysis Batch: 269070

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone			50.0	56.5		ug/L		113	63 - 131	3	20
Acrylonitrile			500	522		ug/L		104	81 - 117	3	20
Benzene			50.0	53.7		ug/L		107	80 - 120	0	20
Bromochloromethane			50.0	48.6		ug/L		97	80 - 120	1	20
Bromodichloromethane			50.0	49.9		ug/L		100	80 - 120	3	20
Bromoform			50.0	50.0		ug/L		100	80 - 120	2	20
Carbon disulfide			50.0	53.0		ug/L		106	79 - 126	0	20
Carbon tetrachloride			50.0	49.9		ug/L		100	73 - 123	1	20
Chlorobenzene			50.0	52.3		ug/L		105	80 - 120	2	20
Chloroethane			50.0	59.3		ug/L		119	52 - 140	2	20
Chloroform			50.0	49.9		ug/L		100	80 - 120	2	20
cis-1,2-Dichloroethene			50.0	50.3		ug/L		101	80 - 120	3	20
cis-1,3-Dichloropropene			50.0	50.4		ug/L		101	80 - 122	6	20
Dibromochloromethane			50.0	51.4		ug/L		103	80 - 120	3	20
1,2-Dibromo-3-Chloropropane			50.0	46.4		ug/L		93	77 - 125	2	20
1,2-Dibromoethane (EDB)			50.0	50.6		ug/L		101	80 - 120	5	20
1,2-Dichlorobenzene			50.0	50.5		ug/L		101	80 - 120	1	20
1,4-Dichlorobenzene			50.0	54.9		ug/L		110	80 - 120	0	20
1,1-Dichloroethane			50.0	51.2		ug/L		102	80 - 120	2	20
1,2-Dichloroethane			50.0	49.8		ug/L		100	69 - 124	2	20
1,1-Dichloroethene			50.0	50.2		ug/L		100	77 - 126	1	20
1,2-Dichloropropane			50.0	50.2		ug/L		100	80 - 120	2	20
Ethylbenzene			50.0	50.7		ug/L		101	80 - 120	0	20
2-Hexanone			50.0	51.2		ug/L		102	64 - 136	10	20
Methyl bromide			50.0	62.2		ug/L		124	57 - 139	3	20
Methyl chloride			50.0	54.3		ug/L		109	70 - 127	2	20
Methylene bromide			50.0	49.4		ug/L		99	78 - 120	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-269070/5
Matrix: Water
Analysis Batch: 269070

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride			50.0	50.6		ug/L		101	80 - 120	2	20
Methyl Ethyl Ketone			50.0	54.6		ug/L		109	70 - 130	5	20
Methyl iodide			50.0	50.0		ug/L		100	73 - 125	1	20
4-Methyl-2-pentanone (MIBK)			50.0	55.4		ug/L		111	76 - 129	4	20
Styrene			50.0	54.5		ug/L		109	80 - 120	2	20
1,1,1,2-Tetrachloroethane			50.0	52.1		ug/L		104	80 - 120	3	20
1,1,2,2-Tetrachloroethane			50.0	49.1		ug/L		98	80 - 120	2	20
Tetrachloroethene			50.0	49.3		ug/L		99	80 - 120	2	20
Toluene			50.0	52.4		ug/L		105	80 - 120	1	20
trans-1,4-Dichloro-2-butene			50.0	49.4		ug/L		99	75 - 127	8	20
trans-1,2-Dichloroethene			50.0	50.5		ug/L		101	80 - 120	1	20
trans-1,3-Dichloropropene			50.0	51.5		ug/L		103	80 - 130	4	20
1,1,1-Trichloroethane			50.0	49.5		ug/L		99	76 - 120	0	20
1,1,2-Trichloroethane			50.0	50.6		ug/L		101	80 - 120	7	20
Trichloroethene			50.0	50.6		ug/L		101	73 - 120	0	20
Trichlorofluoromethane			50.0	55.7		ug/L		111	74 - 130	3	20
1,2,3-Trichloropropane			50.0	47.5		ug/L		95	80 - 120	1	20
Vinyl acetate			50.0	51.3		ug/L		103	37 - 140	6	20
Vinyl chloride			50.0	57.4		ug/L		115	51 - 140	5	20
Xylenes, Total			100	96.9		ug/L		97	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*93*		*71 - 139*
Dibromofluoromethane (Surr)	*97*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*98*		*76 - 121*
Toluene-d8 (Surr)	*101*		*80 - 129*

Lab Sample ID: 160-18933-1 MS
Matrix: Water
Analysis Batch: 269070

Client Sample ID: S-84
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	66.9		ug/L		134	52 - 138
Acrylonitrile	ND		500	562		ug/L		112	58 - 142
Benzene	0.95	J	50.0	53.3		ug/L		105	80 - 120
Bromochloromethane	ND		50.0	49.1		ug/L		98	72 - 125
Bromodichloromethane	ND		50.0	49.9		ug/L		100	71 - 128
Bromoform	ND		50.0	49.2		ug/L		98	65 - 133
Carbon disulfide	ND		50.0	50.1		ug/L		100	69 - 139
Carbon tetrachloride	ND		50.0	44.3		ug/L		89	70 - 126
Chlorobenzene	6.8		50.0	57.3		ug/L		101	80 - 120
Chloroethane	ND		50.0	63.4		ug/L		127	59 - 144
Chloroform	ND		50.0	47.9		ug/L		96	80 - 120
cis-1,2-Dichloroethene	ND		50.0	48.3		ug/L		97	80 - 124
cis-1,3-Dichloropropene	ND		50.0	50.4		ug/L		101	67 - 130
Dibromochloromethane	ND		50.0	50.8		ug/L		102	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	50.6		ug/L		101	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	51.1		ug/L		102	65 - 138

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18933-1 MS
Matrix: Water
Analysis Batch: 269070

Client Sample ID: S-84
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		50.0	50.8		ug/L		102	80 - 124
1,4-Dichlorobenzene	ND		50.0	53.2		ug/L		106	80 - 120
1,1-Dichloroethane	ND		50.0	48.7		ug/L		97	80 - 120
1,2-Dichloroethane	ND		50.0	50.6		ug/L		101	56 - 136
1,1-Dichloroethene	ND		50.0	46.6		ug/L		93	66 - 137
1,2-Dichloropropane	ND		50.0	49.7		ug/L		99	80 - 123
Ethylbenzene	ND		50.0	48.3		ug/L		97	80 - 121
2-Hexanone	ND		50.0	52.9		ug/L		106	47 - 150
Methyl bromide	ND		50.0	62.9		ug/L		126	53 - 146
Methyl chloride	ND		50.0	47.8		ug/L		96	61 - 137
Methylene bromide	ND		50.0	50.9		ug/L		102	61 - 136
Methylene Chloride	ND		50.0	49.7		ug/L		99	80 - 120
Methyl Ethyl Ketone	ND		50.0	57.9		ug/L		116	58 - 143
Methyl iodide	ND		50.0	47.8		ug/L		96	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	57.2		ug/L		114	53 - 150
Styrene	ND		50.0	51.7		ug/L		103	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	50.2		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	53.5		ug/L		107	60 - 150
Tetrachloroethene	ND		50.0	44.0		ug/L		88	66 - 132
Toluene	ND		50.0	50.2		ug/L		100	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	51.4		ug/L		103	55 - 146
trans-1,2-Dichloroethene	ND		50.0	46.8		ug/L		94	79 - 121
trans-1,3-Dichloropropene	ND		50.0	51.1		ug/L		102	68 - 143
1,1,1-Trichloroethane	ND		50.0	46.6		ug/L		93	74 - 123
1,1,2-Trichloroethane	ND		50.0	52.3		ug/L		105	70 - 134
Trichloroethene	ND		50.0	48.8		ug/L		98	63 - 120
Trichlorofluoromethane	ND		50.0	54.4		ug/L		109	53 - 150
1,2,3-Trichloropropane	ND		50.0	51.7		ug/L		103	62 - 137
Vinyl acetate	ND		50.0	57.2		ug/L		114	63 - 150
Vinyl chloride	ND		50.0	61.2		ug/L		122	54 - 140
Xylenes, Total	ND		100	91.0		ug/L		91	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*91*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*99*		*76 - 121*
Toluene-d8 (Surr)	*98*		*80 - 129*

Lab Sample ID: 160-18933-1 MSD
Matrix: Water
Analysis Batch: 269070

Client Sample ID: S-84
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	62.5		ug/L		125	52 - 138	7	20
Acrylonitrile	ND		500	548		ug/L		110	58 - 142	3	20
Benzene	0.95	J	50.0	55.4		ug/L		109	80 - 120	4	20
Bromochloromethane	ND		50.0	49.8		ug/L		100	72 - 125	2	20
Bromodichloromethane	ND		50.0	51.6		ug/L		103	71 - 128	3	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18933-1 MSD
Matrix: Water
Analysis Batch: 269070

Client Sample ID: S-84
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Bromoform	ND		50.0	49.1		ug/L		98	65 - 133	0	20
Carbon disulfide	ND		50.0	53.5		ug/L		107	69 - 139	7	20
Carbon tetrachloride	ND		50.0	48.3		ug/L		97	70 - 126	9	20
Chlorobenzene	6.8		50.0	59.0		ug/L		104	80 - 120	3	20
Chloroethane	ND		50.0	65.8		ug/L		132	59 - 144	4	20
Chloroform	ND		50.0	50.1		ug/L		100	80 - 120	4	20
cis-1,2-Dichloroethene	ND		50.0	50.1		ug/L		100	80 - 124	4	20
cis-1,3-Dichloropropene	ND		50.0	51.1		ug/L		102	67 - 130	1	20
Dibromochloromethane	ND		50.0	50.8		ug/L		102	68 - 133	0	20
1,2-Dibromo-3-Chloropropane	ND		50.0	50.5		ug/L		101	58 - 148	0	20
1,2-Dibromoethane (EDB)	ND		50.0	50.3		ug/L		101	65 - 138	2	20
1,2-Dichlorobenzene	ND		50.0	52.0		ug/L		104	80 - 124	2	20
1,4-Dichlorobenzene	ND		50.0	54.3		ug/L		109	80 - 120	2	20
1,1-Dichloroethane	ND		50.0	50.8		ug/L		102	80 - 120	4	20
1,2-Dichloroethane	ND		50.0	51.6		ug/L		103	56 - 136	2	20
1,1-Dichloroethene	ND		50.0	49.5		ug/L		99	66 - 137	6	20
1,2-Dichloropropane	ND		50.0	51.1		ug/L		102	80 - 123	3	20
Ethylbenzene	ND		50.0	50.0		ug/L		100	80 - 121	3	20
2-Hexanone	ND		50.0	50.7		ug/L		101	47 - 150	4	20
Methyl bromide	ND		50.0	67.7		ug/L		135	53 - 146	7	20
Methyl chloride	ND		50.0	50.4		ug/L		101	61 - 137	5	20
Methylene bromide	ND		50.0	50.8		ug/L		102	61 - 136	0	20
Methylene Chloride	ND		50.0	51.1		ug/L		102	80 - 120	3	20
Methyl Ethyl Ketone	ND		50.0	54.7		ug/L		109	58 - 143	6	20
Methyl iodide	ND		50.0	50.1		ug/L		100	69 - 124	5	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	54.3		ug/L		109	53 - 150	5	20
Styrene	ND		50.0	53.0		ug/L		106	44 - 150	2	20
1,1,1,2-Tetrachloroethane	ND		50.0	52.3		ug/L		105	80 - 120	4	20
1,1,2,2-Tetrachloroethane	ND		50.0	51.3		ug/L		103	60 - 150	4	20
Tetrachloroethene	ND		50.0	46.4		ug/L		93	66 - 132	5	20
Toluene	ND		50.0	51.7		ug/L		103	75 - 134	3	20
trans-1,4-Dichloro-2-butene	ND		50.0	49.4		ug/L		99	55 - 146	4	20
trans-1,2-Dichloroethene	ND		50.0	50.1		ug/L		100	79 - 121	7	20
trans-1,3-Dichloropropene	ND		50.0	51.0		ug/L		102	68 - 143	0	20
1,1,1-Trichloroethane	ND		50.0	49.9		ug/L		100	74 - 123	7	20
1,1,2-Trichloroethane	ND		50.0	50.0		ug/L		100	70 - 134	4	20
Trichloroethene	ND		50.0	51.0		ug/L		102	63 - 120	4	20
Trichlorofluoromethane	ND		50.0	55.8		ug/L		112	53 - 150	3	20
1,2,3-Trichloropropane	ND		50.0	47.4		ug/L		95	62 - 137	9	20
Vinyl acetate	ND		50.0	55.6		ug/L		111	63 - 150	3	20
Vinyl chloride	ND		50.0	61.5		ug/L		123	54 - 140	0	20
Xylenes, Total	ND		100	96.0		ug/L		96	80 - 124	5	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*99*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*102*		*76 - 121*
Toluene-d8 (Surr)	*99*		*80 - 129*

Lab Sample ID: MB 160-269365/6
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	ND		20	6.7	ug/L			09/13/16 17:27	1
Acrylonitrile	ND		50	1.7	ug/L			09/13/16 17:27	1
Benzene	ND		5.0	0.25	ug/L			09/13/16 17:27	1
Bromochloromethane	ND		5.0	0.55	ug/L			09/13/16 17:27	1
Bromodichloromethane	ND		5.0	0.25	ug/L			09/13/16 17:27	1
Bromoform	ND		5.0	0.37	ug/L			09/13/16 17:27	1
Carbon disulfide	ND		5.0	0.37	ug/L			09/13/16 17:27	1
Carbon tetrachloride	ND		5.0	0.36	ug/L			09/13/16 17:27	1
Chlorobenzene	ND		5.0	0.38	ug/L			09/13/16 17:27	1
Chloroethane	ND		10	0.38	ug/L			09/13/16 17:27	1
Chloroform	ND		5.0	0.15	ug/L			09/13/16 17:27	1
cis-1,2-Dichloroethene	ND		5.0	0.16	ug/L			09/13/16 17:27	1
cis-1,3-Dichloropropene	ND		5.0	0.34	ug/L			09/13/16 17:27	1
Dibromochloromethane	ND		5.0	0.33	ug/L			09/13/16 17:27	1
1,2-Dibromo-3-Chloropropane	ND		10	1.2	ug/L			09/13/16 17:27	1
1,2-Dibromoethane (EDB)	ND		5.0	0.44	ug/L			09/13/16 17:27	1
1,2-Dichlorobenzene	ND		5.0	0.28	ug/L			09/13/16 17:27	1
1,4-Dichlorobenzene	ND		5.0	0.35	ug/L			09/13/16 17:27	1
1,1-Dichloroethane	ND		5.0	0.39	ug/L			09/13/16 17:27	1
1,2-Dichloroethane	ND		5.0	0.37	ug/L			09/13/16 17:27	1
1,1-Dichloroethene	ND		5.0	0.37	ug/L			09/13/16 17:27	1
1,2-Dichloropropane	ND		5.0	0.32	ug/L			09/13/16 17:27	1
Ethylbenzene	ND		5.0	0.30	ug/L			09/13/16 17:27	1
2-Hexanone	ND		20	0.59	ug/L			09/13/16 17:27	1
Methyl bromide	0.604	J	10	0.40	ug/L			09/13/16 17:27	1
Methyl chloride	ND		10	0.55	ug/L			09/13/16 17:27	1
Methylene bromide	ND		5.0	0.41	ug/L			09/13/16 17:27	1
Methylene Chloride	ND		5.0	1.7	ug/L			09/13/16 17:27	1
Methyl Ethyl Ketone	ND		20	0.39	ug/L			09/13/16 17:27	1
Methyl iodide	ND		5.0	1.5	ug/L			09/13/16 17:27	1
4-Methyl-2-pentanone (MIBK)	ND		20	0.33	ug/L			09/13/16 17:27	1
Styrene	ND		5.0	0.35	ug/L			09/13/16 17:27	1
1,1,1,2-Tetrachloroethane	ND		5.0	0.25	ug/L			09/13/16 17:27	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.43	ug/L			09/13/16 17:27	1
Tetrachloroethene	ND		5.0	0.28	ug/L			09/13/16 17:27	1
Toluene	ND		5.0	1.0	ug/L			09/13/16 17:27	1
trans-1,4-Dichloro-2-butene	ND		10	0.95	ug/L			09/13/16 17:27	1
trans-1,2-Dichloroethene	ND		5.0	0.18	ug/L			09/13/16 17:27	1
trans-1,3-Dichloropropene	ND		5.0	0.35	ug/L			09/13/16 17:27	1
1,1,1-Trichloroethane	ND		5.0	0.29	ug/L			09/13/16 17:27	1
1,1,2-Trichloroethane	ND		5.0	0.57	ug/L			09/13/16 17:27	1
Trichloroethene	ND		5.0	0.29	ug/L			09/13/16 17:27	1
Trichlorofluoromethane	ND		5.0	0.22	ug/L			09/13/16 17:27	1
1,2,3-Trichloropropane	ND		5.0	0.56	ug/L			09/13/16 17:27	1
Vinyl acetate	ND		5.0	0.61	ug/L			09/13/16 17:27	1
Vinyl chloride	ND		5.0	0.43	ug/L			09/13/16 17:27	1
Xylenes, Total	ND		10	0.85	ug/L			09/13/16 17:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*		*09/13/16 17:27*	*1*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 160-269365/6
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Dibromofluoromethane (Surr)	94		80 - 121		09/13/16 17:27	1
1,2-Dichloroethane-d4 (Surr)	100		76 - 121		09/13/16 17:27	1
Toluene-d8 (Surr)	96		80 - 129		09/13/16 17:27	1

Lab Sample ID: LCS 160-269365/3
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	50.0	53.8		ug/L		108	63 - 131
Acrylonitrile	500	534		ug/L		107	81 - 117
Benzene	50.0	46.7		ug/L		93	80 - 120
Bromochloromethane	50.0	49.7		ug/L		99	80 - 120
Bromodichloromethane	50.0	51.5		ug/L		103	80 - 120
Bromoform	50.0	51.0		ug/L		102	80 - 120
Carbon disulfide	50.0	48.9		ug/L		98	79 - 126
Carbon tetrachloride	50.0	49.9		ug/L		100	73 - 123
Chlorobenzene	50.0	49.7		ug/L		99	80 - 120
Chloroethane	50.0	44.0		ug/L		88	52 - 140
Chloroform	50.0	49.8		ug/L		100	80 - 120
cis-1,2-Dichloroethene	50.0	48.6		ug/L		97	80 - 120
cis-1,3-Dichloropropene	50.0	51.8		ug/L		104	80 - 122
Dibromochloromethane	50.0	50.9		ug/L		102	80 - 120
1,2-Dibromo-3-Chloropropane	50.0	54.8		ug/L		110	77 - 125
1,2-Dibromoethane (EDB)	50.0	50.4		ug/L		101	80 - 120
1,2-Dichlorobenzene	50.0	49.4		ug/L		99	80 - 120
1,4-Dichlorobenzene	50.0	49.6		ug/L		99	80 - 120
1,1-Dichloroethane	50.0	49.1		ug/L		98	80 - 120
1,2-Dichloroethane	50.0	50.0		ug/L		100	69 - 124
1,1-Dichloroethene	50.0	47.4		ug/L		95	77 - 126
1,2-Dichloropropane	50.0	50.3		ug/L		101	80 - 120
Ethylbenzene	50.0	48.4		ug/L		97	80 - 120
2-Hexanone	50.0	53.7		ug/L		107	64 - 136
Methyl bromide	50.0	43.8		ug/L		88	57 - 139
Methyl chloride	50.0	46.7		ug/L		93	70 - 127
Methylene bromide	50.0	51.4		ug/L		103	78 - 120
Methylene Chloride	50.0	48.9		ug/L		98	80 - 120
Methyl Ethyl Ketone	50.0	52.7		ug/L		105	70 - 130
Methyl iodide	50.0	43.1		ug/L		86	73 - 125
4-Methyl-2-pentanone (MIBK)	50.0	56.1		ug/L		112	76 - 129
Styrene	50.0	51.1		ug/L		102	80 - 120
1,1,1,2-Tetrachloroethane	50.0	50.2		ug/L		100	80 - 120
1,1,2,2-Tetrachloroethane	50.0	50.7		ug/L		101	80 - 120
Tetrachloroethene	50.0	48.5		ug/L		97	80 - 120
Toluene	50.0	48.2		ug/L		96	80 - 120
trans-1,4-Dichloro-2-butene	50.0	53.1		ug/L		106	75 - 127
trans-1,2-Dichloroethene	50.0	48.0		ug/L		96	80 - 120
trans-1,3-Dichloropropene	50.0	52.4		ug/L		105	80 - 130

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 160-269365/3
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	49.3		ug/L		99	76 - 120
1,1,2-Trichloroethane	50.0	49.7		ug/L		99	80 - 120
Trichloroethene	50.0	48.4		ug/L		97	73 - 120
Trichlorofluoromethane	50.0	47.5		ug/L		95	74 - 130
1,2,3-Trichloropropane	50.0	51.3		ug/L		103	80 - 120
Vinyl acetate	50.0	60.2		ug/L		120	37 - 140
Vinyl chloride	50.0	48.0		ug/L		96	51 - 140
Xylenes, Total	100	98.9		ug/L		99	80 - 121

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*99*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*101*		*76 - 121*
Toluene-d8 (Surr)	*98*		*80 - 129*

Lab Sample ID: LCSD 160-269365/4
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	50.0	47.3		ug/L		95	63 - 131	13	20
Acrylonitrile	500	474		ug/L		95	81 - 117	12	20
Benzene	50.0	45.7		ug/L		91	80 - 120	2	20
Bromochloromethane	50.0	48.1		ug/L		96	80 - 120	3	20
Bromodichloromethane	50.0	49.0		ug/L		98	80 - 120	5	20
Bromoform	50.0	47.3		ug/L		95	80 - 120	7	20
Carbon disulfide	50.0	48.9		ug/L		98	79 - 126	0	20
Carbon tetrachloride	50.0	49.7		ug/L		99	73 - 123	0	20
Chlorobenzene	50.0	49.2		ug/L		98	80 - 120	1	20
Chloroethane	50.0	47.5		ug/L		95	52 - 140	8	20
Chloroform	50.0	47.6		ug/L		95	80 - 120	5	20
cis-1,2-Dichloroethene	50.0	47.8		ug/L		96	80 - 120	2	20
cis-1,3-Dichloropropene	50.0	50.0		ug/L		100	80 - 122	4	20
Dibromochloromethane	50.0	48.5		ug/L		97	80 - 120	5	20
1,2-Dibromo-3-Chloropropane	50.0	47.2		ug/L		94	77 - 125	15	20
1,2-Dibromoethane (EDB)	50.0	47.6		ug/L		95	80 - 120	6	20
1,2-Dichlorobenzene	50.0	48.7		ug/L		97	80 - 120	1	20
1,4-Dichlorobenzene	50.0	49.1		ug/L		98	80 - 120	1	20
1,1-Dichloroethane	50.0	48.3		ug/L		97	80 - 120	2	20
1,2-Dichloroethane	50.0	47.4		ug/L		95	69 - 124	5	20
1,1-Dichloroethene	50.0	48.2		ug/L		96	77 - 126	2	20
1,2-Dichloropropane	50.0	48.6		ug/L		97	80 - 120	3	20
Ethylbenzene	50.0	48.8		ug/L		98	80 - 120	1	20
2-Hexanone	50.0	45.6		ug/L		91	64 - 136	16	20
Methyl bromide	50.0	44.2		ug/L		88	57 - 139	1	20
Methyl chloride	50.0	46.9		ug/L		94	70 - 127	0	20
Methylene bromide	50.0	47.9		ug/L		96	78 - 120	7	20
Methylene Chloride	50.0	48.0		ug/L		96	80 - 120	2	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCSD 160-269365/4
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl Ethyl Ketone			50.0	47.3		ug/L		95	70 - 130	11	20
Methyl iodide			50.0	44.3		ug/L		89	73 - 125	3	20
4-Methyl-2-pentanone (MIBK)			50.0	48.0		ug/L		96	76 - 129	16	20
Styrene			50.0	50.0		ug/L		100	80 - 120	2	20
1,1,1,2-Tetrachloroethane			50.0	49.3		ug/L		99	80 - 120	2	20
1,1,2,2-Tetrachloroethane			50.0	46.5		ug/L		93	80 - 120	9	20
Tetrachloroethene			50.0	49.3		ug/L		99	80 - 120	2	20
Toluene			50.0	48.7		ug/L		97	80 - 120	1	20
trans-1,4-Dichloro-2-butene			50.0	46.8		ug/L		94	75 - 127	13	20
trans-1,2-Dichloroethene			50.0	47.1		ug/L		94	80 - 120	2	20
trans-1,3-Dichloropropene			50.0	50.0		ug/L		100	80 - 130	5	20
1,1,1-Trichloroethane			50.0	49.2		ug/L		98	76 - 120	0	20
1,1,2-Trichloroethane			50.0	47.1		ug/L		94	80 - 120	5	20
Trichloroethene			50.0	48.0		ug/L		96	73 - 120	1	20
Trichlorofluoromethane			50.0	47.5		ug/L		95	74 - 130	0	20
1,2,3-Trichloropropane			50.0	46.5		ug/L		93	80 - 120	10	20
Vinyl acetate			50.0	52.9		ug/L		106	37 - 140	13	20
Vinyl chloride			50.0	47.7		ug/L		95	51 - 140	1	20
Xylenes, Total			100	99.4		ug/L		99	80 - 121	1	20

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*94*		*71 - 139*
Dibromofluoromethane (Surr)	*95*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*95*		*76 - 121*
Toluene-d8 (Surr)	*97*		*80 - 129*

Lab Sample ID: 160-18944-B-8 MS
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acetone	ND		50.0	51.9		ug/L		104	52 - 138
Acrylonitrile	ND		500	569		ug/L		114	58 - 142
Benzene	ND		50.0	48.3		ug/L		97	80 - 120
Bromochloromethane	ND		50.0	53.3		ug/L		107	72 - 125
Bromodichloromethane	ND		50.0	54.4		ug/L		109	71 - 128
Bromoform	ND		50.0	51.0		ug/L		102	65 - 133
Carbon disulfide	ND		50.0	50.4		ug/L		101	69 - 139
Carbon tetrachloride	1.0	J	50.0	52.7		ug/L		103	70 - 126
Chlorobenzene	ND		50.0	50.6		ug/L		101	80 - 120
Chloroethane	ND		50.0	47.2		ug/L		94	59 - 144
Chloroform	120		50.0	167		ug/L		102	80 - 120
cis-1,2-Dichloroethene	ND		50.0	50.3		ug/L		101	80 - 124
cis-1,3-Dichloropropene	ND		50.0	53.8		ug/L		108	67 - 130
Dibromochloromethane	ND		50.0	51.7		ug/L		103	68 - 133
1,2-Dibromo-3-Chloropropane	ND		50.0	54.1		ug/L		108	58 - 148
1,2-Dibromoethane (EDB)	ND		50.0	51.9		ug/L		104	65 - 138
1,2-Dichlorobenzene	ND		50.0	50.3		ug/L		101	80 - 124

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18944-B-8 MS
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,4-Dichlorobenzene	ND		50.0	50.3		ug/L		101	80 - 120
1,1-Dichloroethane	ND		50.0	51.3		ug/L		103	80 - 120
1,2-Dichloroethane	0.72	J	50.0	53.8		ug/L		106	56 - 136
1,1-Dichloroethene	1.8	J	50.0	50.6		ug/L		98	66 - 137
1,2-Dichloropropane	ND		50.0	52.5		ug/L		105	80 - 123
Ethylbenzene	ND		50.0	49.3		ug/L		99	80 - 121
2-Hexanone	ND		50.0	53.0		ug/L		106	47 - 150
Methyl bromide	ND		50.0	51.8		ug/L		104	53 - 146
Methyl chloride	ND		50.0	49.3		ug/L		99	61 - 137
Methylene bromide	ND		50.0	54.3		ug/L		109	61 - 136
Methylene Chloride	ND		50.0	51.3		ug/L		103	80 - 120
Methyl Ethyl Ketone	ND		50.0	52.6		ug/L		105	58 - 143
Methyl iodide	ND	F1 F2	50.0	24.9	F1	ug/L		50	69 - 124
4-Methyl-2-pentanone (MIBK)	ND		50.0	55.8		ug/L		112	53 - 150
Styrene	ND		50.0	48.4		ug/L		97	44 - 150
1,1,1,2-Tetrachloroethane	ND		50.0	51.1		ug/L		102	80 - 120
1,1,2,2-Tetrachloroethane	ND		50.0	52.1		ug/L		104	60 - 150
Tetrachloroethene	49		50.0	97.8		ug/L		98	66 - 132
Toluene	ND		50.0	48.4		ug/L		97	75 - 134
trans-1,4-Dichloro-2-butene	ND		50.0	53.7		ug/L		107	55 - 146
trans-1,2-Dichloroethene	ND		50.0	49.1		ug/L		98	79 - 121
trans-1,3-Dichloropropene	ND		50.0	52.8		ug/L		106	68 - 143
1,1,1-Trichloroethane	ND		50.0	51.4		ug/L		103	74 - 123
1,1,2-Trichloroethane	ND		50.0	51.1		ug/L		102	70 - 134
Trichloroethene	1.2	J	50.0	51.9		ug/L		101	63 - 120
Trichlorofluoromethane	ND		50.0	49.6		ug/L		99	53 - 150
1,2,3-Trichloropropane	ND		50.0	51.5		ug/L		103	62 - 137
Vinyl acetate	ND		50.0	65.0		ug/L		130	63 - 150
Vinyl chloride	ND		50.0	49.0		ug/L		98	54 - 140
Xylenes, Total	ND		100	99.6		ug/L		100	80 - 124

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*99*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*108*		*76 - 121*
Toluene-d8 (Surr)	*96*		*80 - 129*

Lab Sample ID: 160-18944-B-8 MSD
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acetone	ND		50.0	48.4		ug/L		97	52 - 138	7	20
Acrylonitrile	ND		500	524		ug/L		105	58 - 142	8	20
Benzene	ND		50.0	47.6		ug/L		95	80 - 120	1	20
Bromochloromethane	ND		50.0	51.0		ug/L		102	72 - 125	4	20
Bromodichloromethane	ND		50.0	52.9		ug/L		106	71 - 128	3	20
Bromoform	ND		50.0	48.2		ug/L		96	65 - 133	6	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 160-18944-B-8 MSD
Matrix: Water
Analysis Batch: 269365

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Carbon disulfide	ND		50.0	49.4		ug/L		99	69 - 139	2	20
Carbon tetrachloride	1.0	J	50.0	52.0		ug/L		102	70 - 126	1	20
Chlorobenzene	ND		50.0	50.1		ug/L		100	80 - 120	1	20
Chloroethane	ND		50.0	46.5		ug/L		93	59 - 144	1	20
Chloroform	120		50.0	166		ug/L		100	80 - 120	1	20
cis-1,2-Dichloroethene	ND		50.0	49.6		ug/L		99	80 - 124	1	20
cis-1,3-Dichloropropene	ND		50.0	52.9		ug/L		106	67 - 130	2	20
Dibromochloromethane	ND		50.0	50.1		ug/L		100	68 - 133	3	20
1,2-Dibromo-3-Chloropropane	ND		50.0	49.7		ug/L		99	58 - 148	8	20
1,2-Dibromoethane (EDB)	ND		50.0	49.7		ug/L		99	65 - 138	4	20
1,2-Dichlorobenzene	ND		50.0	49.8		ug/L		100	80 - 124	1	20
1,4-Dichlorobenzene	ND		50.0	49.8		ug/L		100	80 - 120	1	20
1,1-Dichloroethane	ND		50.0	50.5		ug/L		101	80 - 120	2	20
1,2-Dichloroethane	0.72	J	50.0	51.9		ug/L		102	56 - 136	4	20
1,1-Dichloroethene	1.8	J	50.0	50.4		ug/L		97	66 - 137	0	20
1,2-Dichloropropane	ND		50.0	51.5		ug/L		103	80 - 123	2	20
Ethylbenzene	ND		50.0	48.9		ug/L		98	80 - 121	1	20
2-Hexanone	ND		50.0	49.1		ug/L		98	47 - 150	8	20
Methyl bromide	ND		50.0	46.6		ug/L		93	53 - 146	11	20
Methyl chloride	ND		50.0	47.7		ug/L		95	61 - 137	3	20
Methylene bromide	ND		50.0	52.4		ug/L		105	61 - 136	4	20
Methylene Chloride	ND		50.0	50.4		ug/L		101	80 - 120	2	20
Methyl Ethyl Ketone	ND		50.0	49.7		ug/L		99	58 - 143	6	20
Methyl iodide	ND	F1 F2	50.0	35.5	F2	ug/L		71	69 - 124	35	20
4-Methyl-2-pentanone (MIBK)	ND		50.0	52.1		ug/L		104	53 - 150	7	20
Styrene	ND		50.0	47.3		ug/L		95	44 - 150	2	20
1,1,1,2-Tetrachloroethane	ND		50.0	50.8		ug/L		102	80 - 120	1	20
1,1,2,2-Tetrachloroethane	ND		50.0	49.3		ug/L		99	60 - 150	6	20
Tetrachloroethene	49		50.0	97.2		ug/L		97	66 - 132	1	20
Toluene	ND		50.0	48.3		ug/L		97	75 - 134	0	20
trans-1,4-Dichloro-2-butene	ND		50.0	50.2		ug/L		100	55 - 146	7	20
trans-1,2-Dichloroethene	ND		50.0	48.8		ug/L		98	79 - 121	1	20
trans-1,3-Dichloropropene	ND		50.0	51.6		ug/L		103	68 - 143	2	20
1,1,1-Trichloroethane	ND		50.0	50.5		ug/L		101	74 - 123	2	20
1,1,2-Trichloroethane	ND		50.0	49.8		ug/L		100	70 - 134	3	20
Trichloroethene	1.2	J	50.0	50.6		ug/L		99	63 - 120	3	20
Trichlorofluoromethane	ND		50.0	48.0		ug/L		96	53 - 150	3	20
1,2,3-Trichloropropane	ND		50.0	49.1		ug/L		98	62 - 137	5	20
Vinyl acetate	ND		50.0	60.6		ug/L		121	63 - 150	7	20
Vinyl chloride	ND		50.0	48.0		ug/L		96	54 - 140	2	20
Xylenes, Total	ND		100	99.3		ug/L		99	80 - 124	0	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*95*		*71 - 139*
Dibromofluoromethane (Surr)	*98*		*80 - 121*
1,2-Dichloroethane-d4 (Surr)	*104*		*76 - 121*
Toluene-d8 (Surr)	*96*		*80 - 129*

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 160-272390/3
Matrix: Water
Analysis Batch: 272390

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	ND		0.10	0.010	mg/L			09/29/16 17:33	1
Sulfate	ND		0.50	0.050	mg/L			09/29/16 17:33	1
Chloride	ND		0.20	0.020	mg/L			09/29/16 17:33	1

Lab Sample ID: LCS 160-272390/4
Matrix: Water
Analysis Batch: 272390

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	1.00	0.977		mg/L		98	90 - 110
Sulfate	8.00	7.63		mg/L		95	90 - 110
Chloride	2.00	1.91		mg/L		96	90 - 110

Lab Sample ID: 160-19135-J-1 MS
Matrix: Water
Analysis Batch: 272390

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.38	F1	2.00	2.12	F1	mg/L		87	90 - 110

Lab Sample ID: 160-19135-J-1 DU
Matrix: Water
Analysis Batch: 272390

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.38	F1	0.369		mg/L		2	20

Method: 300.0 - Anions, Ion Chromatography - DL

Lab Sample ID: 160-19135-J-1 MS
Matrix: Water
Analysis Batch: 272390

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate - DL	130		40.0	174		mg/L		98	90 - 110
Chloride - DL	41		20.0	59.9	E	mg/L		93	90 - 110

Lab Sample ID: 160-19135-J-1 DU
Matrix: Water
Analysis Batch: 272390

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate - DL	130		135		mg/L		0.1	20
Chloride - DL	41		40.9		mg/L		1	20

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 160-269134/1-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 269134

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Arsenic	ND		10	4.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Barium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Beryllium	ND		5.0	1.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
Boron	ND		100	25	ug/L		09/12/16 11:53	09/13/16 17:30	1
Cadmium	ND		5.0	1.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
CaHard	ND		2500	750	ug/L		09/12/16 11:53	09/13/16 17:30	1
Calcium	ND		1000	300	ug/L		09/12/16 11:53	09/13/16 17:30	1
Chromium	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Cobalt	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Copper	ND		25	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Lead	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Magnesium	ND		1.0	0.30	mg/L		09/12/16 11:53	09/13/16 17:30	1
Manganese	ND		15	2.5	ug/L		09/12/16 11:53	09/13/16 17:30	1
MgHard	ND		4100	1200	ug/L		09/12/16 11:53	09/13/16 17:30	1
Nickel	ND		0.040	0.010	mg/L		09/12/16 11:53	09/13/16 17:30	1
Phosphorus	ND		250	75	ug/L		09/12/16 11:53	09/13/16 17:30	1
Selenium	ND		15	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Silver	ND		10	3.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Sodium	ND		1000	300	ug/L		09/12/16 11:53	09/13/16 17:30	1
Thallium	ND		20	5.0	ug/L		09/12/16 11:53	09/13/16 17:30	1
Total Hardness	ND		6600	2000	ug/L		09/12/16 11:53	09/13/16 17:30	1
Vanadium	ND		50	15	ug/L		09/12/16 11:53	09/13/16 17:30	1
Zinc	ND		20	6.0	ug/L		09/12/16 11:53	09/13/16 17:30	1

Lab Sample ID: LCS 160-269134/2-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	500	489		ug/L		98	80 - 120
Arsenic	1000	956		ug/L		96	80 - 120
Barium	1000	1000		ug/L		100	80 - 120
Beryllium	1000	1020		ug/L		102	80 - 120
Boron	2000	2080	E	ug/L		104	80 - 120
Cadmium	1000	976		ug/L		98	80 - 120
Calcium	10000	10200		ug/L		102	80 - 120
Chromium	1000	1010		ug/L		101	80 - 120
Cobalt	1000	1020		ug/L		102	80 - 120
Copper	1000	992		ug/L		99	80 - 120
Lead	1000	1030		ug/L		103	80 - 120
Magnesium	10.0	10.2		mg/L		102	80 - 120
Manganese	1000	1050		ug/L		105	80 - 120
Nickel	1.00	1.02		mg/L		102	80 - 120
Phosphorus	1000	1100		ug/L		110	80 - 120
Selenium	500	489		ug/L		98	80 - 120
Silver	200	206		ug/L		103	80 - 120
Sodium	10000	10300		ug/L		103	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 160-269134/2-A
Matrix: Water
Analysis Batch: 269399

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Thallium	200	214		ug/L		107	80 - 120
Vanadium	1000	1010		ug/L		101	80 - 120
Zinc	1000	966		ug/L		97	80 - 120

Lab Sample ID: 160-18933-4 MS
Matrix: Water
Analysis Batch: 269399

Client Sample ID: PZ-303-AS
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	ND		500	487		ug/L		97	75 - 125
Arsenic	74		1000	1030		ug/L		95	75 - 125
Barium	770		1000	1730		ug/L		96	75 - 125
Beryllium	ND		1000	1020		ug/L		102	75 - 125
Boron	270	J	2000	2340		ug/L		103	75 - 125
Cadmium	ND		1000	978		ug/L		98	75 - 125
Calcium	310000		10000	311000	4	ug/L		-9	75 - 125
Chromium	ND		1000	999		ug/L		100	75 - 125
Cobalt	ND		1000	999		ug/L		100	75 - 125
Copper	ND		1000	977		ug/L		98	75 - 125
Lead	ND		1000	1020		ug/L		102	75 - 125
Magnesium	72		10.0	80.4	4	mg/L		81	75 - 125
Manganese	2300		1000	3280		ug/L		96	75 - 125
Nickel	ND		1.00	1.02		mg/L		102	75 - 125
Phosphorus	1700		1000	2770		ug/L		104	75 - 125
Selenium	ND		500	488		ug/L		98	75 - 125
Silver	ND		200	208		ug/L		104	75 - 125
Sodium	60000		10000	68200	4	ug/L		83	75 - 125
Thallium	ND		200	219		ug/L		110	75 - 125
Vanadium	ND		1000	991		ug/L		99	75 - 125
Zinc	ND		1000	972		ug/L		97	75 - 125

Lab Sample ID: 160-18933-4 MSD
Matrix: Water
Analysis Batch: 269399

Client Sample ID: PZ-303-AS
Prep Type: Total/NA
Prep Batch: 269134

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	ND		500	495		ug/L		99	75 - 125	2	20
Arsenic	74		1000	1050		ug/L		98	75 - 125	2	20
Barium	770		1000	1730		ug/L		96	75 - 125	0	20
Beryllium	ND		1000	1000		ug/L		100	75 - 125	1	20
Boron	270	J	2000	2290		ug/L		101	75 - 125	2	20
Cadmium	ND		1000	991		ug/L		99	75 - 125	1	20
Calcium	310000		10000	323000	4	ug/L		112	75 - 125	4	20
Chromium	ND		1000	1010		ug/L		101	75 - 125	1	20
Cobalt	ND		1000	1010		ug/L		101	75 - 125	2	20
Copper	ND		1000	996		ug/L		100	75 - 125	2	20
Lead	ND		1000	1020		ug/L		102	75 - 125	1	20
Magnesium	72		10.0	81.9	4	mg/L		96	75 - 125	2	20
Manganese	2300		1000	3290		ug/L		98	75 - 125	0	20

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 160-18933-4 MSD — **Client Sample ID: PZ-303-AS**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269399 — **Prep Batch: 269134**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nickel	ND		1.00	1.04		mg/L		104	75 - 125	2	20
Phosphorus	1700		1000	2860		ug/L		113	75 - 125	3	20
Selenium	ND		500	496		ug/L		99	75 - 125	2	20
Silver	ND		200	208		ug/L		104	75 - 125	0	20
Sodium	60000		10000	69300	4	ug/L		94	75 - 125	2	20
Thallium	ND		200	224		ug/L		112	75 - 125	2	20
Vanadium	ND		1000	981		ug/L		98	75 - 125	1	20
Zinc	ND		1000	984		ug/L		98	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 160-269325/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269954 — **Prep Batch: 269325**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.20	0.060	ug/L		09/13/16 11:07	09/14/16 11:02	1

Lab Sample ID: LCS 160-269325/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269954 — **Prep Batch: 269325**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	5.00	5.21		ug/L		104	80 - 120

Lab Sample ID: 160-18933-1 MS — **Client Sample ID: S-84**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269954 — **Prep Batch: 269325**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	ND		5.00	4.88		ug/L		98	80 - 120

Lab Sample ID: 160-18933-1 MSD — **Client Sample ID: S-84**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 269954 — **Prep Batch: 269325**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	ND		5.00	4.94		ug/L		99	80 - 120	1	20

Method: 160.1 - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 160-268258/1 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 268258

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids (TDS)	ND		5.0	3.5	mg/L			09/07/16 08:25	1

Method: 160.1 - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: LCS 160-268258/2
Matrix: Water
Analysis Batch: 268258

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids (TDS)	500	505		mg/L		101	90 - 110

Lab Sample ID: 160-18933-1 DU
Matrix: Water
Analysis Batch: 268258

Client Sample ID: S-84
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids (TDS)	750		758		mg/L		0.8	20

Method: 350.1 - Nitrogen, Ammonia

Lab Sample ID: MB 160-272554/25
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ammonia	ND		0.050	0.022	mg/L			09/29/16 17:13	1

Lab Sample ID: LCS 160-272554/26
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia	0.500	0.535		mg/L		107	90 - 110

Method: 350.1 - Nitrogen, Ammonia - RADL

Lab Sample ID: 160-18897-E-1 MS ^100
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia - RADL	26		0.500	26.8	4	mg/L		72	90 - 110

Lab Sample ID: 160-18933-1 MS
Matrix: Water
Analysis Batch: 272554

Client Sample ID: S-84
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ammonia - RADL	1.8	F1	0.500	2.47	F1	mg/L		141	90 - 110

Lab Sample ID: 160-18897-E-1 DU ^100
Matrix: Water
Analysis Batch: 272554

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ammonia - RADL	26		26.6		mg/L		0.5	20

Method: 353.1 Preserved - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 160-272820/13
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	0.0115	J	0.050	0.011	mg/L			10/03/16 14:51	1

Lab Sample ID: LCS 160-272820/14
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.508		mg/L		102	90 - 110

Lab Sample ID: 160-18897-E-1 MS
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.062	B F1	0.500	0.0586	F1	mg/L		-0.7	90 - 110

Lab Sample ID: 160-18897-E-1 DU
Matrix: Water
Analysis Batch: 272820

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.062	B F1	0.0500	F5	mg/L		22	20

Lab Sample ID: MB 160-273534/13
Matrix: Water
Analysis Batch: 273534

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate/Nitrite	ND		0.050	0.011	mg/L			10/06/16 15:45	1

Lab Sample ID: LCS 160-273534/14
Matrix: Water
Analysis Batch: 273534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.500	0.500		mg/L		100	90 - 110

Lab Sample ID: 160-19100-E-1 MS
Matrix: Water
Analysis Batch: 273534

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate/Nitrite	0.16	F1	0.500	0.659		mg/L		100	90 - 110

Lab Sample ID: 160-19100-E-1 DU
Matrix: Water
Analysis Batch: 273534

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrate/Nitrite	0.16	F1	0.160		mg/L		0.4	20

Method: 410.4 - COD

Lab Sample ID: MB 160-270518/3-A
Matrix: Water
Analysis Batch: 270576

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270518

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chemical Oxygen Demand	ND		5.0	1.1	mg/L		09/19/16 11:26	09/20/16 07:58	1

Lab Sample ID: LCS 160-270518/4-A
Matrix: Water
Analysis Batch: 270576

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270518

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	50.0	52.0		mg/L		104	90 - 110

Lab Sample ID: 160-19034-B-4-C MS
Matrix: Water
Analysis Batch: 270576

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270518

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chemical Oxygen Demand	13		50.0	67.0		mg/L		108	90 - 110

Lab Sample ID: 160-19034-B-4-B DU
Matrix: Water
Analysis Batch: 270576

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 270518

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chemical Oxygen Demand	13		12.0		mg/L		8	20

Method: 906.0 - Tritium, Total (LSC)

Lab Sample ID: MB 160-270734/1-A
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270734

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Tritium	-49.10	U	173	173	500	319	pCi/L	09/20/16 14:24	09/20/16 23:28	1

Lab Sample ID: LCS 160-270734/2-A
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Tritium	3020	2995		452	500	322	pCi/L	99	74 - 114

Lab Sample ID: 280-87757-C-6-B MS
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Tritium	892		3020	4225		566	500	329	pCi/L	110	67 - 130

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Method: 906.0 - Tritium, Total (LSC) (Continued)

Lab Sample ID: 280-87757-C-5-B DU
Matrix: Water
Analysis Batch: 270870

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 270734

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Tritium	1650			1829		350	500	329	pCi/L			0.26	1

GC/MS VOA

Analysis Batch: 269070

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	8260C	
160-18933-2	D-85	Total/NA	Water	8260C	
160-18933-3	PZ-208-SS	Total/NA	Water	8260C	
160-18933-5	TRIP BLANK	Total/NA	Water	8260C	
MB 160-269070/7	Method Blank	Total/NA	Water	8260C	
LCS 160-269070/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-269070/5	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18933-1 MS	S-84	Total/NA	Water	8260C	
160-18933-1 MSD	S-84	Total/NA	Water	8260C	

Analysis Batch: 269365

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-4 - DL	PZ-303-AS	Total/NA	Water	8260C	
MB 160-269365/6	Method Blank	Total/NA	Water	8260C	
LCS 160-269365/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 160-269365/4	Lab Control Sample Dup	Total/NA	Water	8260C	
160-18944-B-8 MS	Matrix Spike	Total/NA	Water	8260C	
160-18944-B-8 MSD	Matrix Spike Duplicate	Total/NA	Water	8260C	

HPLC/IC

Analysis Batch: 272390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	300.0	
160-18933-1 - DL	S-84	Total/NA	Water	300.0	
160-18933-2	D-85	Total/NA	Water	300.0	
160-18933-2 - DL	D-85	Total/NA	Water	300.0	
160-18933-2 - DL2	D-85	Total/NA	Water	300.0	
160-18933-3	PZ-208-SS	Total/NA	Water	300.0	
160-18933-3 - DL	PZ-208-SS	Total/NA	Water	300.0	
160-18933-3 - DL2	PZ-208-SS	Total/NA	Water	300.0	
160-18933-4	PZ-303-AS	Total/NA	Water	300.0	
160-18933-4 - DL	PZ-303-AS	Total/NA	Water	300.0	
MB 160-272390/3	Method Blank	Total/NA	Water	300.0	
LCS 160-272390/4	Lab Control Sample	Total/NA	Water	300.0	
160-19135-J-1 MS	Matrix Spike	Total/NA	Water	300.0	
160-19135-J-1 MS - DL	Matrix Spike	Total/NA	Water	300.0	
160-19135-J-1 DU	Duplicate	Total/NA	Water	300.0	
160-19135-J-1 DU - DL	Duplicate	Total/NA	Water	300.0	

Metals

Prep Batch: 269134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	3010A	
160-18933-2	D-85	Total/NA	Water	3010A	
160-18933-3	PZ-208-SS	Total/NA	Water	3010A	
160-18933-4	PZ-303-AS	Total/NA	Water	3010A	
MB 160-269134/1-A	Method Blank	Total/NA	Water	3010A	
LCS 160-269134/2-A	Lab Control Sample	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 269134 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-4 MS	PZ-303-AS	Total/NA	Water	3010A	
160-18933-4 MSD	PZ-303-AS	Total/NA	Water	3010A	

Prep Batch: 269325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	7470A	
160-18933-2	D-85	Total/NA	Water	7470A	
160-18933-3	PZ-208-SS	Total/NA	Water	7470A	
160-18933-4	PZ-303-AS	Total/NA	Water	7470A	
MB 160-269325/1-A	Method Blank	Total/NA	Water	7470A	
LCS 160-269325/2-A	Lab Control Sample	Total/NA	Water	7470A	
160-18933-1 MS	S-84	Total/NA	Water	7470A	
160-18933-1 MSD	S-84	Total/NA	Water	7470A	

Analysis Batch: 269399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	6010C	269134
160-18933-2	D-85	Total/NA	Water	6010C	269134
160-18933-3	PZ-208-SS	Total/NA	Water	6010C	269134
160-18933-4	PZ-303-AS	Total/NA	Water	6010C	269134
MB 160-269134/1-A	Method Blank	Total/NA	Water	6010C	269134
LCS 160-269134/2-A	Lab Control Sample	Total/NA	Water	6010C	269134
160-18933-4 MS	PZ-303-AS	Total/NA	Water	6010C	269134
160-18933-4 MSD	PZ-303-AS	Total/NA	Water	6010C	269134

Analysis Batch: 269954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	7470A	269325
160-18933-2	D-85	Total/NA	Water	7470A	269325
160-18933-3	PZ-208-SS	Total/NA	Water	7470A	269325
160-18933-4	PZ-303-AS	Total/NA	Water	7470A	269325
MB 160-269325/1-A	Method Blank	Total/NA	Water	7470A	269325
LCS 160-269325/2-A	Lab Control Sample	Total/NA	Water	7470A	269325
160-18933-1 MS	S-84	Total/NA	Water	7470A	269325
160-18933-1 MSD	S-84	Total/NA	Water	7470A	269325

General Chemistry

Analysis Batch: 268258

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	160.1	
160-18933-2	D-85	Total/NA	Water	160.1	
160-18933-3	PZ-208-SS	Total/NA	Water	160.1	
160-18933-4	PZ-303-AS	Total/NA	Water	160.1	
MB 160-268258/1	Method Blank	Total/NA	Water	160.1	
LCS 160-268258/2	Lab Control Sample	Total/NA	Water	160.1	
160-18933-1 DU	S-84	Total/NA	Water	160.1	

General Chemistry (Continued)

Prep Batch: 270518

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1 - DL	S-84	Total/NA	Water	410.4	
160-18933-2 - DL	D-85	Total/NA	Water	410.4	
160-18933-3	PZ-208-SS	Total/NA	Water	410.4	
160-18933-4 - DL	PZ-303-AS	Total/NA	Water	410.4	
MB 160-270518/3-A	Method Blank	Total/NA	Water	410.4	
LCS 160-270518/4-A	Lab Control Sample	Total/NA	Water	410.4	
160-19034-B-4-C MS	Matrix Spike	Total/NA	Water	410.4	
160-19034-B-4-B DU	Duplicate	Total/NA	Water	410.4	

Analysis Batch: 270576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1 - DL	S-84	Total/NA	Water	410.4	270518
160-18933-2 - DL	D-85	Total/NA	Water	410.4	270518
160-18933-3	PZ-208-SS	Total/NA	Water	410.4	270518
160-18933-4 - DL	PZ-303-AS	Total/NA	Water	410.4	270518
MB 160-270518/3-A	Method Blank	Total/NA	Water	410.4	270518
LCS 160-270518/4-A	Lab Control Sample	Total/NA	Water	410.4	270518
160-19034-B-4-C MS	Matrix Spike	Total/NA	Water	410.4	270518
160-19034-B-4-B DU	Duplicate	Total/NA	Water	410.4	270518

Analysis Batch: 272554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1 - RADL	S-84	Total/NA	Water	350.1	
160-18933-2 - RADL	D-85	Total/NA	Water	350.1	
160-18933-3 - RA	PZ-208-SS	Total/NA	Water	350.1	
160-18933-4 - RA	PZ-303-AS	Total/NA	Water	350.1	
MB 160-272554/25	Method Blank	Total/NA	Water	350.1	
LCS 160-272554/26	Lab Control Sample	Total/NA	Water	350.1	
160-18897-E-1 MS ^100 - RA	Matrix Spike	Total/NA	Water	350.1	
160-18933-1 MS - RADL	S-84	Total/NA	Water	350.1	
160-18897-E-1 DU ^100 - RA	Duplicate	Total/NA	Water	350.1	

Analysis Batch: 272820

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	353.1 Preserved	
160-18933-3	PZ-208-SS	Total/NA	Water	353.1 Preserved	
MB 160-272820/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-272820/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-18897-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-18897-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

Analysis Batch: 273534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-2	D-85	Total/NA	Water	353.1 Preserved	
160-18933-4	PZ-303-AS	Total/NA	Water	353.1 Preserved	
MB 160-273534/13	Method Blank	Total/NA	Water	353.1 Preserved	
LCS 160-273534/14	Lab Control Sample	Total/NA	Water	353.1 Preserved	
160-19100-E-1 MS	Matrix Spike	Total/NA	Water	353.1 Preserved	
160-19100-E-1 DU	Duplicate	Total/NA	Water	353.1 Preserved	

QC Association Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Rad

Prep Batch: 270734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
160-18933-1	S-84	Total/NA	Water	LSC_Dist_Susp	
160-18933-2	D-85	Total/NA	Water	LSC_Dist_Susp	
160-18933-3	PZ-208-SS	Total/NA	Water	LSC_Dist_Susp	
160-18933-4	PZ-303-AS	Total/NA	Water	LSC_Dist_Susp	
MB 160-270734/1-A	Method Blank	Total/NA	Water	LSC_Dist_Susp	
LCS 160-270734/2-A	Lab Control Sample	Total/NA	Water	LSC_Dist_Susp	
280-87757-C-6-B MS	Matrix Spike	Total/NA	Water	LSC_Dist_Susp	
280-87757-C-5-B DU	Duplicate	Total/NA	Water	LSC_Dist_Susp	

Surrogate Summary

Client: Missouri Attorney General's Office
Project/Site: Groundwater - 3rd Quarter 2016

TestAmerica Job ID: 160-18933-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		BFB	DBFM	12DCE	TOL
Lab Sample ID	Client Sample ID	(71-139)	(80-121)	(76-121)	(80-129)
160-18933-1	S-84	108	98	100	105
160-18933-1 MS	S-84	91	95	99	98
160-18933-1 MSD	S-84	95	99	102	99
160-18933-2	D-85	105	96	92	105
160-18933-3	PZ-208-SS	112	102	102	112
160-18933-4 - DL	PZ-303-AS	95	96	101	94
160-18933-5	TRIP BLANK	105	98	95	109
160-18944-B-8 MS	Matrix Spike	95	99	108	96
160-18944-B-8 MSD	Matrix Spike Duplicate	95	98	104	96
LCS 160-269070/4	Lab Control Sample	93	95	98	100
LCS 160-269365/3	Lab Control Sample	95	99	101	98
LCSD 160-269070/5	Lab Control Sample Dup	93	97	98	101
LCSD 160-269365/4	Lab Control Sample Dup	94	95	95	97
MB 160-269070/7	Method Blank	109	95	94	106
MB 160-269365/6	Method Blank	95	94	100	96

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)
12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)