

Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	6
Client Sample Results	10
Surrogate Summary	27
QC Sample Results	28
QC Association Summary	41
Lab Chronicle	46
Certification Summary	51
Method Summary	52
Sample Summary	53
Chain of Custody	54
Receipt Checklists	57



Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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.
B	Compound was found in the blank and sample.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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.
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.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
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)

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

Job ID: 480-149865-1

Job ID: 480-149865-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-149865-1

Revision

This report has been revised to correct the ID for sample 480-149865-5 from AMW-4VD-W-190305 to AMW-14VD-W-190305.

Receipt

The samples were received on 3/7/2019 9:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.9° C and 3.1° C.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-462080 recovered outside acceptance criteria, low biased, for 1,1,2-Trichloro-1,2,2-trifluoroethane, Carbon disulfide and Cyclohexane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect above the reporting limit (RLs) for these analytes, the data have been reported. The following samples are impacted: MW-26D2-W-190305 (480-149865-1), MW-26D1-W-190305 (480-149865-2), AMW-14D2-W-190305 (480-149865-3), AMW-14D1-W-190305 (480-149865-4), AMW-14VD-W-190305 (480-149865-5), MW-27D2-W-190305 (480-149865-6) and TB-W-190306 (480-149865-10).

Method(s) 8260C: The following volatiles samples were diluted due to foaming at the time of purging during the original sample analysis: MW-26D2-W-190305 (480-149865-1), MW-26D1-W-190305 (480-149865-2), AMW-14D1-W-190305 (480-149865-4) and MW-27D2-W-190305 (480-149865-6). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-462267 recovered outside control limits for the following analytes: Chlorodibromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported. The following samples are impacted: MW-23D2R-W-190305 (480-149865-7), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9).

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: AMW-7R-W-190306 (480-149865-8). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-462267 recovered above the upper control limit for Carbon tetrachloride, Chlorodibromomethane, Tetrachloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: MW-23D2R-W-190305 (480-149865-7), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9).

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

HPLC/IC

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-26D2-W-190305 (480-149865-1), MW-26D1-W-190305 (480-149865-2), AMW-14D2-W-190305 (480-149865-3), AMW-14D1-W-190305 (480-149865-4), AMW-14VD-W-190305 (480-149865-5), MW-27D2-W-190305 (480-149865-6), MW-23D2R-W-190305 (480-149865-7), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-29D1-W-190306 (480-149865-9). 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.

GC VOA

Method(s) RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-26D2-W-190305 (480-149865-1), MW-26D1-W-190305 (480-149865-2), AMW-14D1-W-190305 (480-149865-4), MW-27D2-W-190305 (480-149865-6), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9). Elevated reporting limits (RLs) are provided.

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

Job ID: 480-149865-1

Job ID: 480-149865-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

Metals

Method(s) 6010C: The Low Level Continuing Calibration Verification, (CCVL 480-462351/41) associated with batch 480-462351, contained Total Sodium above the upper quality control limit. The associated samples AMW-14D2-W-190305 (480-149865-3), AMW-14D1-W-190305 (480-149865-4), MW-27D2-W-190305 (480-149865-6), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9) were either ND for the affected analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples AMW-14D2-W-190305 (480-149865-3), AMW-14D1-W-190305 (480-149865-4), MW-27D2-W-190305 (480-149865-6), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9) was not performed.

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

General Chemistry

Method(s) SM 3500 FE D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-26D2-W-190305 (480-149865-1), MW-26D1-W-190305 (480-149865-2), AMW-14D2-W-190305 (480-149865-3), AMW-14D1-W-190305 (480-149865-4), AMW-14VD-W-190305 (480-149865-5), MW-27D2-W-190305 (480-149865-6), MW-23D2R-W-190305 (480-149865-7), AMW-7R-W-190306 (480-149865-8) and MW-29D1-W-190306 (480-149865-9).

Method(s) SM 3500 FE D: The following sample was diluted due to the nature of the sample matrix: AMW-14VD-W-190305 (480-149865-5). Elevated reporting limits (RLs) are provided.

Method(s) 9060A: For the following sample(s) the relative difference (RSD) between replicates exceeded acceptance limits. Matrix interference and/or in-homogenous matrix is suspected. This was confirmed by re-analysis, and the data is reported.
AMW-14VD-W-190305 (480-149865-5)

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-26D2-W-190305

Lab Sample ID: 480-149865-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Methyl tert-butyl ether	100		4.0	0.64	ug/L	4			8260C	Total/NA
Methylene Chloride	6.1		4.0	1.8	ug/L	4			8260C	Total/NA
Carbon dioxide	85000		5000	1800	ug/L	1			RSK-175	Total/NA
Methane	530		88	22	ug/L	22			RSK-175	Total/NA
Iron	0.13		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.056		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	2210		5.0	1.6	mg/L	5			6010C	Total/NA
Chloride	3950		25.0	14.1	mg/L	50			300.0	Total/NA
Sulfate	373		100	17.5	mg/L	50			300.0	Total/NA
Alkalinity, Total	660		100	40.0	mg/L	10			310.2	Total/NA
Total Organic Carbon	8.8		1.0	0.43	mg/L	1			9060A	Total/NA
Ferric Iron	0.13		0.10	0.075	mg/L	1			SM 3500	Total/NA
Sulfide	45.6		2.0	1.3	mg/L	1			SM 4500 S2 F	Total/NA

Client Sample ID: MW-26D1-W-190305

Lab Sample ID: 480-149865-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzene	6.5	J	10	4.1	ug/L	10			8260C	Total/NA
Methyl tert-butyl ether	89		10	1.6	ug/L	10			8260C	Total/NA
Methylene Chloride	11		10	4.4	ug/L	10			8260C	Total/NA
Carbon dioxide	80000		5000	1800	ug/L	1			RSK-175	Total/NA
Methane	950		180	44	ug/L	44			RSK-175	Total/NA
Iron	0.36		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.023		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	1610		5.0	1.6	mg/L	5			6010C	Total/NA
Chloride	2540		25.0	14.1	mg/L	50			300.0	Total/NA
Sulfate	215		100	17.5	mg/L	50			300.0	Total/NA
Alkalinity, Total	516		100	40.0	mg/L	10			310.2	Total/NA
Total Organic Carbon	28.8		2.0	0.87	mg/L	2			9060A	Total/NA
Ferric Iron	0.36		0.10	0.075	mg/L	1			SM 3500	Total/NA
Sulfide	26.4		1.0	0.67	mg/L	1			SM 4500 S2 F	Total/NA

Client Sample ID: AMW-14D2-W-190305

Lab Sample ID: 480-149865-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	5.5	J	10	3.0	ug/L	1			8260C	Total/NA
Methyl tert-butyl ether	3.0		1.0	0.16	ug/L	1			8260C	Total/NA
Carbon dioxide	24000		5000	1800	ug/L	1			RSK-175	Total/NA
Methane	44		4.0	1.0	ug/L	1			RSK-175	Total/NA
Iron	3.2		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.036		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	584	^	1.0	0.32	mg/L	1			6010C	Total/NA
Chloride	1110		10.0	5.6	mg/L	20			300.0	Total/NA
Sulfate	77.9		40.0	7.0	mg/L	20			300.0	Total/NA
Alkalinity, Total	66.7		10.0	4.0	mg/L	1			310.2	Total/NA
Nitrate as N	0.62		0.050	0.020	mg/L	1			353.2	Total/NA
Total Organic Carbon	2.4		1.0	0.43	mg/L	1			9060A	Total/NA
Ferric Iron	3.2		0.10	0.075	mg/L	1			SM 3500	Total/NA

Client Sample ID: AMW-14D1-W-190305

Lab Sample ID: 480-149865-4

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14D1-W-190305 (Continued)

Lab Sample ID: 480-149865-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	8.5	J	10	4.1	ug/L	10		8260C	Total/NA
Methyl tert-butyl ether	250		10	1.6	ug/L	10		8260C	Total/NA
Methylcyclohexane	2.4	J	10	1.6	ug/L	10		8260C	Total/NA
Methylene Chloride	10		10	4.4	ug/L	10		8260C	Total/NA
Xylenes, Total	10	J	20	6.6	ug/L	10		8260C	Total/NA
Carbon dioxide	15000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	210	J	660	130	ug/L	88		RSK-175	Total/NA
Methane	940		350	88	ug/L	88		RSK-175	Total/NA
Iron	3.0		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.012		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	896	^	1.0	0.32	mg/L	1		6010C	Total/NA
Chloride	1410		10.0	5.6	mg/L	20		300.0	Total/NA
Sulfate	123		40.0	7.0	mg/L	20		300.0	Total/NA
Alkalinity, Total	260		30.0	12.0	mg/L	3		310.2	Total/NA
Total Organic Carbon	42.0		2.0	0.87	mg/L	2		9060A	Total/NA
Ferric Iron	3.0		0.10	0.075	mg/L	1		SM 3500	Total/NA
Sulfide	47.2		2.0	1.3	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-14VD-W-190305

Lab Sample ID: 480-149865-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.6	J	10	3.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.37	J	1.0	0.19	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.63	J	1.0	0.16	ug/L	1		8260C	Total/NA
Carbon dioxide	23000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	1.6	J	7.5	1.5	ug/L	1		RSK-175	Total/NA
Methane	81		4.0	1.0	ug/L	1		RSK-175	Total/NA
Iron	4.8		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.30		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	2860		5.0	1.6	mg/L	5		6010C	Total/NA
Chloride	6460		50.0	28.2	mg/L	100		300.0	Total/NA
Sulfate	644		200	34.9	mg/L	100		300.0	Total/NA
Alkalinity, Total	88.2		10.0	4.0	mg/L	1		310.2	Total/NA
Total Organic Carbon	23.9		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	4.3		0.10	0.075	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.49	J HF	0.50	0.38	mg/L	5		SM 3500 FE D	Total/NA
Sulfide	2.0		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-27D2-W-190305

Lab Sample ID: 480-149865-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	9.5		4.0	0.64	ug/L	4		8260C	Total/NA
Methylene Chloride	3.9	J	4.0	1.8	ug/L	4		8260C	Total/NA
Carbon dioxide	86000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1500		88	22	ug/L	22		RSK-175	Total/NA
Iron	0.85		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.18		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	319	^	1.0	0.32	mg/L	1		6010C	Total/NA
Chloride	824		5.0	2.8	mg/L	10		300.0	Total/NA
Sulfate	56.2		20.0	3.5	mg/L	10		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-27D2-W-190305 (Continued)

Lab Sample ID: 480-149865-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity, Total	302		50.0	20.0	mg/L	5		310.2	Total/NA
Nitrate as N	0.35		0.050	0.020	mg/L	1		353.2	Total/NA
Total Organic Carbon	12.8		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	0.59		0.10	0.075	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.26	HF	0.10	0.075	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	27.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-23D2R-W-190305

Lab Sample ID: 480-149865-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.3		1.0	0.41	ug/L	1		8260C	Total/NA
Carbon disulfide	0.20	J	1.0	0.19	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	2.8		1.0	0.16	ug/L	1		8260C	Total/NA
Carbon dioxide	3400	J	5000	1800	ug/L	1		RSK-175	Total/NA
Methane	130		4.0	1.0	ug/L	1		RSK-175	Total/NA
Iron	2.2		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.16		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	1430		5.0	1.6	mg/L	5		6010C	Total/NA
Chloride	1650		10.0	5.6	mg/L	20		300.0	Total/NA
Sulfate	167		40.0	7.0	mg/L	20		300.0	Total/NA
Alkalinity, Total	506		100	40.0	mg/L	10		310.2	Total/NA
Nitrate as N	0.033	J	0.050	0.020	mg/L	1		353.2	Total/NA
Total Organic Carbon	11.8		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	2.2		0.10	0.075	mg/L	1		SM 3500	Total/NA
Sulfide	11.2		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-7R-W-190306

Lab Sample ID: 480-149865-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	10		4.0	0.72	ug/L	4		8260C	Total/NA
Methylcyclohexane	12		4.0	0.64	ug/L	4		8260C	Total/NA
Methylene Chloride	3.0	J B	4.0	1.8	ug/L	4		8260C	Total/NA
Carbon dioxide	55000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	620		44	11	ug/L	11		RSK-175	Total/NA
Iron	64.1		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	1.1		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	116	^	1.0	0.32	mg/L	1		6010C	Total/NA
Chloride	97.5		2.5	1.4	mg/L	5		300.0	Total/NA
Sulfate	240		10.0	1.7	mg/L	5		300.0	Total/NA
Alkalinity, Total	399		50.0	20.0	mg/L	5		310.2	Total/NA
Total Organic Carbon	11.6		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	62.8		0.10	0.075	mg/L	1		SM 3500	Total/NA
Ferrous Iron	1.3	HF	0.50	0.38	mg/L	5		SM 3500 FE D	Total/NA
Sulfide	6.8		1.0	0.67	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-29D1-W-190306

Lab Sample ID: 480-149865-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	3.4	J	10	3.0	ug/L	1		8260C	Total/NA
Benzene	0.70	J	1.0	0.41	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-29D1-W-190306 (Continued)

Lab Sample ID: 480-149865-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Cyclohexane	3.8		1.0	0.18	ug/L	1			8260C	Total/NA
Isopropylbenzene	2.0		1.0	0.79	ug/L	1			8260C	Total/NA
Methyl tert-butyl ether	7.5		1.0	0.16	ug/L	1			8260C	Total/NA
Methylcyclohexane	1.2		1.0	0.16	ug/L	1			8260C	Total/NA
Carbon dioxide	35000		5000	1800	ug/L	1			RSK-175	Total/NA
Methane	1800		88	22	ug/L	22			RSK-175	Total/NA
Iron	9.0		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.26		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	673	^	1.0	0.32	mg/L	1			6010C	Total/NA
Chloride	1110		10.0	5.6	mg/L	20			300.0	Total/NA
Sulfate	14.3	J	20.0	3.5	mg/L	10			300.0	Total/NA
Alkalinity, Total	97.9		10.0	4.0	mg/L	1			310.2	Total/NA
Total Organic Carbon	3.2		1.0	0.43	mg/L	1			9060A	Total/NA
Ferric Iron	8.9		0.10	0.075	mg/L	1			SM 3500	Total/NA
Ferrous Iron	0.12	HF	0.10	0.075	mg/L	1			SM 3500 FE D	Total/NA
Sulfide	1.2		1.0	0.67	mg/L	1			SM 4500 S2 F	Total/NA

Client Sample ID: TB-W-190306

Lab Sample ID: 480-149865-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	4.4	J	10	3.0	ug/L	1			8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-26D2-W-190305

Lab Sample ID: 480-149865-1

Date Collected: 03/05/19 20:07

Matrix: Ground Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0	3.3	ug/L			03/08/19 01:24	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.84	ug/L			03/08/19 01:24	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0	1.2	ug/L			03/08/19 01:24	4
1,1,2-Trichloroethane	4.0	U	4.0	0.92	ug/L			03/08/19 01:24	4
1,1-Dichloroethane	4.0	U	4.0	1.5	ug/L			03/08/19 01:24	4
1,1-Dichloroethene	4.0	U	4.0	1.2	ug/L			03/08/19 01:24	4
1,2,4-Trichlorobenzene	4.0	U	4.0	1.6	ug/L			03/08/19 01:24	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			03/08/19 01:24	4
1,2-Dibromoethane	4.0	U	4.0	2.9	ug/L			03/08/19 01:24	4
1,2-Dichlorobenzene	4.0	U	4.0	3.2	ug/L			03/08/19 01:24	4
1,2-Dichloroethane	4.0	U	4.0	0.84	ug/L			03/08/19 01:24	4
1,2-Dichloropropane	4.0	U	4.0	2.9	ug/L			03/08/19 01:24	4
1,3-Dichlorobenzene	4.0	U	4.0	3.1	ug/L			03/08/19 01:24	4
1,4-Dichlorobenzene	4.0	U	4.0	3.4	ug/L			03/08/19 01:24	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			03/08/19 01:24	4
2-Hexanone	20	U	20	5.0	ug/L			03/08/19 01:24	4
4-Methyl-2-pentanone (MIBK)	20	U	20	8.4	ug/L			03/08/19 01:24	4
Acetone	40	U	40	12	ug/L			03/08/19 01:24	4
Benzene	4.0	U	4.0	1.6	ug/L			03/08/19 01:24	4
Bromodichloromethane	4.0	U	4.0	1.6	ug/L			03/08/19 01:24	4
Bromoform	4.0	U	4.0	1.0	ug/L			03/08/19 01:24	4
Bromomethane	4.0	U	4.0	2.8	ug/L			03/08/19 01:24	4
Carbon disulfide	4.0	U	4.0	0.76	ug/L			03/08/19 01:24	4
Carbon tetrachloride	4.0	U	4.0	1.1	ug/L			03/08/19 01:24	4
Chlorobenzene	4.0	U	4.0	3.0	ug/L			03/08/19 01:24	4
Chloroethane	4.0	U	4.0	1.3	ug/L			03/08/19 01:24	4
Chloroform	4.0	U	4.0	1.4	ug/L			03/08/19 01:24	4
Chloromethane	4.0	U	4.0	1.4	ug/L			03/08/19 01:24	4
cis-1,2-Dichloroethene	4.0	U	4.0	3.2	ug/L			03/08/19 01:24	4
cis-1,3-Dichloropropene	4.0	U	4.0	1.4	ug/L			03/08/19 01:24	4
Cyclohexane	4.0	U	4.0	0.72	ug/L			03/08/19 01:24	4
Dibromochloromethane	4.0	U	4.0	1.3	ug/L			03/08/19 01:24	4
Dichlorodifluoromethane	4.0	U	4.0	2.7	ug/L			03/08/19 01:24	4
Ethylbenzene	4.0	U	4.0	3.0	ug/L			03/08/19 01:24	4
Isopropylbenzene	4.0	U	4.0	3.2	ug/L			03/08/19 01:24	4
Methyl acetate	10	U	10	5.2	ug/L			03/08/19 01:24	4
Methyl tert-butyl ether	100		4.0	0.64	ug/L			03/08/19 01:24	4
Methylcyclohexane	4.0	U	4.0	0.64	ug/L			03/08/19 01:24	4
Methylene Chloride	6.1		4.0	1.8	ug/L			03/08/19 01:24	4
Styrene	4.0	U	4.0	2.9	ug/L			03/08/19 01:24	4
Tetrachloroethene	4.0	U	4.0	1.4	ug/L			03/08/19 01:24	4
Toluene	4.0	U	4.0	2.0	ug/L			03/08/19 01:24	4
trans-1,2-Dichloroethene	4.0	U	4.0	3.6	ug/L			03/08/19 01:24	4
trans-1,3-Dichloropropene	4.0	U	4.0	1.5	ug/L			03/08/19 01:24	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			03/08/19 01:24	4
Trichlorofluoromethane	4.0	U	4.0	3.5	ug/L			03/08/19 01:24	4
Vinyl chloride	4.0	U	4.0	3.6	ug/L			03/08/19 01:24	4
Xylenes, Total	8.0	U	8.0	2.6	ug/L			03/08/19 01:24	4

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-26D2-W-190305

Lab Sample ID: 480-149865-1

Date Collected: 03/05/19 20:07

Matrix: Ground Water

Date Received: 03/07/19 09:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		77 - 120		03/08/19 01:24	4
4-Bromofluorobenzene (Surr)	112		73 - 120		03/08/19 01:24	4
Dibromofluoromethane (Surr)	112		75 - 123		03/08/19 01:24	4
Toluene-d8 (Surr)	98		80 - 120		03/08/19 01:24	4

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	85000		5000	1800	ug/L			03/08/19 14:14	1
Ethane	170	U	170	33	ug/L			03/12/19 10:30	22
Ethene	150	U	150	33	ug/L			03/12/19 10:30	22
Methane	530		88	22	ug/L			03/12/19 10:30	22

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.13		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 17:56	1
Manganese	0.056		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 17:56	1
Sodium	2210		5.0	1.6	mg/L		03/08/19 07:34	03/11/19 14:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3950		25.0	14.1	mg/L			03/08/19 15:10	50
Sulfate	373		100	17.5	mg/L			03/08/19 15:10	50
Alkalinity, Total	660		100	40.0	mg/L			03/12/19 19:03	10
Nitrate as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:08	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:08	1
Total Organic Carbon	8.8		1.0	0.43	mg/L			03/16/19 00:13	1
Ferric Iron	0.13		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	45.6		2.0	1.3	mg/L			03/10/19 14:07	1

Client Sample ID: MW-26D1-W-190305

Lab Sample ID: 480-149865-2

Date Collected: 03/05/19 20:32

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10	8.2	ug/L			03/08/19 01:51	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			03/08/19 01:51	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	3.1	ug/L			03/08/19 01:51	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			03/08/19 01:51	10
1,1-Dichloroethane	10	U	10	3.8	ug/L			03/08/19 01:51	10
1,1-Dichloroethene	10	U	10	2.9	ug/L			03/08/19 01:51	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			03/08/19 01:51	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			03/08/19 01:51	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			03/08/19 01:51	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			03/08/19 01:51	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			03/08/19 01:51	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			03/08/19 01:51	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			03/08/19 01:51	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			03/08/19 01:51	10
2-Butanone (MEK)	100	U	100	13	ug/L			03/08/19 01:51	10

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-26D1-W-190305

Lab Sample ID: 480-149865-2

Date Collected: 03/05/19 20:32

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	50	U	50	12	ug/L			03/08/19 01:51	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			03/08/19 01:51	10
Acetone	100	U	100	30	ug/L			03/08/19 01:51	10
Benzene	6.5	J	10	4.1	ug/L			03/08/19 01:51	10
Bromodichloromethane	10	U	10	3.9	ug/L			03/08/19 01:51	10
Bromoform	10	U	10	2.6	ug/L			03/08/19 01:51	10
Bromomethane	10	U	10	6.9	ug/L			03/08/19 01:51	10
Carbon disulfide	10	U	10	1.9	ug/L			03/08/19 01:51	10
Carbon tetrachloride	10	U	10	2.7	ug/L			03/08/19 01:51	10
Chlorobenzene	10	U	10	7.5	ug/L			03/08/19 01:51	10
Chloroethane	10	U	10	3.2	ug/L			03/08/19 01:51	10
Chloroform	10	U	10	3.4	ug/L			03/08/19 01:51	10
Chloromethane	10	U	10	3.5	ug/L			03/08/19 01:51	10
cis-1,2-Dichloroethene	10	U	10	8.1	ug/L			03/08/19 01:51	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			03/08/19 01:51	10
Cyclohexane	10	U	10	1.8	ug/L			03/08/19 01:51	10
Dibromochloromethane	10	U	10	3.2	ug/L			03/08/19 01:51	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			03/08/19 01:51	10
Ethylbenzene	10	U	10	7.4	ug/L			03/08/19 01:51	10
Isopropylbenzene	10	U	10	7.9	ug/L			03/08/19 01:51	10
Methyl acetate	25	U	25	13	ug/L			03/08/19 01:51	10
Methyl tert-butyl ether	89		10	1.6	ug/L			03/08/19 01:51	10
Methylcyclohexane	10	U	10	1.6	ug/L			03/08/19 01:51	10
Methylene Chloride	11		10	4.4	ug/L			03/08/19 01:51	10
Styrene	10	U	10	7.3	ug/L			03/08/19 01:51	10
Tetrachloroethene	10	U	10	3.6	ug/L			03/08/19 01:51	10
Toluene	10	U	10	5.1	ug/L			03/08/19 01:51	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			03/08/19 01:51	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			03/08/19 01:51	10
Trichloroethene	10	U	10	4.6	ug/L			03/08/19 01:51	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			03/08/19 01:51	10
Vinyl chloride	10	U	10	9.0	ug/L			03/08/19 01:51	10
Xylenes, Total	20	U	20	6.6	ug/L			03/08/19 01:51	10

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		03/08/19 01:51	10
4-Bromofluorobenzene (Surr)	111		73 - 120		03/08/19 01:51	10
Dibromofluoromethane (Surr)	110		75 - 123		03/08/19 01:51	10
Toluene-d8 (Surr)	98		80 - 120		03/08/19 01:51	10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	80000		5000	1800	ug/L			03/08/19 14:23	1
Ethane	330	U	330	66	ug/L			03/12/19 10:49	44
Ethene	310	U	310	66	ug/L			03/12/19 10:49	44
Methane	950		180	44	ug/L			03/12/19 10:49	44

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.36		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:00	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-26D1-W-190305

Lab Sample ID: 480-149865-2

Date Collected: 03/05/19 20:32

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.023		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:00	1
Sodium	1610		5.0	1.6	mg/L		03/08/19 07:34	03/11/19 14:57	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2540		25.0	14.1	mg/L			03/08/19 15:25	50
Sulfate	215		100	17.5	mg/L			03/08/19 15:25	50
Alkalinity, Total	516		100	40.0	mg/L			03/12/19 19:06	10
Nitrate as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:09	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:09	1
Total Organic Carbon	28.8		2.0	0.87	mg/L			03/10/19 16:04	2
Ferric Iron	0.36		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	26.4		1.0	0.67	mg/L			03/10/19 14:07	1

Client Sample ID: AMW-14D2-W-190305

Lab Sample ID: 480-149865-3

Date Collected: 03/05/19 21:08

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/08/19 02:17	1
1,1,1,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 02:17	1
1,1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 02:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/08/19 02:17	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/08/19 02:17	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/08/19 02:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/08/19 02:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/08/19 02:17	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/08/19 02:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/08/19 02:17	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 02:17	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/08/19 02:17	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/08/19 02:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/08/19 02:17	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/08/19 02:17	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/08/19 02:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/08/19 02:17	1
Acetone	5.5	J	10	3.0	ug/L			03/08/19 02:17	1
Benzene	1.0	U	1.0	0.41	ug/L			03/08/19 02:17	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/08/19 02:17	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/08/19 02:17	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/08/19 02:17	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			03/08/19 02:17	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/08/19 02:17	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/08/19 02:17	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 02:17	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/08/19 02:17	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/08/19 02:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/08/19 02:17	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14D2-W-190305

Lab Sample ID: 480-149865-3

Date Collected: 03/05/19 21:08

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/08/19 02:17	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			03/08/19 02:17	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			03/08/19 02:17	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/08/19 02:17	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/08/19 02:17	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			03/08/19 02:17	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/08/19 02:17	1
Methyl tert-butyl ether	3.0		1.0	0.16	ug/L			03/08/19 02:17	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			03/08/19 02:17	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			03/08/19 02:17	1
Styrene	1.0	U	1.0	0.73	ug/L			03/08/19 02:17	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/08/19 02:17	1
Toluene	1.0	U	1.0	0.51	ug/L			03/08/19 02:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/08/19 02:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/08/19 02:17	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/08/19 02:17	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/08/19 02:17	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/08/19 02:17	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/08/19 02:17	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		03/08/19 02:17	1
4-Bromofluorobenzene (Surr)	106		73 - 120		03/08/19 02:17	1
Dibromofluoromethane (Surr)	108		75 - 123		03/08/19 02:17	1
Toluene-d8 (Surr)	99		80 - 120		03/08/19 02:17	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	24000		5000	1800	ug/L			03/08/19 14:40	1
Ethane	7.5	U	7.5	1.5	ug/L			03/12/19 11:08	1
Ethene	7.0	U	7.0	1.5	ug/L			03/12/19 11:08	1
Methane	44		4.0	1.0	ug/L			03/12/19 11:08	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.2		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:04	1
Manganese	0.036		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:04	1
Sodium	584	^	1.0	0.32	mg/L		03/08/19 07:34	03/08/19 18:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1110		10.0	5.6	mg/L			03/08/19 15:41	20
Sulfate	77.9		40.0	7.0	mg/L			03/08/19 15:41	20
Alkalinity, Total	66.7		10.0	4.0	mg/L			03/12/19 18:43	1
Nitrate as N	0.62		0.050	0.020	mg/L			03/07/19 16:27	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 16:27	1
Total Organic Carbon	2.4		1.0	0.43	mg/L			03/10/19 17:01	1
Ferric Iron	3.2		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	1.0	U	1.0	0.67	mg/L			03/10/19 14:07	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14D1-W-190305

Lab Sample ID: 480-149865-4

Date Collected: 03/05/19 21:40

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10	8.2	ug/L			03/08/19 02:45	10
1,1,2,2-Tetrachloroethane	10	U	10	2.1	ug/L			03/08/19 02:45	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	3.1	ug/L			03/08/19 02:45	10
1,1,2-Trichloroethane	10	U	10	2.3	ug/L			03/08/19 02:45	10
1,1-Dichloroethane	10	U	10	3.8	ug/L			03/08/19 02:45	10
1,1-Dichloroethene	10	U	10	2.9	ug/L			03/08/19 02:45	10
1,2,4-Trichlorobenzene	10	U	10	4.1	ug/L			03/08/19 02:45	10
1,2-Dibromo-3-Chloropropane	10	U	10	3.9	ug/L			03/08/19 02:45	10
1,2-Dibromoethane	10	U	10	7.3	ug/L			03/08/19 02:45	10
1,2-Dichlorobenzene	10	U	10	7.9	ug/L			03/08/19 02:45	10
1,2-Dichloroethane	10	U	10	2.1	ug/L			03/08/19 02:45	10
1,2-Dichloropropane	10	U	10	7.2	ug/L			03/08/19 02:45	10
1,3-Dichlorobenzene	10	U	10	7.8	ug/L			03/08/19 02:45	10
1,4-Dichlorobenzene	10	U	10	8.4	ug/L			03/08/19 02:45	10
2-Butanone (MEK)	100	U	100	13	ug/L			03/08/19 02:45	10
2-Hexanone	50	U	50	12	ug/L			03/08/19 02:45	10
4-Methyl-2-pentanone (MIBK)	50	U	50	21	ug/L			03/08/19 02:45	10
Acetone	100	U	100	30	ug/L			03/08/19 02:45	10
Benzene	8.5	J	10	4.1	ug/L			03/08/19 02:45	10
Bromodichloromethane	10	U	10	3.9	ug/L			03/08/19 02:45	10
Bromoform	10	U	10	2.6	ug/L			03/08/19 02:45	10
Bromomethane	10	U	10	6.9	ug/L			03/08/19 02:45	10
Carbon disulfide	10	U	10	1.9	ug/L			03/08/19 02:45	10
Carbon tetrachloride	10	U	10	2.7	ug/L			03/08/19 02:45	10
Chlorobenzene	10	U	10	7.5	ug/L			03/08/19 02:45	10
Chloroethane	10	U	10	3.2	ug/L			03/08/19 02:45	10
Chloroform	10	U	10	3.4	ug/L			03/08/19 02:45	10
Chloromethane	10	U	10	3.5	ug/L			03/08/19 02:45	10
cis-1,2-Dichloroethene	10	U	10	8.1	ug/L			03/08/19 02:45	10
cis-1,3-Dichloropropene	10	U	10	3.6	ug/L			03/08/19 02:45	10
Cyclohexane	10	U	10	1.8	ug/L			03/08/19 02:45	10
Dibromochloromethane	10	U	10	3.2	ug/L			03/08/19 02:45	10
Dichlorodifluoromethane	10	U	10	6.8	ug/L			03/08/19 02:45	10
Ethylbenzene	10	U	10	7.4	ug/L			03/08/19 02:45	10
Isopropylbenzene	10	U	10	7.9	ug/L			03/08/19 02:45	10
Methyl acetate	25	U	25	13	ug/L			03/08/19 02:45	10
Methyl tert-butyl ether	250		10	1.6	ug/L			03/08/19 02:45	10
Methylcyclohexane	2.4	J	10	1.6	ug/L			03/08/19 02:45	10
Methylene Chloride	10		10	4.4	ug/L			03/08/19 02:45	10
Styrene	10	U	10	7.3	ug/L			03/08/19 02:45	10
Tetrachloroethene	10	U	10	3.6	ug/L			03/08/19 02:45	10
Toluene	10	U	10	5.1	ug/L			03/08/19 02:45	10
trans-1,2-Dichloroethene	10	U	10	9.0	ug/L			03/08/19 02:45	10
trans-1,3-Dichloropropene	10	U	10	3.7	ug/L			03/08/19 02:45	10
Trichloroethene	10	U	10	4.6	ug/L			03/08/19 02:45	10
Trichlorofluoromethane	10	U	10	8.8	ug/L			03/08/19 02:45	10
Vinyl chloride	10	U	10	9.0	ug/L			03/08/19 02:45	10
Xylenes, Total	10	J	20	6.6	ug/L			03/08/19 02:45	10

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14D1-W-190305

Lab Sample ID: 480-149865-4

Date Collected: 03/05/19 21:40

Matrix: Water

Date Received: 03/07/19 09:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		03/08/19 02:45	10
4-Bromofluorobenzene (Surr)	111		73 - 120		03/08/19 02:45	10
Dibromofluoromethane (Surr)	113		75 - 123		03/08/19 02:45	10
Toluene-d8 (Surr)	97		80 - 120		03/08/19 02:45	10

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	15000		5000	1800	ug/L			03/08/19 14:32	1
Ethane	210	J	660	130	ug/L			03/12/19 11:26	88
Ethene	620	U	620	130	ug/L			03/12/19 11:26	88
Methane	940		350	88	ug/L			03/12/19 11:26	88

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	3.0		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:39	1
Manganese	0.012		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:39	1
Sodium	896	^	1.0	0.32	mg/L		03/08/19 07:34	03/08/19 18:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1410		10.0	5.6	mg/L			03/08/19 15:55	20
Sulfate	123		40.0	7.0	mg/L			03/08/19 15:55	20
Alkalinity, Total	260		30.0	12.0	mg/L			03/12/19 18:59	3
Nitrate as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:11	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:11	1
Total Organic Carbon	42.0		2.0	0.87	mg/L			03/10/19 17:29	2
Ferric Iron	3.0		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	47.2		2.0	1.3	mg/L			03/10/19 14:07	1

Client Sample ID: AMW-14VD-W-190305

Lab Sample ID: 480-149865-5

Date Collected: 03/05/19 22:24

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/08/19 03:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 03:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 03:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/08/19 03:12	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/08/19 03:12	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/08/19 03:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/08/19 03:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/08/19 03:12	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/08/19 03:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/08/19 03:12	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 03:12	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/08/19 03:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/08/19 03:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/08/19 03:12	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/08/19 03:12	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14VD-W-190305

Lab Sample ID: 480-149865-5

Date Collected: 03/05/19 22:24

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/08/19 03:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/08/19 03:12	1
Acetone	4.6	J	10	3.0	ug/L			03/08/19 03:12	1
Benzene	1.0	U	1.0	0.41	ug/L			03/08/19 03:12	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/08/19 03:12	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/08/19 03:12	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/08/19 03:12	1
Carbon disulfide	0.37	J	1.0	0.19	ug/L			03/08/19 03:12	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/08/19 03:12	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/08/19 03:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 03:12	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/08/19 03:12	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/08/19 03:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/08/19 03:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/08/19 03:12	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			03/08/19 03:12	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			03/08/19 03:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/08/19 03:12	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/08/19 03:12	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			03/08/19 03:12	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/08/19 03:12	1
Methyl tert-butyl ether	0.63	J	1.0	0.16	ug/L			03/08/19 03:12	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			03/08/19 03:12	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			03/08/19 03:12	1
Styrene	1.0	U	1.0	0.73	ug/L			03/08/19 03:12	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/08/19 03:12	1
Toluene	1.0	U	1.0	0.51	ug/L			03/08/19 03:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/08/19 03:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/08/19 03:12	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/08/19 03:12	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/08/19 03:12	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/08/19 03:12	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/08/19 03:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		77 - 120		03/08/19 03:12	1
4-Bromofluorobenzene (Surr)	107		73 - 120		03/08/19 03:12	1
Dibromofluoromethane (Surr)	111		75 - 123		03/08/19 03:12	1
Toluene-d8 (Surr)	95		80 - 120		03/08/19 03:12	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	23000		5000	1800	ug/L			03/08/19 14:49	1
Ethane	1.6	J	7.5	1.5	ug/L			03/12/19 13:20	1
Ethene	7.0	U	7.0	1.5	ug/L			03/12/19 13:20	1
Methane	81		4.0	1.0	ug/L			03/12/19 13:20	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	4.8		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:08	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14VD-W-190305

Lab Sample ID: 480-149865-5

Date Collected: 03/05/19 22:24

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	0.30		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:08	1
Sodium	2860		5.0	1.6	mg/L		03/08/19 07:34	03/11/19 15:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6460		50.0	28.2	mg/L			03/08/19 16:10	100
Sulfate	644		200	34.9	mg/L			03/08/19 16:10	100
Alkalinity, Total	88.2		10.0	4.0	mg/L			03/12/19 18:43	1
Nitrate as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:17	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:17	1
Total Organic Carbon	23.9		1.0	0.43	mg/L			03/10/19 17:57	1
Ferric Iron	4.3		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.49	J HF	0.50	0.38	mg/L			03/07/19 15:00	5
Sulfide	2.0		1.0	0.67	mg/L			03/11/19 14:01	1

Client Sample ID: MW-27D2-W-190305

Lab Sample ID: 480-149865-6

Date Collected: 03/05/19 23:03

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0	3.3	ug/L			03/08/19 03:38	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.84	ug/L			03/08/19 03:38	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0	1.2	ug/L			03/08/19 03:38	4
1,1,2-Trichloroethane	4.0	U	4.0	0.92	ug/L			03/08/19 03:38	4
1,1-Dichloroethane	4.0	U	4.0	1.5	ug/L			03/08/19 03:38	4
1,1-Dichloroethene	4.0	U	4.0	1.2	ug/L			03/08/19 03:38	4
1,2,4-Trichlorobenzene	4.0	U	4.0	1.6	ug/L			03/08/19 03:38	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			03/08/19 03:38	4
1,2-Dibromoethane	4.0	U	4.0	2.9	ug/L			03/08/19 03:38	4
1,2-Dichlorobenzene	4.0	U	4.0	3.2	ug/L			03/08/19 03:38	4
1,2-Dichloroethane	4.0	U	4.0	0.84	ug/L			03/08/19 03:38	4
1,2-Dichloropropane	4.0	U	4.0	2.9	ug/L			03/08/19 03:38	4
1,3-Dichlorobenzene	4.0	U	4.0	3.1	ug/L			03/08/19 03:38	4
1,4-Dichlorobenzene	4.0	U	4.0	3.4	ug/L			03/08/19 03:38	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			03/08/19 03:38	4
2-Hexanone	20	U	20	5.0	ug/L			03/08/19 03:38	4
4-Methyl-2-pentanone (MIBK)	20	U	20	8.4	ug/L			03/08/19 03:38	4
Acetone	40	U	40	12	ug/L			03/08/19 03:38	4
Benzene	4.0	U	4.0	1.6	ug/L			03/08/19 03:38	4
Bromodichloromethane	4.0	U	4.0	1.6	ug/L			03/08/19 03:38	4
Bromoform	4.0	U	4.0	1.0	ug/L			03/08/19 03:38	4
Bromomethane	4.0	U	4.0	2.8	ug/L			03/08/19 03:38	4
Carbon disulfide	4.0	U	4.0	0.76	ug/L			03/08/19 03:38	4
Carbon tetrachloride	4.0	U	4.0	1.1	ug/L			03/08/19 03:38	4
Chlorobenzene	4.0	U	4.0	3.0	ug/L			03/08/19 03:38	4
Chloroethane	4.0	U	4.0	1.3	ug/L			03/08/19 03:38	4
Chloroform	4.0	U	4.0	1.4	ug/L			03/08/19 03:38	4
Chloromethane	4.0	U	4.0	1.4	ug/L			03/08/19 03:38	4
cis-1,2-Dichloroethene	4.0	U	4.0	3.2	ug/L			03/08/19 03:38	4

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-27D2-W-190305

Lab Sample ID: 480-149865-6

Date Collected: 03/05/19 23:03

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	4.0	U	4.0	1.4	ug/L			03/08/19 03:38	4
Cyclohexane	4.0	U	4.0	0.72	ug/L			03/08/19 03:38	4
Dibromochloromethane	4.0	U	4.0	1.3	ug/L			03/08/19 03:38	4
Dichlorodifluoromethane	4.0	U	4.0	2.7	ug/L			03/08/19 03:38	4
Ethylbenzene	4.0	U	4.0	3.0	ug/L			03/08/19 03:38	4
Isopropylbenzene	4.0	U	4.0	3.2	ug/L			03/08/19 03:38	4
Methyl acetate	10	U	10	5.2	ug/L			03/08/19 03:38	4
Methyl tert-butyl ether	9.5		4.0	0.64	ug/L			03/08/19 03:38	4
Methylcyclohexane	4.0	U	4.0	0.64	ug/L			03/08/19 03:38	4
Methylene Chloride	3.9	J	4.0	1.8	ug/L			03/08/19 03:38	4
Styrene	4.0	U	4.0	2.9	ug/L			03/08/19 03:38	4
Tetrachloroethene	4.0	U	4.0	1.4	ug/L			03/08/19 03:38	4
Toluene	4.0	U	4.0	2.0	ug/L			03/08/19 03:38	4
trans-1,2-Dichloroethene	4.0	U	4.0	3.6	ug/L			03/08/19 03:38	4
trans-1,3-Dichloropropene	4.0	U	4.0	1.5	ug/L			03/08/19 03:38	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			03/08/19 03:38	4
Trichlorofluoromethane	4.0	U	4.0	3.5	ug/L			03/08/19 03:38	4
Vinyl chloride	4.0	U	4.0	3.6	ug/L			03/08/19 03:38	4
Xylenes, Total	8.0	U	8.0	2.6	ug/L			03/08/19 03:38	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	103		77 - 120		03/08/19 03:38	4
4-Bromofluorobenzene (Surr)	109		73 - 120		03/08/19 03:38	4
Dibromofluoromethane (Surr)	107		75 - 123		03/08/19 03:38	4
Toluene-d8 (Surr)	94		80 - 120		03/08/19 03:38	4

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	86000		5000	1800	ug/L			03/08/19 14:58	1
Ethane	170	U	170	33	ug/L			03/12/19 12:04	22
Ethene	150	U	150	33	ug/L			03/12/19 12:04	22
Methane	1500		88	22	ug/L			03/12/19 12:04	22

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.85		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:12	1
Manganese	0.18		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:12	1
Sodium	319	^	1.0	0.32	mg/L		03/08/19 07:34	03/08/19 18:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	824		5.0	2.8	mg/L			03/08/19 18:50	10
Sulfate	56.2		20.0	3.5	mg/L			03/08/19 18:50	10
Alkalinity, Total	302		50.0	20.0	mg/L			03/12/19 18:48	5
Nitrate as N	0.35		0.050	0.020	mg/L			03/07/19 16:29	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 16:29	1
Total Organic Carbon	12.8		1.0	0.43	mg/L			03/10/19 18:26	1
Ferric Iron	0.59		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.26	HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	27.2		1.0	0.67	mg/L			03/11/19 14:01	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-23D2R-W-190305

Lab Sample ID: 480-149865-7

Date Collected: 03/05/19 23:40

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/09/19 16:57	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/09/19 16:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/09/19 16:57	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/09/19 16:57	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/09/19 16:57	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/09/19 16:57	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/09/19 16:57	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/09/19 16:57	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/09/19 16:57	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/09/19 16:57	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/09/19 16:57	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/09/19 16:57	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/09/19 16:57	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/09/19 16:57	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/09/19 16:57	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/09/19 16:57	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/09/19 16:57	1
Acetone	10	U	10	3.0	ug/L			03/09/19 16:57	1
Benzene	6.3		1.0	0.41	ug/L			03/09/19 16:57	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/09/19 16:57	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/09/19 16:57	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/09/19 16:57	1
Carbon disulfide	0.20	J	1.0	0.19	ug/L			03/09/19 16:57	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/09/19 16:57	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/09/19 16:57	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/09/19 16:57	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/09/19 16:57	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/09/19 16:57	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/09/19 16:57	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/09/19 16:57	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			03/09/19 16:57	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			03/09/19 16:57	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/09/19 16:57	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/09/19 16:57	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			03/09/19 16:57	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/09/19 16:57	1
Methyl tert-butyl ether	2.8		1.0	0.16	ug/L			03/09/19 16:57	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			03/09/19 16:57	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			03/09/19 16:57	1
Styrene	1.0	U	1.0	0.73	ug/L			03/09/19 16:57	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/09/19 16:57	1
Toluene	1.0	U	1.0	0.51	ug/L			03/09/19 16:57	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/09/19 16:57	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/09/19 16:57	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/09/19 16:57	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/09/19 16:57	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/09/19 16:57	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/09/19 16:57	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-23D2R-W-190305

Lab Sample ID: 480-149865-7

Date Collected: 03/05/19 23:40

Matrix: Water

Date Received: 03/07/19 09:00

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		03/09/19 16:57	1
4-Bromofluorobenzene (Surr)	110		73 - 120		03/09/19 16:57	1
Dibromofluoromethane (Surr)	110		75 - 123		03/09/19 16:57	1
Toluene-d8 (Surr)	103		80 - 120		03/09/19 16:57	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	3400	J	5000	1800	ug/L			03/08/19 15:06	1
Ethane	7.5	U	7.5	1.5	ug/L			03/12/19 12:23	1
Ethene	7.0	U	7.0	1.5	ug/L			03/12/19 12:23	1
Methane	130		4.0	1.0	ug/L			03/12/19 12:23	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.2		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:16	1
Manganese	0.16		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:16	1
Sodium	1430		5.0	1.6	mg/L		03/08/19 07:34	03/11/19 15:09	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1650		10.0	5.6	mg/L			03/08/19 20:18	20
Sulfate	167		40.0	7.0	mg/L			03/08/19 20:18	20
Alkalinity, Total	506		100	40.0	mg/L			03/12/19 19:06	10
Nitrate as N	0.033	J	0.050	0.020	mg/L			03/07/19 15:19	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:19	1
Total Organic Carbon	11.8		1.0	0.43	mg/L			03/10/19 18:54	1
Ferric Iron	2.2		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	11.2		1.0	0.67	mg/L			03/11/19 14:01	1

Client Sample ID: AMW-7R-W-190306

Lab Sample ID: 480-149865-8

Date Collected: 03/06/19 00:12

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	4.0	U	4.0	3.3	ug/L			03/09/19 17:23	4
1,1,2,2-Tetrachloroethane	4.0	U	4.0	0.84	ug/L			03/09/19 17:23	4
1,1,2-Trichloro-1,2,2-trifluoroethane	4.0	U	4.0	1.2	ug/L			03/09/19 17:23	4
1,1,2-Trichloroethane	4.0	U	4.0	0.92	ug/L			03/09/19 17:23	4
1,1-Dichloroethane	4.0	U	4.0	1.5	ug/L			03/09/19 17:23	4
1,1-Dichloroethene	4.0	U	4.0	1.2	ug/L			03/09/19 17:23	4
1,2,4-Trichlorobenzene	4.0	U	4.0	1.6	ug/L			03/09/19 17:23	4
1,2-Dibromo-3-Chloropropane	4.0	U	4.0	1.6	ug/L			03/09/19 17:23	4
1,2-Dibromoethane	4.0	U	4.0	2.9	ug/L			03/09/19 17:23	4
1,2-Dichlorobenzene	4.0	U	4.0	3.2	ug/L			03/09/19 17:23	4
1,2-Dichloroethane	4.0	U	4.0	0.84	ug/L			03/09/19 17:23	4
1,2-Dichloropropane	4.0	U	4.0	2.9	ug/L			03/09/19 17:23	4
1,3-Dichlorobenzene	4.0	U	4.0	3.1	ug/L			03/09/19 17:23	4
1,4-Dichlorobenzene	4.0	U	4.0	3.4	ug/L			03/09/19 17:23	4
2-Butanone (MEK)	40	U	40	5.3	ug/L			03/09/19 17:23	4

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-7R-W-190306

Lab Sample ID: 480-149865-8

Date Collected: 03/06/19 00:12

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	20	U	20	5.0	ug/L			03/09/19 17:23	4
4-Methyl-2-pentanone (MIBK)	20	U	20	8.4	ug/L			03/09/19 17:23	4
Acetone	40	U	40	12	ug/L			03/09/19 17:23	4
Benzene	4.0	U	4.0	1.6	ug/L			03/09/19 17:23	4
Bromodichloromethane	4.0	U	4.0	1.6	ug/L			03/09/19 17:23	4
Bromoform	4.0	U	4.0	1.0	ug/L			03/09/19 17:23	4
Bromomethane	4.0	U	4.0	2.8	ug/L			03/09/19 17:23	4
Carbon disulfide	4.0	U	4.0	0.76	ug/L			03/09/19 17:23	4
Carbon tetrachloride	4.0	U	4.0	1.1	ug/L			03/09/19 17:23	4
Chlorobenzene	4.0	U	4.0	3.0	ug/L			03/09/19 17:23	4
Chloroethane	4.0	U	4.0	1.3	ug/L			03/09/19 17:23	4
Chloroform	4.0	U	4.0	1.4	ug/L			03/09/19 17:23	4
Chloromethane	4.0	U	4.0	1.4	ug/L			03/09/19 17:23	4
cis-1,2-Dichloroethene	4.0	U	4.0	3.2	ug/L			03/09/19 17:23	4
cis-1,3-Dichloropropene	4.0	U	4.0	1.4	ug/L			03/09/19 17:23	4
Cyclohexane	10		4.0	0.72	ug/L			03/09/19 17:23	4
Dibromochloromethane	4.0	U *	4.0	1.3	ug/L			03/09/19 17:23	4
Dichlorodifluoromethane	4.0	U	4.0	2.7	ug/L			03/09/19 17:23	4
Ethylbenzene	4.0	U	4.0	3.0	ug/L			03/09/19 17:23	4
Isopropylbenzene	4.0	U	4.0	3.2	ug/L			03/09/19 17:23	4
Methyl acetate	10	U	10	5.2	ug/L			03/09/19 17:23	4
Methyl tert-butyl ether	4.0	U	4.0	0.64	ug/L			03/09/19 17:23	4
Methylcyclohexane	12		4.0	0.64	ug/L			03/09/19 17:23	4
Methylene Chloride	3.0 J B		4.0	1.8	ug/L			03/09/19 17:23	4
Styrene	4.0	U	4.0	2.9	ug/L			03/09/19 17:23	4
Tetrachloroethene	4.0	U	4.0	1.4	ug/L			03/09/19 17:23	4
Toluene	4.0	U	4.0	2.0	ug/L			03/09/19 17:23	4
trans-1,2-Dichloroethene	4.0	U	4.0	3.6	ug/L			03/09/19 17:23	4
trans-1,3-Dichloropropene	4.0	U	4.0	1.5	ug/L			03/09/19 17:23	4
Trichloroethene	4.0	U	4.0	1.8	ug/L			03/09/19 17:23	4
Trichlorofluoromethane	4.0	U	4.0	3.5	ug/L			03/09/19 17:23	4
Vinyl chloride	4.0	U	4.0	3.6	ug/L			03/09/19 17:23	4
Xylenes, Total	8.0	U	8.0	2.6	ug/L			03/09/19 17:23	4

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		77 - 120		03/09/19 17:23	4
4-Bromofluorobenzene (Surr)	109		73 - 120		03/09/19 17:23	4
Dibromofluoromethane (Surr)	110		75 - 123		03/09/19 17:23	4
Toluene-d8 (Surr)	100		80 - 120		03/09/19 17:23	4

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	55000		5000	1800	ug/L			03/08/19 15:15	1
Ethane	83	U	83	17	ug/L			03/12/19 12:42	11
Ethene	77	U	77	17	ug/L			03/12/19 12:42	11
Methane	620		44	11	ug/L			03/12/19 12:42	11

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	64.1		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:20	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-7R-W-190306

Lab Sample ID: 480-149865-8

Date Collected: 03/06/19 00:12

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Manganese	1.1		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:20	1
Sodium	116	^	1.0	0.32	mg/L		03/08/19 07:34	03/08/19 18:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	97.5		2.5	1.4	mg/L			03/08/19 20:33	5
Sulfate	240		10.0	1.7	mg/L			03/08/19 20:33	5
Alkalinity, Total	399		50.0	20.0	mg/L			03/12/19 18:50	5
Nitrate as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:21	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:21	1
Total Organic Carbon	11.6		1.0	0.43	mg/L			03/10/19 21:15	1
Ferric Iron	62.8		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	1.3	HF	0.50	0.38	mg/L			03/07/19 15:00	5
Sulfide	6.8		1.0	0.67	mg/L			03/11/19 14:01	1

Client Sample ID: MW-29D1-W-190306

Lab Sample ID: 480-149865-9

Date Collected: 03/06/19 00:46

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/09/19 17:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/09/19 17:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/09/19 17:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/09/19 17:50	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/09/19 17:50	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/09/19 17:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/09/19 17:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/09/19 17:50	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/09/19 17:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/09/19 17:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/09/19 17:50	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/09/19 17:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/09/19 17:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/09/19 17:50	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/09/19 17:50	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/09/19 17:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/09/19 17:50	1
Acetone	3.4	J	10	3.0	ug/L			03/09/19 17:50	1
Benzene	0.70	J	1.0	0.41	ug/L			03/09/19 17:50	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/09/19 17:50	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/09/19 17:50	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/09/19 17:50	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			03/09/19 17:50	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/09/19 17:50	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/09/19 17:50	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/09/19 17:50	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/09/19 17:50	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/09/19 17:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/09/19 17:50	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-29D1-W-190306

Lab Sample ID: 480-149865-9

Date Collected: 03/06/19 00:46

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/09/19 17:50	1
Cyclohexane	3.8		1.0	0.18	ug/L			03/09/19 17:50	1
Dibromochloromethane	1.0	U *	1.0	0.32	ug/L			03/09/19 17:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/09/19 17:50	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/09/19 17:50	1
Isopropylbenzene	2.0		1.0	0.79	ug/L			03/09/19 17:50	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/09/19 17:50	1
Methyl tert-butyl ether	7.5		1.0	0.16	ug/L			03/09/19 17:50	1
Methylcyclohexane	1.2		1.0	0.16	ug/L			03/09/19 17:50	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			03/09/19 17:50	1
Styrene	1.0	U	1.0	0.73	ug/L			03/09/19 17:50	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/09/19 17:50	1
Toluene	1.0	U	1.0	0.51	ug/L			03/09/19 17:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/09/19 17:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/09/19 17:50	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/09/19 17:50	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/09/19 17:50	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/09/19 17:50	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/09/19 17:50	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		77 - 120		03/09/19 17:50	1
4-Bromofluorobenzene (Surr)	105		73 - 120		03/09/19 17:50	1
Dibromofluoromethane (Surr)	102		75 - 123		03/09/19 17:50	1
Toluene-d8 (Surr)	99		80 - 120		03/09/19 17:50	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	35000		5000	1800	ug/L			03/08/19 15:24	1
Ethane	170	U	170	33	ug/L			03/12/19 14:17	22
Ethene	150	U	150	33	ug/L			03/12/19 14:17	22
Methane	1800		88	22	ug/L			03/12/19 14:17	22

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	9.0		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:24	1
Manganese	0.26		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:24	1
Sodium	673	^	1.0	0.32	mg/L		03/08/19 07:34	03/08/19 18:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1110		10.0	5.6	mg/L			03/11/19 11:01	20
Sulfate	14.3	J	20.0	3.5	mg/L			03/08/19 20:47	10
Alkalinity, Total	97.9		10.0	4.0	mg/L			03/12/19 18:43	1
Nitrate as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:23	1
Nitrite as N	0.050	U	0.050	0.020	mg/L			03/07/19 15:23	1
Total Organic Carbon	3.2		1.0	0.43	mg/L			03/10/19 22:11	1
Ferric Iron	8.9		0.10	0.075	mg/L			03/18/19 15:43	1
Ferrous Iron	0.12	HF	0.10	0.075	mg/L			03/07/19 15:00	1
Sulfide	1.2		1.0	0.67	mg/L			03/11/19 14:01	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: TB-W-190306

Lab Sample ID: 480-149865-10

Date Collected: 03/06/19 02:10

Matrix: Water

Date Received: 03/07/19 09:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/08/19 05:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 05:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 05:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/08/19 05:24	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/08/19 05:24	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/08/19 05:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/08/19 05:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/08/19 05:24	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/08/19 05:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/08/19 05:24	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 05:24	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/08/19 05:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/08/19 05:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/08/19 05:24	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/08/19 05:24	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/08/19 05:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/08/19 05:24	1
Acetone	4.4	J	10	3.0	ug/L			03/08/19 05:24	1
Benzene	1.0	U	1.0	0.41	ug/L			03/08/19 05:24	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/08/19 05:24	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/08/19 05:24	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/08/19 05:24	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			03/08/19 05:24	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/08/19 05:24	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/08/19 05:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 05:24	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/08/19 05:24	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/08/19 05:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/08/19 05:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/08/19 05:24	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			03/08/19 05:24	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			03/08/19 05:24	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/08/19 05:24	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/08/19 05:24	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			03/08/19 05:24	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/08/19 05:24	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			03/08/19 05:24	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			03/08/19 05:24	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			03/08/19 05:24	1
Styrene	1.0	U	1.0	0.73	ug/L			03/08/19 05:24	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/08/19 05:24	1
Toluene	1.0	U	1.0	0.51	ug/L			03/08/19 05:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/08/19 05:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/08/19 05:24	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/08/19 05:24	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/08/19 05:24	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/08/19 05:24	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/08/19 05:24	1

TestAmerica Buffalo

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: TB-W-190306

Lab Sample ID: 480-149865-10

Date Collected: 03/06/19 02:10

Matrix: Water

Date Received: 03/07/19 09:00

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	108		77 - 120		03/08/19 05:24	1
4-Bromofluorobenzene (Surr)	108		73 - 120		03/08/19 05:24	1
Dibromofluoromethane (Surr)	107		75 - 123		03/08/19 05:24	1
Toluene-d8 (Surr)	99		80 - 120		03/08/19 05:24	1

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

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

Matrix: Ground Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-149865-1	MW-26D2-W-190305	109	112	112	98

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (77-120)	BFB (73-120)	DBFM (75-123)	TOL (80-120)
480-149865-2	MW-26D1-W-190305	105	111	110	98
480-149865-3	AMW-14D2-W-190305	103	106	108	99
480-149865-4	AMW-14D1-W-190305	105	111	113	97
480-149865-5	AMW-14VD-W-190305	107	107	111	95
480-149865-6	MW-27D2-W-190305	103	109	107	94
480-149865-7	MW-23D2R-W-190305	104	110	110	103
480-149865-8	AMW-7R-W-190306	104	109	110	100
480-149865-9	MW-29D1-W-190306	102	105	102	99
480-149865-10	TB-W-190306	108	108	107	99
LCS 480-462080/5	Lab Control Sample	98	109	106	99
LCS 480-462267/5	Lab Control Sample	105	113	106	104
MB 480-462080/23	Method Blank	105	112	111	99
MB 480-462267/8	Method Blank	100	112	103	100

Surrogate Legend

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

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

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

Lab Sample ID: MB 480-462080/23

Matrix: Water

Analysis Batch: 462080

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/08/19 00:50	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 00:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 00:50	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/08/19 00:50	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/08/19 00:50	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/08/19 00:50	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/08/19 00:50	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/08/19 00:50	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/08/19 00:50	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/08/19 00:50	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 00:50	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/08/19 00:50	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/08/19 00:50	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/08/19 00:50	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/08/19 00:50	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/08/19 00:50	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/08/19 00:50	1
Acetone	10	U	10	3.0	ug/L			03/08/19 00:50	1
Benzene	1.0	U	1.0	0.41	ug/L			03/08/19 00:50	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/08/19 00:50	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/08/19 00:50	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/08/19 00:50	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			03/08/19 00:50	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/08/19 00:50	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/08/19 00:50	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 00:50	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/08/19 00:50	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/08/19 00:50	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/08/19 00:50	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/08/19 00:50	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			03/08/19 00:50	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			03/08/19 00:50	1
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/08/19 00:50	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/08/19 00:50	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			03/08/19 00:50	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/08/19 00:50	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			03/08/19 00:50	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			03/08/19 00:50	1
Methylene Chloride	1.0	U	1.0	0.44	ug/L			03/08/19 00:50	1
Styrene	1.0	U	1.0	0.73	ug/L			03/08/19 00:50	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/08/19 00:50	1
Toluene	1.0	U	1.0	0.51	ug/L			03/08/19 00:50	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/08/19 00:50	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/08/19 00:50	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/08/19 00:50	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/08/19 00:50	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/08/19 00:50	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/08/19 00:50	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		77 - 120		03/08/19 00:50	1
4-Bromofluorobenzene (Surr)	112		73 - 120		03/08/19 00:50	1
Dibromofluoromethane (Surr)	111		75 - 123		03/08/19 00:50	1
Toluene-d8 (Surr)	99		80 - 120		03/08/19 00:50	1

Lab Sample ID: LCS 480-462080/5

Matrix: Water

Analysis Batch: 462080

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	25.0	22.3		ug/L		89	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.2		ug/L		77	61 - 148
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122
1,1-Dichloroethane	25.0	21.5		ug/L		86	77 - 120
1,1-Dichloroethene	25.0	19.8		ug/L		79	66 - 127
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	22.6		ug/L		91	56 - 134
1,2-Dibromoethane	25.0	26.3		ug/L		105	77 - 120
1,2-Dichlorobenzene	25.0	23.3		ug/L		93	80 - 124
1,2-Dichloroethane	25.0	22.9		ug/L		91	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	23.4		ug/L		94	77 - 120
1,4-Dichlorobenzene	25.0	23.6		ug/L		94	80 - 120
2-Butanone (MEK)	125	137		ug/L		110	57 - 140
2-Hexanone	125	138		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	115		ug/L		92	71 - 125
Acetone	125	145		ug/L		116	56 - 142
Benzene	25.0	23.8		ug/L		95	71 - 124
Bromodichloromethane	25.0	27.2		ug/L		109	80 - 122
Bromoform	25.0	31.1		ug/L		124	61 - 132
Bromomethane	25.0	27.3		ug/L		109	55 - 144
Carbon disulfide	25.0	16.1		ug/L		65	59 - 134
Carbon tetrachloride	25.0	23.7		ug/L		95	72 - 134
Chlorobenzene	25.0	24.1		ug/L		96	80 - 120
Chloroethane	25.0	25.9		ug/L		104	69 - 136
Chloroform	25.0	22.9		ug/L		92	73 - 127
Chloromethane	25.0	25.1		ug/L		100	68 - 124
cis-1,2-Dichloroethene	25.0	23.0		ug/L		92	74 - 124
cis-1,3-Dichloropropene	25.0	27.8		ug/L		111	74 - 124
Cyclohexane	25.0	18.8		ug/L		75	59 - 135
Dibromochloromethane	25.0	29.5		ug/L		118	75 - 125
Dichlorodifluoromethane	25.0	21.7		ug/L		87	59 - 135
Ethylbenzene	25.0	22.6		ug/L		91	77 - 123
Isopropylbenzene	25.0	21.8		ug/L		87	77 - 122
Methyl acetate	50.0	39.6		ug/L		79	74 - 133
Methyl tert-butyl ether	25.0	23.8		ug/L		95	77 - 120
Methylcyclohexane	25.0	20.8		ug/L		83	68 - 134
Methylene Chloride	25.0	24.8		ug/L		99	75 - 124
Styrene	25.0	24.6		ug/L		98	80 - 120
Tetrachloroethene	25.0	23.7		ug/L		95	74 - 122
Toluene	25.0	23.1		ug/L		92	80 - 122
trans-1,2-Dichloroethene	25.0	21.8		ug/L		87	73 - 127

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

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

Lab Sample ID: LCS 480-462080/5

Matrix: Water

Analysis Batch: 462080

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	25.0	27.2		ug/L		109	80 - 120
Trichloroethene	25.0	23.1		ug/L		92	74 - 123
Trichlorofluoromethane	25.0	22.5		ug/L		90	62 - 150
Vinyl chloride	25.0	24.2		ug/L		97	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		77 - 120
4-Bromofluorobenzene (Surr)	109		73 - 120
Dibromofluoromethane (Surr)	106		75 - 123
Toluene-d8 (Surr)	99		80 - 120

Lab Sample ID: MB 480-462267/8

Matrix: Water

Analysis Batch: 462267

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.82	ug/L			03/09/19 16:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/09/19 16:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/09/19 16:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.23	ug/L			03/09/19 16:11	1
1,1-Dichloroethane	1.0	U	1.0	0.38	ug/L			03/09/19 16:11	1
1,1-Dichloroethene	1.0	U	1.0	0.29	ug/L			03/09/19 16:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.41	ug/L			03/09/19 16:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.39	ug/L			03/09/19 16:11	1
1,2-Dibromoethane	1.0	U	1.0	0.73	ug/L			03/09/19 16:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.79	ug/L			03/09/19 16:11	1
1,2-Dichloroethane	1.0	U	1.0	0.21	ug/L			03/09/19 16:11	1
1,2-Dichloropropane	1.0	U	1.0	0.72	ug/L			03/09/19 16:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.78	ug/L			03/09/19 16:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.84	ug/L			03/09/19 16:11	1
2-Butanone (MEK)	10	U	10	1.3	ug/L			03/09/19 16:11	1
2-Hexanone	5.0	U	5.0	1.2	ug/L			03/09/19 16:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.1	ug/L			03/09/19 16:11	1
Acetone	10	U	10	3.0	ug/L			03/09/19 16:11	1
Benzene	1.0	U	1.0	0.41	ug/L			03/09/19 16:11	1
Bromodichloromethane	1.0	U	1.0	0.39	ug/L			03/09/19 16:11	1
Bromoform	1.0	U	1.0	0.26	ug/L			03/09/19 16:11	1
Bromomethane	1.0	U	1.0	0.69	ug/L			03/09/19 16:11	1
Carbon disulfide	1.0	U	1.0	0.19	ug/L			03/09/19 16:11	1
Carbon tetrachloride	1.0	U	1.0	0.27	ug/L			03/09/19 16:11	1
Chlorobenzene	1.0	U	1.0	0.75	ug/L			03/09/19 16:11	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/09/19 16:11	1
Chloroform	1.0	U	1.0	0.34	ug/L			03/09/19 16:11	1
Chloromethane	1.0	U	1.0	0.35	ug/L			03/09/19 16:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.81	ug/L			03/09/19 16:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.36	ug/L			03/09/19 16:11	1
Cyclohexane	1.0	U	1.0	0.18	ug/L			03/09/19 16:11	1
Dibromochloromethane	1.0	U	1.0	0.32	ug/L			03/09/19 16:11	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

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

Lab Sample ID: MB 480-462267/8

Matrix: Water

Analysis Batch: 462267

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.68	ug/L			03/09/19 16:11	1
Ethylbenzene	1.0	U	1.0	0.74	ug/L			03/09/19 16:11	1
Isopropylbenzene	1.0	U	1.0	0.79	ug/L			03/09/19 16:11	1
Methyl acetate	2.5	U	2.5	1.3	ug/L			03/09/19 16:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.16	ug/L			03/09/19 16:11	1
Methylcyclohexane	1.0	U	1.0	0.16	ug/L			03/09/19 16:11	1
Methylene Chloride	0.483	J	1.0	0.44	ug/L			03/09/19 16:11	1
Styrene	1.0	U	1.0	0.73	ug/L			03/09/19 16:11	1
Tetrachloroethene	1.0	U	1.0	0.36	ug/L			03/09/19 16:11	1
Toluene	1.0	U	1.0	0.51	ug/L			03/09/19 16:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.90	ug/L			03/09/19 16:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.37	ug/L			03/09/19 16:11	1
Trichloroethene	1.0	U	1.0	0.46	ug/L			03/09/19 16:11	1
Trichlorofluoromethane	1.0	U	1.0	0.88	ug/L			03/09/19 16:11	1
Vinyl chloride	1.0	U	1.0	0.90	ug/L			03/09/19 16:11	1
Xylenes, Total	2.0	U	2.0	0.66	ug/L			03/09/19 16:11	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		77 - 120		03/09/19 16:11	1
4-Bromofluorobenzene (Surr)	112		73 - 120		03/09/19 16:11	1
Dibromofluoromethane (Surr)	103		75 - 123		03/09/19 16:11	1
Toluene-d8 (Surr)	100		80 - 120		03/09/19 16:11	1

Lab Sample ID: LCS 480-462267/5

Matrix: Water

Analysis Batch: 462267

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	25.0	27.2		ug/L		109	73 - 126
1,1,1,2-Tetrachloroethane	25.0	24.3		ug/L		97	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	28.8		ug/L		115	61 - 148
1,1,2-Trichloroethane	25.0	26.1		ug/L		104	76 - 122
1,1-Dichloroethane	25.0	24.4		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	27.8		ug/L		111	66 - 127
1,2,4-Trichlorobenzene	25.0	23.1		ug/L		92	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	23.0		ug/L		92	56 - 134
1,2-Dibromoethane	25.0	29.0		ug/L		116	77 - 120
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	23.6		ug/L		95	75 - 120
1,2-Dichloropropane	25.0	25.7		ug/L		103	76 - 120
1,3-Dichlorobenzene	25.0	24.9		ug/L		99	77 - 120
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	80 - 120
2-Butanone (MEK)	125	134		ug/L		107	57 - 140
2-Hexanone	125	140		ug/L		112	65 - 127
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		94	71 - 125
Acetone	125	144		ug/L		115	56 - 142
Benzene	25.0	26.6		ug/L		106	71 - 124

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

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

Lab Sample ID: LCS 480-462267/5

Matrix: Water

Analysis Batch: 462267

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromodichloromethane	25.0	29.2		ug/L		117	80 - 122
Bromoform	25.0	33.1		ug/L		132	61 - 132
Bromomethane	25.0	25.6		ug/L		102	55 - 144
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134
Carbon tetrachloride	25.0	29.9		ug/L		120	72 - 134
Chlorobenzene	25.0	26.2		ug/L		105	80 - 120
Chloroethane	25.0	25.0		ug/L		100	69 - 136
Chloroform	25.0	24.3		ug/L		97	73 - 127
Chloromethane	25.0	24.7		ug/L		99	68 - 124
cis-1,2-Dichloroethene	25.0	25.0		ug/L		100	74 - 124
cis-1,3-Dichloropropene	25.0	30.1		ug/L		121	74 - 124
Cyclohexane	25.0	27.1		ug/L		109	59 - 135
Dibromochloromethane	25.0	32.6	*	ug/L		130	75 - 125
Dichlorodifluoromethane	25.0	25.8		ug/L		103	59 - 135
Ethylbenzene	25.0	25.6		ug/L		103	77 - 123
Isopropylbenzene	25.0	24.0		ug/L		96	77 - 122
Methyl acetate	50.0	39.7		ug/L		79	74 - 133
Methyl tert-butyl ether	25.0	24.0		ug/L		96	77 - 120
Methylcyclohexane	25.0	27.8		ug/L		111	68 - 134
Methylene Chloride	25.0	24.5		ug/L		98	75 - 124
Styrene	25.0	26.9		ug/L		108	80 - 120
Tetrachloroethene	25.0	29.2		ug/L		117	74 - 122
Toluene	25.0	25.8		ug/L		103	80 - 122
trans-1,2-Dichloroethene	25.0	26.3		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	29.2		ug/L		117	80 - 120
Trichloroethene	25.0	25.9		ug/L		104	74 - 123
Trichlorofluoromethane	25.0	24.7		ug/L		99	62 - 150
Vinyl chloride	25.0	24.8		ug/L		99	65 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		77 - 120
4-Bromofluorobenzene (Surr)	113		73 - 120
Dibromofluoromethane (Surr)	106		75 - 123
Toluene-d8 (Surr)	104		80 - 120

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-140653/4

Matrix: Water

Analysis Batch: 140653

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5000	U	5000	1800	ug/L			03/08/19 14:06	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCS 200-140653/2

Matrix: Water

Analysis Batch: 140653

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon dioxide	40000	40300		ug/L		101	70 - 130

Lab Sample ID: LCSD 200-140653/3

Matrix: Water

Analysis Batch: 140653

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
Carbon dioxide	40000	43300		ug/L		108	70 - 130	7	30

Lab Sample ID: MB 480-462512/6

Matrix: Water

Analysis Batch: 462512

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	7.5	U	7.5	1.5	ug/L			03/12/19 09:06	1
Ethene	7.0	U	7.0	1.5	ug/L			03/12/19 09:06	1
Methane	4.0	U	4.0	1.0	ug/L			03/12/19 09:06	1

Lab Sample ID: LCS 480-462512/7

Matrix: Water

Analysis Batch: 462512

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	14.5	14.3		ug/L		99	79 - 120
Ethene	13.5	13.8		ug/L		102	85 - 120
Methane	7.67	7.37		ug/L		96	85 - 120

Lab Sample ID: LCSD 480-462512/8

Matrix: Water

Analysis Batch: 462512

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
Ethane	14.5	13.5		ug/L		93	79 - 120	6	50
Ethene	13.5	13.0		ug/L		96	85 - 120	6	50
Methane	7.67	6.98		ug/L		91	85 - 120	5	50

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-462064/1-A

Matrix: Water

Analysis Batch: 462351

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 462064

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.050	U	0.050	0.019	mg/L		03/08/19 07:34	03/08/19 17:14	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 17:14	1
Sodium	1.0	U	1.0	0.32	mg/L		03/08/19 07:34	03/08/19 17:14	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

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

Lab Sample ID: LCS 480-462064/2-A

Matrix: Water

Analysis Batch: 462351

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 462064

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.97		mg/L		100	80 - 120
Manganese	0.200	0.198		mg/L		99	80 - 120
Sodium	10.0	9.75		mg/L		97	80 - 120

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-462150/28

Matrix: Water

Analysis Batch: 462150

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.28	mg/L			03/08/19 17:23	1
Sulfate	2.0	U	2.0	0.35	mg/L			03/08/19 17:23	1

Lab Sample ID: MB 480-462150/4

Matrix: Water

Analysis Batch: 462150

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.28	mg/L			03/08/19 11:30	1
Sulfate	2.0	U	2.0	0.35	mg/L			03/08/19 11:30	1

Lab Sample ID: LCS 480-462150/27

Matrix: Water

Analysis Batch: 462150

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	51.47		mg/L		103	90 - 110
Sulfate	50.0	49.77		mg/L		100	90 - 110

Lab Sample ID: LCS 480-462150/3

Matrix: Water

Analysis Batch: 462150

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.39		mg/L		99	90 - 110
Sulfate	50.0	48.71		mg/L		97	90 - 110

Lab Sample ID: 480-149865-5 MS

Matrix: Water

Analysis Batch: 462150

Client Sample ID: AMW-14VD-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6460		5000	11430	E	mg/L		99	81 - 120
Sulfate	644		5000	5585		mg/L		99	80 - 120

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 480-149865-6 MS

Matrix: Water

Analysis Batch: 462150

Client Sample ID: MW-27D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	824		500	1328	E	mg/L		101	81 - 120
Sulfate	56.2		500	562.1		mg/L		101	80 - 120

Lab Sample ID: 480-149865-6 MSD

Matrix: Water

Analysis Batch: 462150

Client Sample ID: MW-27D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	824		500	1338	E	mg/L		103	81 - 120	1	20
Sulfate	56.2		500	558.1		mg/L		100	80 - 120	1	20

Lab Sample ID: MB 480-462378/4

Matrix: Water

Analysis Batch: 462378

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.28	mg/L			03/11/19 10:53	1
Sulfate	2.0	U	2.0	0.35	mg/L			03/11/19 10:53	1

Lab Sample ID: LCS 480-462378/3

Matrix: Water

Analysis Batch: 462378

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	49.58		mg/L		99	90 - 110
Sulfate	50.0	48.24		mg/L		96	90 - 110

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-462657/100

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L			03/12/19 18:52	1

Lab Sample ID: MB 480-462657/61

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	4.99	J	10.0	4.0	mg/L			03/12/19 16:12	1

Lab Sample ID: MB 480-462657/72

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L			03/12/19 16:29	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: 310.2 - Alkalinity (Continued)

Lab Sample ID: MB 480-462657/84

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L	-		03/12/19 18:43	1

Lab Sample ID: MB 480-462657/93

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L	-		03/12/19 18:48	1

Lab Sample ID: LCS 480-462657/101

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	50.44		mg/L	-	101	90 - 110

Lab Sample ID: LCS 480-462657/62

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	52.92		mg/L	-	106	90 - 110

Lab Sample ID: LCS 480-462657/73

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	49.26		mg/L	-	99	90 - 110

Lab Sample ID: LCS 480-462657/85

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	48.52		mg/L	-	97	90 - 110

Lab Sample ID: LCS 480-462657/94

Matrix: Water

Analysis Batch: 462657

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	50.65		mg/L	-	101	90 - 110

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-462065/3

Matrix: Water

Analysis Batch: 462065

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.050	U	0.050	0.020	mg/L	-		03/07/19 16:22	1

Lab Sample ID: LCS 480-462065/4

Matrix: Water

Analysis Batch: 462065

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.53		mg/L	-	102	90 - 110

Lab Sample ID: 480-149865-3 MS

Matrix: Water

Analysis Batch: 462065

Client Sample ID: AMW-14D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.050	U	1.00	1.01		mg/L	-	101	90 - 110

Lab Sample ID: 480-149865-6 DU

Matrix: Water

Analysis Batch: 462065

Client Sample ID: MW-27D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Nitrite as N	0.050	U	0.050	U	mg/L	-	NC	20

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-462826/27

Matrix: Water

Analysis Batch: 462826

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.43	mg/L	-		03/10/19 09:03	1

Lab Sample ID: MB 480-462826/51

Matrix: Water

Analysis Batch: 462826

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.43	mg/L	-		03/10/19 20:18	1

Lab Sample ID: LCS 480-462826/28

Matrix: Water

Analysis Batch: 462826

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	64.04		mg/L	-	107	90 - 110

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 480-462826/52

Matrix: Water

Analysis Batch: 462826

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	64.88		mg/L		108	90 - 110

Lab Sample ID: 480-149865-8 MS

Matrix: Water

Analysis Batch: 462826

Client Sample ID: AMW-7R-W-190306

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	11.6		22.7	35.74		mg/L		106	54 - 131

Lab Sample ID: 480-149865-2 DU

Matrix: Water

Analysis Batch: 462826

Client Sample ID: MW-26D1-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	28.8		29.63		mg/L		3	20

Lab Sample ID: 480-149865-9 DU

Matrix: Water

Analysis Batch: 462826

Client Sample ID: MW-29D1-W-190306

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	3.2		3.10		mg/L		4	20

Lab Sample ID: MB 480-463298/8

Matrix: Water

Analysis Batch: 463298

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.43	mg/L			03/15/19 20:26	1

Lab Sample ID: LCS 480-463298/9

Matrix: Water

Analysis Batch: 463298

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	64.71		mg/L		108	90 - 110

Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: MB 480-462308/27

Matrix: Water

Analysis Batch: 462308

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.10	U	0.10	0.075	mg/L			03/07/19 15:00	1

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: SM 3500 FE D - Iron, Ferrous and Ferric (Continued)

Lab Sample ID: MB 480-462308/3

Matrix: Water

Analysis Batch: 462308

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.10	U	0.10	0.075	mg/L			03/07/19 15:00	1

Lab Sample ID: LCS 480-462308/28

Matrix: Water

Analysis Batch: 462308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	2.11		mg/L		106	90 - 110

Lab Sample ID: LCS 480-462308/4

Matrix: Water

Analysis Batch: 462308

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	2.14		mg/L		107	90 - 110

Lab Sample ID: 480-149865-3 MS

Matrix: Water

Analysis Batch: 462308

Client Sample ID: AMW-14D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.10	U HF	1.00	1.25		mg/L		125	70 - 130

Lab Sample ID: 480-149865-9 MS

Matrix: Water

Analysis Batch: 462308

Client Sample ID: MW-29D1-W-190306

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.12	HF	1.00	1.13		mg/L		101	70 - 130

Lab Sample ID: 480-149865-6 DU

Matrix: Water

Analysis Batch: 462308

Client Sample ID: MW-27D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ferrous Iron	0.26	HF	0.279		mg/L		7	20

Lab Sample ID: 480-149865-9 DU

Matrix: Water

Analysis Batch: 462308

Client Sample ID: MW-29D1-W-190306

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Ferrous Iron	0.12	HF	0.158	F5	mg/L		24	20

TestAmerica Buffalo

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 480-462311/3

Matrix: Water

Analysis Batch: 462311

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	0.67	mg/L	-		03/10/19 14:07	1

Lab Sample ID: LCS 480-462311/4

Matrix: Water

Analysis Batch: 462311

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	9.00	9.20		mg/L	-	102	90 - 110

Lab Sample ID: 480-149865-4 DU

Matrix: Water

Analysis Batch: 462311

Client Sample ID: AMW-14D1-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfide	47.2		47.20		mg/L	-	0	20

Lab Sample ID: MB 480-462456/3

Matrix: Water

Analysis Batch: 462456

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfide	1.0	U	1.0	0.67	mg/L	-		03/11/19 14:01	1

Lab Sample ID: LCS 480-462456/4

Matrix: Water

Analysis Batch: 462456

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	9.00	8.80		mg/L	-	98	90 - 110

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

GC/MS VOA

Analysis Batch: 462080

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	8260C	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	8260C	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	8260C	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	8260C	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	8260C	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	8260C	
480-149865-10	TB-W-190306	Total/NA	Water	8260C	
MB 480-462080/23	Method Blank	Total/NA	Water	8260C	
LCS 480-462080/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 462267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	8260C	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	8260C	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	8260C	
MB 480-462267/8	Method Blank	Total/NA	Water	8260C	
LCS 480-462267/5	Lab Control Sample	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 140653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	RSK-175	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	RSK-175	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	RSK-175	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	RSK-175	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	RSK-175	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	RSK-175	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	RSK-175	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	RSK-175	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	RSK-175	
MB 200-140653/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-140653/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-140653/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 462512

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	RSK-175	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	RSK-175	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	RSK-175	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	RSK-175	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	RSK-175	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	RSK-175	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	RSK-175	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	RSK-175	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	RSK-175	
MB 480-462512/6	Method Blank	Total/NA	Water	RSK-175	
LCS 480-462512/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-462512/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Metals

Prep Batch: 462064

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	3005A	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	3005A	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	3005A	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	3005A	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	3005A	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	3005A	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	3005A	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	3005A	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	3005A	
MB 480-462064/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-462064/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 462351

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	6010C	462064
480-149865-2	MW-26D1-W-190305	Total/NA	Water	6010C	462064
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	6010C	462064
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	6010C	462064
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	6010C	462064
480-149865-6	MW-27D2-W-190305	Total/NA	Water	6010C	462064
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	6010C	462064
480-149865-8	AMW-7R-W-190306	Total/NA	Water	6010C	462064
480-149865-9	MW-29D1-W-190306	Total/NA	Water	6010C	462064
MB 480-462064/1-A	Method Blank	Total/NA	Water	6010C	462064
LCS 480-462064/2-A	Lab Control Sample	Total/NA	Water	6010C	462064

Analysis Batch: 462501

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	6010C	462064
480-149865-2	MW-26D1-W-190305	Total/NA	Water	6010C	462064
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	6010C	462064
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	6010C	462064

General Chemistry

Analysis Batch: 462065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	353.2	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	353.2	
MB 480-462065/3	Method Blank	Total/NA	Water	353.2	
LCS 480-462065/4	Lab Control Sample	Total/NA	Water	353.2	
480-149865-3 MS	AMW-14D2-W-190305	Total/NA	Water	353.2	
480-149865-6 DU	MW-27D2-W-190305	Total/NA	Water	353.2	

Analysis Batch: 462071

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	353.2	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	353.2	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	353.2	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	353.2	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

General Chemistry (Continued)

Analysis Batch: 462071 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	353.2	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	353.2	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	353.2	

Analysis Batch: 462072

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	353.2	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	353.2	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	353.2	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	353.2	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	353.2	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	353.2	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	353.2	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	353.2	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	353.2	

Analysis Batch: 462150

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	300.0	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	300.0	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	300.0	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	300.0	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	300.0	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	300.0	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	300.0	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	300.0	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	300.0	
MB 480-462150/28	Method Blank	Total/NA	Water	300.0	
MB 480-462150/4	Method Blank	Total/NA	Water	300.0	
LCS 480-462150/27	Lab Control Sample	Total/NA	Water	300.0	
LCS 480-462150/3	Lab Control Sample	Total/NA	Water	300.0	
480-149865-5 MS	AMW-14VD-W-190305	Total/NA	Water	300.0	
480-149865-6 MS	MW-27D2-W-190305	Total/NA	Water	300.0	
480-149865-6 MSD	MW-27D2-W-190305	Total/NA	Water	300.0	

Analysis Batch: 462308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	SM 3500 FE D	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	SM 3500 FE D	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	SM 3500 FE D	
MB 480-462308/27	Method Blank	Total/NA	Water	SM 3500 FE D	
MB 480-462308/3	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 480-462308/28	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
LCS 480-462308/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
480-149865-3 MS	AMW-14D2-W-190305	Total/NA	Water	SM 3500 FE D	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

General Chemistry (Continued)

Analysis Batch: 462308 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-9 MS	MW-29D1-W-190306	Total/NA	Water	SM 3500 FE D	
480-149865-6 DU	MW-27D2-W-190305	Total/NA	Water	SM 3500 FE D	
480-149865-9 DU	MW-29D1-W-190306	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 462311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	SM 4500 S2 F	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	SM 4500 S2 F	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	SM 4500 S2 F	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	SM 4500 S2 F	
MB 480-462311/3	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 480-462311/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	
480-149865-4 DU	AMW-14D1-W-190305	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 462378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-9	MW-29D1-W-190306	Total/NA	Water	300.0	
MB 480-462378/4	Method Blank	Total/NA	Water	300.0	
LCS 480-462378/3	Lab Control Sample	Total/NA	Water	300.0	

Analysis Batch: 462456

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	SM 4500 S2 F	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	SM 4500 S2 F	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	SM 4500 S2 F	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	SM 4500 S2 F	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	SM 4500 S2 F	
MB 480-462456/3	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCS 480-462456/4	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 462657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	310.2	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	310.2	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	310.2	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	310.2	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	310.2	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	310.2	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	310.2	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	310.2	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	310.2	
MB 480-462657/100	Method Blank	Total/NA	Water	310.2	
MB 480-462657/61	Method Blank	Total/NA	Water	310.2	
MB 480-462657/72	Method Blank	Total/NA	Water	310.2	
MB 480-462657/84	Method Blank	Total/NA	Water	310.2	
MB 480-462657/93	Method Blank	Total/NA	Water	310.2	
LCS 480-462657/101	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462657/62	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462657/73	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462657/85	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462657/94	Lab Control Sample	Total/NA	Water	310.2	

TestAmerica Buffalo

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Analysis Batch: 462826

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-2	MW-26D1-W-190305	Total/NA	Water	9060A	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	9060A	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	9060A	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	9060A	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	9060A	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	9060A	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	9060A	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	9060A	
MB 480-462826/27	Method Blank	Total/NA	Water	9060A	
MB 480-462826/51	Method Blank	Total/NA	Water	9060A	
LCS 480-462826/28	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-462826/52	Lab Control Sample	Total/NA	Water	9060A	
480-149865-8 MS	AMW-7R-W-190306	Total/NA	Water	9060A	
480-149865-2 DU	MW-26D1-W-190305	Total/NA	Water	9060A	
480-149865-9 DU	MW-29D1-W-190306	Total/NA	Water	9060A	

Analysis Batch: 463298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	9060A	
MB 480-463298/8	Method Blank	Total/NA	Water	9060A	
LCS 480-463298/9	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 463470

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149865-1	MW-26D2-W-190305	Total/NA	Ground Water	SM 3500	
480-149865-2	MW-26D1-W-190305	Total/NA	Water	SM 3500	
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	SM 3500	
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	SM 3500	
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	SM 3500	
480-149865-6	MW-27D2-W-190305	Total/NA	Water	SM 3500	
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	SM 3500	
480-149865-8	AMW-7R-W-190306	Total/NA	Water	SM 3500	
480-149865-9	MW-29D1-W-190306	Total/NA	Water	SM 3500	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-26D2-W-190305

Date Collected: 03/05/19 20:07

Date Received: 03/07/19 09:00

Lab Sample ID: 480-149865-1

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	462080	03/08/19 01:24	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 14:14	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	462512	03/12/19 10:30	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 17:56	EMB	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		5	462501	03/11/19 14:42	EMB	TAL BUF
Total/NA	Analysis	300.0		50	462150	03/08/19 15:10	EMD	TAL BUF
Total/NA	Analysis	310.2		10	462657	03/12/19 19:03	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:08	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 15:08	DCB	TAL BUF
Total/NA	Analysis	9060A		1	463298	03/16/19 00:13	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462311	03/10/19 14:07	MJB	TAL BUF

Client Sample ID: MW-26D1-W-190305

Date Collected: 03/05/19 20:32

Date Received: 03/07/19 09:00

Lab Sample ID: 480-149865-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	462080	03/08/19 01:51	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 14:23	MLT	TAL BUR
Total/NA	Analysis	RSK-175		44	462512	03/12/19 10:49	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:00	EMB	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		5	462501	03/11/19 14:57	EMB	TAL BUF
Total/NA	Analysis	300.0		50	462150	03/08/19 15:25	EMD	TAL BUF
Total/NA	Analysis	310.2		10	462657	03/12/19 19:06	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:09	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 15:09	DCB	TAL BUF
Total/NA	Analysis	9060A		2	462826	03/10/19 16:04	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462311	03/10/19 14:07	MJB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: AMW-14D2-W-190305

Lab Sample ID: 480-149865-3

Date Collected: 03/05/19 21:08

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	462080	03/08/19 02:17	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 14:40	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462512	03/12/19 11:08	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:04	EMB	TAL BUF
Total/NA	Analysis	300.0		20	462150	03/08/19 15:41	EMD	TAL BUF
Total/NA	Analysis	310.2		1	462657	03/12/19 18:43	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462065	03/07/19 16:27	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 16:27	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462826	03/10/19 17:01	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462311	03/10/19 14:07	MJB	TAL BUF

Client Sample ID: AMW-14D1-W-190305

Lab Sample ID: 480-149865-4

Date Collected: 03/05/19 21:40

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		10	462080	03/08/19 02:45	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 14:32	MLT	TAL BUR
Total/NA	Analysis	RSK-175		88	462512	03/12/19 11:26	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:39	EMB	TAL BUF
Total/NA	Analysis	300.0		20	462150	03/08/19 15:55	EMD	TAL BUF
Total/NA	Analysis	310.2		3	462657	03/12/19 18:59	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:11	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 15:11	DCB	TAL BUF
Total/NA	Analysis	9060A		2	462826	03/10/19 17:29	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462311	03/10/19 14:07	MJB	TAL BUF

Client Sample ID: AMW-14VD-W-190305

Lab Sample ID: 480-149865-5

Date Collected: 03/05/19 22:24

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	462080	03/08/19 03:12	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 14:49	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462512	03/12/19 13:20	CAM	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:08	EMB	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		5	462501	03/11/19 15:05	EMB	TAL BUF
Total/NA	Analysis	300.0		100	462150	03/08/19 16:10	EMD	TAL BUF
Total/NA	Analysis	310.2		1	462657	03/12/19 18:43	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:17	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 15:17	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462826	03/10/19 17:57	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		5	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462456	03/11/19 14:01	MJB	TAL BUF

Client Sample ID: MW-27D2-W-190305

Lab Sample ID: 480-149865-6

Date Collected: 03/05/19 23:03

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	462080	03/08/19 03:38	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 14:58	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	462512	03/12/19 12:04	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:12	EMB	TAL BUF
Total/NA	Analysis	300.0		10	462150	03/08/19 18:50	EMD	TAL BUF
Total/NA	Analysis	310.2		5	462657	03/12/19 18:48	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 16:29	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462065	03/07/19 16:29	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462826	03/10/19 18:26	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462456	03/11/19 14:01	MJB	TAL BUF

Client Sample ID: MW-23D2R-W-190305

Lab Sample ID: 480-149865-7

Date Collected: 03/05/19 23:40

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	462267	03/09/19 16:57	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 15:06	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462512	03/12/19 12:23	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:16	EMB	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		5	462501	03/11/19 15:09	EMB	TAL BUF
Total/NA	Analysis	300.0		20	462150	03/08/19 20:18	EMD	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Client Sample ID: MW-23D2R-W-190305

Lab Sample ID: 480-149865-7

Date Collected: 03/05/19 23:40

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	310.2		10	462657	03/12/19 19:06	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:19	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 15:19	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462826	03/10/19 18:54	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462456	03/11/19 14:01	MJB	TAL BUF

Client Sample ID: AMW-7R-W-190306

Lab Sample ID: 480-149865-8

Date Collected: 03/06/19 00:12

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	462267	03/09/19 17:23	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 15:15	MLT	TAL BUR
Total/NA	Analysis	RSK-175		11	462512	03/12/19 12:42	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:20	EMB	TAL BUF
Total/NA	Analysis	300.0		5	462150	03/08/19 20:33	EMD	TAL BUF
Total/NA	Analysis	310.2		5	462657	03/12/19 18:50	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:21	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462072	03/07/19 15:21	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462826	03/10/19 21:15	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		5	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462456	03/11/19 14:01	MJB	TAL BUF

Client Sample ID: MW-29D1-W-190306

Lab Sample ID: 480-149865-9

Date Collected: 03/06/19 00:46

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	462267	03/09/19 17:50	KMN	TAL BUF
Total/NA	Analysis	RSK-175		1	140653	03/08/19 15:24	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	462512	03/12/19 14:17	CAM	TAL BUF
Total/NA	Prep	3005A			462064	03/08/19 07:34	MV	TAL BUF
Total/NA	Analysis	6010C		1	462351	03/08/19 18:24	EMB	TAL BUF
Total/NA	Analysis	300.0		10	462150	03/08/19 20:47	EMD	TAL BUF
Total/NA	Analysis	300.0		20	462378	03/11/19 11:01	EMD	TAL BUF
Total/NA	Analysis	310.2		1	462657	03/12/19 18:43	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462071	03/07/19 15:23	DCB	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: ARCADIS U.S. Inc

TestAmerica Job ID: 480-149865-1

Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	462072	03/07/19 15:23	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462826	03/10/19 22:11	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463470	03/18/19 15:43	JJP	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF
Total/NA	Analysis	SM 4500 S2 F		1	462456	03/11/19 14:01	MJB	TAL BUF

Client Sample ID: TB-W-190306

Lab Sample ID: 480-149865-10

Date Collected: 03/06/19 02:10

Matrix: Water

Date Received: 03/07/19 09:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	462080	03/08/19 05:24	KMN	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 3500		Ground Water	Ferric Iron
SM 3500		Water	Ferric Iron
SM 3500 FE D		Ground Water	Ferrous Iron
SM 3500 FE D		Water	Ferrous Iron

Laboratory: TestAmerica Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10391	04-01-20

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
RSK-175		Ground Water	Carbon dioxide
RSK-175		Water	Carbon dioxide

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUR
6010C	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 3500	Iron, Ferric	SM	TAL BUF
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL BUF
SM 4500 S2 F	Sulfide, Total	SM	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

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.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: ARCADIS U.S. Inc

Project/Site: CHEVRON - CVX#6518040 - Oceanside, NY

TestAmerica Job ID: 480-149865-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-149865-1	MW-26D2-W-190305	Ground Water	03/05/19 20:07	03/07/19 09:00
480-149865-2	MW-26D1-W-190305	Water	03/05/19 20:32	03/07/19 09:00
480-149865-3	AMW-14D2-W-190305	Water	03/05/19 21:08	03/07/19 09:00
480-149865-4	AMW-14D1-W-190305	Water	03/05/19 21:40	03/07/19 09:00
480-149865-5	AMW-14VD-W-190305	Water	03/05/19 22:24	03/07/19 09:00
480-149865-6	MW-27D2-W-190305	Water	03/05/19 23:03	03/07/19 09:00
480-149865-7	MW-23D2R-W-190305	Water	03/05/19 23:40	03/07/19 09:00
480-149865-8	AMW-7R-W-190306	Water	03/06/19 00:12	03/07/19 09:00
480-149865-9	MW-29D1-W-190306	Water	03/06/19 00:46	03/07/19 09:00
480-149865-10	TB-W-190306	Water	03/06/19 02:10	03/07/19 09:00

CHAIN OF CUSTODY / ANALYSIS REQUEST

480-149865 Chain of Custody

Name (for report and invoice) Kwong, Loretta		Company Arcadis		Address Long Island City NY		City Long Island City		State NY	
Phone 415-744-4906		Fax		P.O. # ASR00RS.8040.00001		Regulatory Program: NY: ☒ NJ: ☐ Other: ☐		DKQP: ☐	
Sample Identification		Date		Analysis Turnaround Time		ANALYSIS REQUESTED (ENTER "X" BELOW TO INDICATE REQUEST)		LAB USE ONLY	
MW-26 D2-W-190305		3/5/19		Standard ☒ Rush Charges Authorized For: 2 Week ☐ 1 Week ☐ Other ☐		Dissolved Gases (CO ₂) RSK-175-CO ₂ 300.0-280-1C- Sulfate Chloride 6010C-Metals (ICP) Fe, Mn & As RSK-175-Dissolved Gases-HCE 8260C-TLC H ₂ S VOCs 9060A-Organic Carbon (TOC) 514500-S2-F- Sulfide, Total 353.2-NH ₄ Nitrate, Calc 810.2-Alkalinity 3500-Fe-D, Cal		Project No:	
MW-26 D1-W-190305		3/5/19						Job No:	
AMW-14 D2-W-190305		3/5/19						Sample Numbers	
AMW-14 D1-W-190305		3/5/19							
AMW-4 V D-W-190305		3/5/19							
MW-27 D2-W-190305		3/5/19							
MW-27 D2R-W-190305		3/5/19							
AMW-7 R-W-190306		3/6/19							
MW-24 D1-W-190306		3/6/19							
TB-W-190306		3/6/19							
Preservation Used: 1 = ICE, 2 = HCl, 3 = H ₂ SO ₄ , 4 = HNO ₃ , 5 = NaOH 6 = Other NAC , 7 = Other Zinc Acetate		Soil: Water:							

Special Instructions		Water Metals Filtered (Yes/No)?	
Relinquished by Balek Sandaogo	Company Arcadis	Date / Time 3/6/19 11400	Received by TH
Relinquished by 2) [Signature]	Company TA	Date / Time 3/6/19 1900	Received by TA
Relinquished by 3) [Signature]	Company	Date / Time	Received by
Relinquished by 4) [Signature]	Company	Date / Time	Received by

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132).
 Massachusetts (M-NJ312), North Carolina (No. 578)

TestAmerica Buffalo

10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab) Client Contact: Shipping/Receiving: Company: Address: City: State, Zip: Phone: Email: Project Name: Site: Project # SSOW#		Lab PM: Schove, John R. E-Mail: John.schove@testamericainc.com Pennsylvania Accreditations Required (See note): NELAP - New York		COC No: 480-48177.1 Page: Page 1 of 1 Job #: 480-149865-1	
Due Date Requested: 3/19/2019 TAT Requested (days): PO #: WO #: Project # 48016199 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 Other: 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 - Client ID (Lab ID) MW-26D2-W-190305 (480-149865-1) MW-26D1-W-190305 (480-149865-2) AMW-14D2-W-190305 (480-149865-3) AMW-14D1-W-190305 (480-149865-4) AMW-4VD-W-190305 (480-149865-5) MW-27D2-W-190305 (480-149865-6) MW-23D2R-W-190305 (480-149865-7) AMW-7R-W-190306 (480-149865-8) MW-29D1-W-190306 (480-149865-9)		Sample Date 3/5/19 3/5/19 3/5/19 3/5/19 3/5/19 3/5/19 3/5/19 3/6/19 3/6/19		Sample Time 20:07 Eastern 20:32 Eastern 21:08 Eastern 21:40 Eastern 22:24 Eastern 23:03 Eastern 23:40 Eastern 00:12 Eastern 00:46 Eastern	
Sample Type (C=Comp, G=Grab)		Matrix (W=Water, S=solid, O=oil, BT=Tissue, A=Air)		Field/Filter Sample (Yes or No) RSK_175_CO2/ Dissolved Gases - CO2	
Preservation Code		Total Number of Containers		Special Instructions/Note:	
MW-26D2-W-190305 (480-149865-1)		Water		X	
MW-26D1-W-190305 (480-149865-2)		Water		X	
AMW-14D2-W-190305 (480-149865-3)		Water		X	
AMW-14D1-W-190305 (480-149865-4)		Water		X	
AMW-4VD-W-190305 (480-149865-5)		Water		X	
MW-27D2-W-190305 (480-149865-6)		Water		X	
MW-23D2R-W-190305 (480-149865-7)		Water		X	
AMW-7R-W-190306 (480-149865-8)		Water		X	
MW-29D1-W-190306 (480-149865-9)		Water		X	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification Unconfirmed		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:		Method of Shipment:	
Relinquished by: Date/Time: 3-7-19 1520		Received by: Date/Time: 3-8-19 1034	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Custody Seals Intact: 525951		Cooler Temperature(s) °C and Other Remarks: 1.5	

Ver: 01/16/2019

ORIGIN ID:DKKA (716) 691-2600
CHAR BRONSON
TEST AMERICA
10 HAZELWOOD

AMHERST, NY 14228
UNITED STATES, US

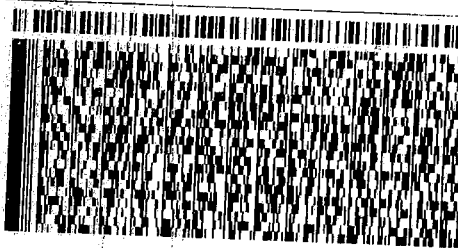
SHIP DATE: 07/17
ACTWGT: 18.35
CAD: 846654
DIMS: 19x15

BILL RECIP:

TO **SAMPLE MGT.**
TA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403

(802) 660-1990
DEPT: SAMPLE CONTROL

REF: BURLINGTON



FedEx
Express



J1811160605010

TRK#
0201 4276 0719 1598

FRI - 08 MAR 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV



Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-149865-1

Login Number: 149865

List Number: 1

Creator: Harper, Marcus D

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	ARCADIS
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 480-149865-1

Login Number: 149865

List Number: 2

Creator: Hall, Samuel C

List Source: TestAmerica Burlington

List Creation: 03/08/19 11:21 AM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	525951
Sample custody seals, if present, are intact.	True	
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	1.5°C
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?	N/A	Received project as a subcontract.
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Edison

777 New Durham Road

Edison, NJ 08817

Tel: (732)549-3900

TestAmerica Job ID: 460-176527-1

Client Project/Site: MNA Analysis

For:

ARCADIS U.S. Inc

655 Third Avenue

12th Floor

New York City, New York 10017-9118

Attn: Loretta Kwong



Authorized for release by:

3/20/2019 10:53:45 AM

Rebecca Jones, Project Management Assistant I

rebecca.jones@testamericainc.com

Designee for

John Schove, Project Manager II

(716)504-9838

john.schove@testamericainc.com

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

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

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	5
Detection Summary	7
Client Sample Results	11
Surrogate Summary	27
QC Sample Results	28
QC Association Summary	44
Lab Chronicle	49
Certification Summary	53
Method Summary	54
Sample Summary	55
Chain of Custody	56
Receipt Checklists	61



Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
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.

GC VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
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
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.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.
HF	Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
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.
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
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 (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)

TestAmerica Edison

Definitions/Glossary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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)

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Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Job ID: 460-176527-1

Laboratory: TestAmerica Edison

Narrative

Job Narrative 460-176527-1

Receipt

The samples were received on 3/5/2019 5:31 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8° C.

Receipt Exceptions

The following sample had the wrong collection time documented on the chain of custody: MW-28D2R-W-190304 (460-176527-1). The client contacted the laboratory and supplied the correct time after the sample was logged in.

GC/MS VOA

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 460-593942 recovered above the upper control limit for Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-594111 was outside the method criteria for the following analyte(s): Chloroethane (biased high) and 1,1,2,2-Tetrachloroethane, Bromoform and Carbon tetrachloride (biased low). A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

Method(s) 8260C: The laboratory control sample (LCS) for 460-593942 recovered outside control limits for the following analytes: Bromomethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported: MW-28D2R-W-190304 (460-176527-1), AMW-15D3-W-190304 (460-176527-2), AMW-15D2-W-190304 (460-176527-4), MW-24D2-W-190305 (460-176527-5), MW-24VDR-W-190305 (460-176527-6), MW-24D1R-W-190305 (460-176527-7), BD-W-190305 (460-176527-9) and TB-W-190304 (460-176527-10).

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

HPLC/IC

Method(s) 300.0: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-28D2R-W-190304 (460-176527-1), AMW-15D3-W-190304 (460-176527-2), AMW-15VD-W-190304 (460-176527-3), AMW-15D2-W-190304 (460-176527-4), MW-24D2-W-190305 (460-176527-5), MW-24VDR-W-190305 (460-176527-6) and MW-24D1R-W-190305 (460-176527-7). 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.

GC VOA

Method(s) RSK-175: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria (5-9) when verified by the laboratory, and corrective action was not possible: AMW-15D3-W-190304 (460-176527-2). pH=12

Method(s) RSK-175: The following samples were diluted due to the nature of the sample matrix: AMW-15D3-W-190304 (460-176527-2) and MW-24D1R-W-190305 (460-176527-7). 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.

Metals

Method(s) 6010C: The Low Level Continuing Calibration Verification, (CCVL 480-462498/29) associated with batch 480-462498, contained Total Sodium above the upper quality control limit. The associated samples AMW-15D3-W-190304 (460-176527-2), MW-24D2-W-190305 (460-176527-5), MW-24VDR-W-190305 (460-176527-6), MW-23D1R-W-190305 (460-176527-8) and (MB 480-462133/1-A) were either ND for the affected analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Case Narrative

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Job ID: 460-176527-1 (Continued)

Laboratory: TestAmerica Edison (Continued)

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

General Chemistry

Method(s) 353.2: The following samples were received outside of holding time: MW-28D2R-W-190304 (460-176527-1), AMW-15D3-W-190304 (460-176527-2), AMW-15VD-W-190304 (460-176527-3), AMW-15D2-W-190304 (460-176527-4), MW-24D2-W-190305 (460-176527-5), MW-24VDR-W-190305 (460-176527-6), MW-24D1R-W-190305 (460-176527-7) and MW-23D1R-W-190305 (460-176527-8).

Method(s) SM 3500 FE D: This analysis is normally performed in the field and has a method-defined holding time of 15 minutes. The following samples has been qualified with the "HF" flag to indicate analysis was performed in the laboratory outside the 15 minute timeframe: MW-28D2R-W-190304 (460-176527-1), AMW-15D3-W-190304 (460-176527-2), AMW-15VD-W-190304 (460-176527-3), AMW-15D2-W-190304 (460-176527-4), MW-24D2-W-190305 (460-176527-5), MW-24VDR-W-190305 (460-176527-6), MW-24D1R-W-190305 (460-176527-7) and MW-23D1R-W-190305 (460-176527-8).

Method(s) 9060A: The following samples were diluted due to the nature of the sample matrix: AMW-15D3-W-190304 (460-176527-2) and MW-24D1R-W-190305 (460-176527-7). Strong odor and sediment indicates organics present. Elevated reporting limits (RLs) are provided.

Method(s) SM 3500 FE D: The following samples were diluted due to the nature of the sample matrix: AMW-15D3-W-190304 (460-176527-2) and MW-24D1R-W-190305 (460-176527-7). Elevated reporting limits (RLs) are provided.

Method(s) 353.2: The following samples were received outside of holding time: MW-28D2R-W-190304 (460-176527-1), AMW-15D3-W-190304 (460-176527-2), AMW-15VD-W-190304 (460-176527-3), AMW-15D2-W-190304 (460-176527-4), MW-24D2-W-190305 (460-176527-5), MW-24D1R-W-190305 (460-176527-7) and MW-23D1R-W-190305 (460-176527-8).

Method(s) 353.2: The following sample was received outside of holding time: MW-24VDR-W-190305 (460-176527-6).

Method(s) Nitrate by calc: The following samples were received outside of holding time: MW-28D2R-W-190304 (460-176527-1), AMW-15D3-W-190304 (460-176527-2), AMW-15VD-W-190304 (460-176527-3), AMW-15D2-W-190304 (460-176527-4), MW-24D2-W-190305 (460-176527-5), MW-24VDR-W-190305 (460-176527-6), MW-24D1R-W-190305 (460-176527-7) and MW-23D1R-W-190305 (460-176527-8).

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

VOA Prep

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

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-28D2R-W-190304

Lab Sample ID: 460-176527-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Acetone	8.7		5.0	5.0	ug/L	1			8260C	Total/NA
Benzene	1.2		1.0	0.43	ug/L	1			8260C	Total/NA
Carbon dioxide	11000		5000	1800	ug/L	1			RSK-175	Total/NA
Methane	6.7		4.0	1.0	ug/L	1			RSK-175	Total/NA
Iron	0.56		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.29		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	2930		5.0	1.6	mg/L	5			6010C	Total/NA
Chloride	6930		50.0	28.2	mg/L	100			300.0	Total/NA
Sulfate	833		200	34.9	mg/L	100			300.0	Total/NA
Alkalinity, Total	322		50.0	20.0	mg/L	5			310.2	Total/NA
Total Organic Carbon	5.0		1.0	0.43	mg/L	1			9060A	Total/NA
Ferric Iron	0.56		0.10	0.075	mg/L	1			SM 3500	Total/NA

Client Sample ID: AMW-15D3-W-190304

Lab Sample ID: 460-176527-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
2-Butanone (MEK)	11		5.0	1.9	ug/L	1			8260C	Total/NA
Acetone	90		5.0	5.0	ug/L	1			8260C	Total/NA
Benzene	4.4		1.0	0.43	ug/L	1			8260C	Total/NA
Carbon disulfide	1.9		1.0	0.16	ug/L	1			8260C	Total/NA
cis-1,2-Dichloroethene	11		1.0	0.22	ug/L	1			8260C	Total/NA
Cyclohexane	0.33	J	1.0	0.32	ug/L	1			8260C	Total/NA
Ethylbenzene	0.79	J	1.0	0.30	ug/L	1			8260C	Total/NA
Methyl tert-butyl ether	64		1.0	0.47	ug/L	1			8260C	Total/NA
Methylene Chloride	0.43	J	1.0	0.32	ug/L	1			8260C	Total/NA
Toluene	1.2		1.0	0.38	ug/L	1			8260C	Total/NA
trans-1,2-Dichloroethene	0.38	J	1.0	0.24	ug/L	1			8260C	Total/NA
Trichloroethene	58		1.0	0.31	ug/L	1			8260C	Total/NA
Vinyl chloride	6.9		1.0	0.17	ug/L	1			8260C	Total/NA
Xylenes, Total	1.7	J	2.0	0.30	ug/L	1			8260C	Total/NA
Methane	2100		180	44	ug/L	44			RSK-175	Total/NA
Iron	0.20		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.0097		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	653	^	1.0	0.32	mg/L	1			6010C	Total/NA
Chloride	878		10.0	5.6	mg/L	20			300.0	Total/NA
Sulfate	42.9		40.0	7.0	mg/L	20			300.0	Total/NA
Alkalinity, Total	518		100	40.0	mg/L	10			310.2	Total/NA
Nitrate as N	0.046	J H	0.050	0.020	mg/L	1			353.2	Total/NA
Total Organic Carbon	26.9		4.0	1.7	mg/L	4			9060A	Total/NA
Ferric Iron	0.20		0.10	0.075	mg/L	1			SM 3500	Total/NA

Client Sample ID: AMW-15VD-W-190304

Lab Sample ID: 460-176527-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Methyl tert-butyl ether	0.99	J	1.0	0.47	ug/L	1			8260C	Total/NA
Carbon dioxide	13000		5000	1800	ug/L	1			RSK-175	Total/NA
Methane	29		4.0	1.0	ug/L	1			RSK-175	Total/NA
Iron	2.6		0.050	0.019	mg/L	1			6010C	Total/NA
Manganese	0.15		0.0030	0.00040	mg/L	1			6010C	Total/NA
Sodium	5590		10.0	3.2	mg/L	10			6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Edison

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: AMW-15VD-W-190304 (Continued)

Lab Sample ID: 460-176527-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	15500		100	56.4	mg/L	200		300.0	Total/NA
Sulfate	1800		400	69.8	mg/L	200		300.0	Total/NA
Alkalinity, Total	393		50.0	20.0	mg/L	5		310.2	Total/NA
Total Organic Carbon	2.6		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	2.6		0.10	0.075	mg/L	1		SM 3500	Total/NA

Client Sample ID: AMW-15D2-W-190304

Lab Sample ID: 460-176527-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	33		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	69000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	200		4.0	1.0	ug/L	1		RSK-175	Total/NA
Iron	1.6		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.086		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	2230		5.0	1.6	mg/L	5		6010C	Total/NA
Chloride	3750		25.0	14.1	mg/L	50		300.0	Total/NA
Sulfate	241		100	17.5	mg/L	50		300.0	Total/NA
Alkalinity, Total	639		100	40.0	mg/L	10		310.2	Total/NA
Total Organic Carbon	5.8		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	1.6		0.10	0.075	mg/L	1		SM 3500	Total/NA

Client Sample ID: MW-24D2-W-190305

Lab Sample ID: 460-176527-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	14		5.0	5.0	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	4.8		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	1800	J	5000	1800	ug/L	1		RSK-175	Total/NA
Iron	1.7		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.012		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	192	^	1.0	0.32	mg/L	1		6010C	Total/NA
Chloride	658		5.0	2.8	mg/L	10		300.0	Total/NA
Sulfate	43.5		20.0	3.5	mg/L	10		300.0	Total/NA
Alkalinity, Total	217		30.0	12.0	mg/L	3		310.2	Total/NA
Total Organic Carbon	5.6		1.0	0.43	mg/L	1		9060A	Total/NA
Ferric Iron	1.6		0.10	0.075	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.091	J HF	0.10	0.075	mg/L	1		SM 3500 FE D	Total/NA

Client Sample ID: MW-24VDR-W-190305

Lab Sample ID: 460-176527-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	12		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	1.4		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	1.2		1.0	0.16	ug/L	1		8260C	Total/NA
Carbon dioxide	5000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1.9	J	4.0	1.0	ug/L	1		RSK-175	Total/NA
Iron	1.2		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.015		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	182	^	1.0	0.32	mg/L	1		6010C	Total/NA
Chloride	7640		50.0	28.2	mg/L	100		300.0	Total/NA
Sulfate	859		200	34.9	mg/L	100		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Edison

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24VDR-W-190305 (Continued)

Lab Sample ID: 460-176527-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Alkalinity, Total	306		50.0	20.0	mg/L	5		310.2	Total/NA
Nitrate as N	0.14	H	0.050	0.020	mg/L	1		353.2	Total/NA
Nitrite as N	0.034	J H	0.050	0.020	mg/L	1		353.2	Total/NA
Total Organic Carbon	3.9		1.0	0.43	mg/L	1		9060A	Total/NA
Ferrous Iron	2.1	HF	0.50	0.38	mg/L	5		SM 3500 FE D	Total/NA

Client Sample ID: MW-24D1R-W-190305

Lab Sample ID: 460-176527-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.61	J	1.0	0.26	ug/L	1		8260C	Total/NA
Acetone	12		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	8.6		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	4.0		1.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	0.81	J	1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	5.1		1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.58	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	160		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.47	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	15		1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	13		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	36		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	21		2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	32000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	390		170	33	ug/L	22		RSK-175	Total/NA
Ethene	210		150	33	ug/L	22		RSK-175	Total/NA
Methane	3500		88	22	ug/L	22		RSK-175	Total/NA
Iron	12.1		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.16		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	998		5.0	1.6	mg/L	5		6010C	Total/NA
Chloride	1850		10.0	5.6	mg/L	20		300.0	Total/NA
Sulfate	105		40.0	7.0	mg/L	20		300.0	Total/NA
Alkalinity, Total	381		40.0	16.0	mg/L	4		310.2	Total/NA
Total Organic Carbon	28.3		10.0	4.3	mg/L	10		9060A	Total/NA
Ferric Iron	12.1		0.10	0.075	mg/L	1		SM 3500	Total/NA

Client Sample ID: MW-23D1R-W-190305

Lab Sample ID: 460-176527-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	16		5.0	5.0	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.1		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	1900	J	5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1.6	J	4.0	1.0	ug/L	1		RSK-175	Total/NA
Iron	2.8		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.13		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	50.4	^	1.0	0.32	mg/L	1		6010C	Total/NA
Chloride	90.0		0.50	0.28	mg/L	1		300.0	Total/NA
Sulfate	9.6		2.0	0.35	mg/L	1		300.0	Total/NA
Alkalinity, Total	35.7		10.0	4.0	mg/L	1		310.2	Total/NA
Nitrate as N	0.049	J H	0.050	0.020	mg/L	1		353.2	Total/NA
Total Organic Carbon	1.6		1.0	0.43	mg/L	1		9060A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Edison

Detection Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-23D1R-W-190305 (Continued)

Lab Sample ID: 460-176527-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Ferric Iron	2.8		0.10	0.075	mg/L	1		SM 3500	Total/NA

Client Sample ID: BD-W-190305

Lab Sample ID: 460-176527-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.48	J	1.0	0.26	ug/L	1		8260C	Total/NA
Acetone	8.4		5.0	5.0	ug/L	1		8260C	Total/NA
Benzene	7.0		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	3.2		1.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	0.62	J	1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	3.8		1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.43	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	140		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.35	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	12		1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	11		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	30		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	16		2.0	0.30	ug/L	1		8260C	Total/NA
Iron	8.6		0.050	0.019	mg/L	1		6010C	Total/NA
Manganese	0.13		0.0030	0.00040	mg/L	1		6010C	Total/NA
Sodium	1440		5.0	1.6	mg/L	5		6010C	Total/NA

Client Sample ID: TB-W-190304

Lab Sample ID: 460-176527-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.0		5.0	5.0	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-28D2R-W-190304

Lab Sample ID: 460-176527-1

Date Collected: 03/04/19 20:55

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 03:40	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 03:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 03:40	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 03:40	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 03:40	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 03:40	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 03:40	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 03:40	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 03:40	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 03:40	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 03:40	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 03:40	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 03:40	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 03:40	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 03:40	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 03:40	1
Acetone	8.7		5.0	5.0	ug/L			03/08/19 03:40	1
Benzene	1.2		1.0	0.43	ug/L			03/08/19 03:40	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 03:40	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 03:40	1
Carbon disulfide	1.0	U F1	1.0	0.16	ug/L			03/08/19 03:40	1
Carbon tetrachloride	1.0	U F1	1.0	0.21	ug/L			03/08/19 03:40	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 03:40	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 03:40	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 03:40	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 03:40	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 03:40	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 03:40	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 03:40	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 03:40	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 03:40	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 03:40	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 03:40	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 03:40	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 03:40	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 03:40	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			03/08/19 03:40	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 03:40	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 03:40	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 03:40	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 03:40	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 03:40	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 03:40	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 03:40	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 03:40	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 03:40	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 03:40	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 03:40	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-28D2R-W-190304

Lab Sample ID: 460-176527-1

Date Collected: 03/04/19 20:55

Matrix: Water

Date Received: 03/05/19 17:31

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		03/08/19 03:40	1
4-Bromofluorobenzene	91		77 - 124		03/08/19 03:40	1
Dibromofluoromethane (Surr)	99		72 - 131		03/08/19 03:40	1
Toluene-d8 (Surr)	102		80 - 120		03/08/19 03:40	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	11000		5000	1800	ug/L			03/07/19 17:15	1
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 08:46	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 08:46	1
Methane	6.7		4.0	1.0	ug/L			03/08/19 08:46	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.56		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:14	1
Manganese	0.29		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:14	1
Sodium	2930		5.0	1.6	mg/L		03/09/19 08:47	03/12/19 11:36	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6930		50.0	28.2	mg/L			03/08/19 11:35	100
Sulfate	833		200	34.9	mg/L			03/08/19 11:35	100
Alkalinity, Total	322		50.0	20.0	mg/L			03/08/19 17:25	5
Nitrate as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:18	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:18	1
Total Organic Carbon	5.0		1.0	0.43	mg/L			03/09/19 20:21	1
Ferric Iron	0.56		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1

Client Sample ID: AMW-15D3-W-190304

Lab Sample ID: 460-176527-2

Date Collected: 03/04/19 22:18

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 04:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 04:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 04:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 04:07	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 04:07	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 04:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 04:07	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 04:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 04:07	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 04:07	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 04:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 04:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 04:07	1
2-Butanone (MEK)	11		5.0	1.9	ug/L			03/08/19 04:07	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 04:07	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 04:07	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: AMW-15D3-W-190304

Lab Sample ID: 460-176527-2

Date Collected: 03/04/19 22:18

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	90		5.0	5.0	ug/L			03/08/19 04:07	1
Benzene	4.4		1.0	0.43	ug/L			03/08/19 04:07	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 04:07	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 04:07	1
Carbon disulfide	1.9		1.0	0.16	ug/L			03/08/19 04:07	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 04:07	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 04:07	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 04:07	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 04:07	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 04:07	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 04:07	1
cis-1,2-Dichloroethene	11		1.0	0.22	ug/L			03/08/19 04:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 04:07	1
Cyclohexane	0.33	J	1.0	0.32	ug/L			03/08/19 04:07	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 04:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 04:07	1
Ethylbenzene	0.79	J	1.0	0.30	ug/L			03/08/19 04:07	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 04:07	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 04:07	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 04:07	1
Methyl tert-butyl ether	64		1.0	0.47	ug/L			03/08/19 04:07	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 04:07	1
Methylene Chloride	0.43	J	1.0	0.32	ug/L			03/08/19 04:07	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 04:07	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 04:07	1
Toluene	1.2		1.0	0.38	ug/L			03/08/19 04:07	1
trans-1,2-Dichloroethene	0.38	J	1.0	0.24	ug/L			03/08/19 04:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 04:07	1
Trichloroethene	58		1.0	0.31	ug/L			03/08/19 04:07	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 04:07	1
Vinyl chloride	6.9		1.0	0.17	ug/L			03/08/19 04:07	1
Xylenes, Total	1.7	J	2.0	0.30	ug/L			03/08/19 04:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		74 - 132		03/08/19 04:07	1
4-Bromofluorobenzene	96		77 - 124		03/08/19 04:07	1
Dibromofluoromethane (Surr)	101		72 - 131		03/08/19 04:07	1
Toluene-d8 (Surr)	107		80 - 120		03/08/19 04:07	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5000	U	5000	1800	ug/L			03/07/19 17:24	1
Ethane	330	U	330	66	ug/L			03/08/19 09:05	44
Ethene	310	U	310	66	ug/L			03/08/19 09:05	44
Methane	2100		180	44	ug/L			03/08/19 09:05	44

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.20		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:33	1
Manganese	0.0097		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:33	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: AMW-15D3-W-190304

Lab Sample ID: 460-176527-2

Date Collected: 03/04/19 22:18

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	653	^	1.0	0.32	mg/L		03/09/19 08:47	03/11/19 11:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	878		10.0	5.6	mg/L			03/08/19 11:43	20
Sulfate	42.9		40.0	7.0	mg/L			03/08/19 11:43	20
Alkalinity, Total	518		100	40.0	mg/L			03/08/19 17:10	10
Nitrate as N	0.046	J H	0.050	0.020	mg/L			03/08/19 14:19	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:19	1
Total Organic Carbon	26.9		4.0	1.7	mg/L			03/10/19 03:20	4
Ferric Iron	0.20		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.50	U HF	0.50	0.38	mg/L			03/07/19 15:00	5

Client Sample ID: AMW-15VD-W-190304

Lab Sample ID: 460-176527-3

Date Collected: 03/04/19 22:35

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 15:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 15:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 15:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 15:35	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 15:35	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 15:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 15:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 15:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 15:35	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 15:35	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 15:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 15:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 15:35	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 15:35	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 15:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 15:35	1
Acetone	5.0	U	5.0	5.0	ug/L			03/08/19 15:35	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 15:35	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 15:35	1
Bromomethane	1.0	U	1.0	1.0	ug/L			03/08/19 15:35	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 15:35	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 15:35	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 15:35	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 15:35	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 15:35	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 15:35	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 15:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 15:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 15:35	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 15:35	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 15:35	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: AMW-15VD-W-190304

Lab Sample ID: 460-176527-3

Date Collected: 03/04/19 22:35

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 15:35	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 15:35	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 15:35	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 15:35	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 15:35	1
Methyl tert-butyl ether	0.99	J	1.0	0.47	ug/L			03/08/19 15:35	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 15:35	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 15:35	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 15:35	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 15:35	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 15:35	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 15:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 15:35	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 15:35	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 15:35	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 15:35	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 15:35	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		74 - 132		03/08/19 15:35	1
4-Bromofluorobenzene	92		77 - 124		03/08/19 15:35	1
Dibromofluoromethane (Surr)	98		72 - 131		03/08/19 15:35	1
Toluene-d8 (Surr)	101		80 - 120		03/08/19 15:35	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	13000		5000	1800	ug/L			03/07/19 17:32	1
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 09:24	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 09:24	1
Methane	29		4.0	1.0	ug/L			03/08/19 09:24	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.6		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:37	1
Manganese	0.15		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:37	1
Sodium	5590		10.0	3.2	mg/L		03/09/19 08:47	03/12/19 11:55	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15500		100	56.4	mg/L			03/08/19 11:51	200
Sulfate	1800		400	69.8	mg/L			03/08/19 11:51	200
Alkalinity, Total	393		50.0	20.0	mg/L			03/08/19 17:12	5
Nitrate as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:20	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:20	1
Total Organic Carbon	2.6		1.0	0.43	mg/L			03/10/19 04:20	1
Ferric Iron	2.6		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: AMW-15D2-W-190304

Lab Sample ID: 460-176527-4

Date Collected: 03/04/19 23:01

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 05:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 05:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 05:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 05:01	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 05:01	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 05:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 05:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 05:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 05:01	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 05:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 05:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 05:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 05:01	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 05:01	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 05:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 05:01	1
Acetone	5.0	U	5.0	5.0	ug/L			03/08/19 05:01	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 05:01	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 05:01	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 05:01	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 05:01	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 05:01	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 05:01	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 05:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 05:01	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 05:01	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 05:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 05:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 05:01	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 05:01	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 05:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 05:01	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 05:01	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 05:01	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 05:01	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 05:01	1
Methyl tert-butyl ether	33		1.0	0.47	ug/L			03/08/19 05:01	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 05:01	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 05:01	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 05:01	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 05:01	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 05:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 05:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 05:01	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 05:01	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 05:01	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 05:01	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 05:01	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: AMW-15D2-W-190304

Lab Sample ID: 460-176527-4

Date Collected: 03/04/19 23:01

Matrix: Water

Date Received: 03/05/19 17:31

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	96		74 - 132		03/08/19 05:01	1
4-Bromofluorobenzene	93		77 - 124		03/08/19 05:01	1
Dibromofluoromethane (Surr)	99		72 - 131		03/08/19 05:01	1
Toluene-d8 (Surr)	101		80 - 120		03/08/19 05:01	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	69000		5000	1800	ug/L			03/07/19 17:41	1
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 09:42	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 09:42	1
Methane	200		4.0	1.0	ug/L			03/08/19 09:42	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.6		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:53	1
Manganese	0.086		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:53	1
Sodium	2230		5.0	1.6	mg/L		03/09/19 08:47	03/12/19 11:59	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3750		25.0	14.1	mg/L			03/08/19 11:59	50
Sulfate	241		100	17.5	mg/L			03/08/19 11:59	50
Alkalinity, Total	639		100	40.0	mg/L			03/08/19 17:25	10
Nitrate as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:21	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:21	1
Total Organic Carbon	5.8		1.0	0.43	mg/L			03/10/19 08:19	1
Ferric Iron	1.6		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.10	U HF F1	0.10	0.075	mg/L			03/07/19 15:00	1

Client Sample ID: MW-24D2-W-190305

Lab Sample ID: 460-176527-5

Date Collected: 03/05/19 00:03

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 05:27	1
1,1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 05:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 05:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 05:27	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 05:27	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 05:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 05:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 05:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 05:27	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 05:27	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 05:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 05:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 05:27	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 05:27	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 05:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 05:27	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24D2-W-190305

Lab Sample ID: 460-176527-5

Date Collected: 03/05/19 00:03

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	14		5.0	5.0	ug/L			03/08/19 05:27	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 05:27	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 05:27	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 05:27	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 05:27	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 05:27	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 05:27	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 05:27	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 05:27	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 05:27	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 05:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 05:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 05:27	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 05:27	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 05:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 05:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 05:27	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 05:27	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 05:27	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 05:27	1
Methyl tert-butyl ether	4.8		1.0	0.47	ug/L			03/08/19 05:27	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 05:27	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 05:27	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 05:27	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 05:27	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 05:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 05:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 05:27	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 05:27	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 05:27	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 05:27	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 05:27	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		03/08/19 05:27	1
4-Bromofluorobenzene	90		77 - 124		03/08/19 05:27	1
Dibromofluoromethane (Surr)	97		72 - 131		03/08/19 05:27	1
Toluene-d8 (Surr)	101		80 - 120		03/08/19 05:27	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	1800	J	5000	1800	ug/L			03/07/19 17:50	1
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 10:01	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 10:01	1
Methane	4.0	U	4.0	1.0	ug/L			03/08/19 10:01	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.7		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:56	1
Manganese	0.012		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:56	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24D2-W-190305

Lab Sample ID: 460-176527-5

Date Collected: 03/05/19 00:03

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	192	^	1.0	0.32	mg/L		03/09/19 08:47	03/11/19 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	658		5.0	2.8	mg/L			03/08/19 12:07	10
Sulfate	43.5		20.0	3.5	mg/L			03/08/19 12:07	10
Alkalinity, Total	217		30.0	12.0	mg/L			03/08/19 17:25	3
Nitrate as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:22	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:22	1
Total Organic Carbon	5.6		1.0	0.43	mg/L			03/10/19 09:19	1
Ferric Iron	1.6		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.091	J HF	0.10	0.075	mg/L			03/07/19 15:00	1

Client Sample ID: MW-24VDR-W-190305

Lab Sample ID: 460-176527-6

Date Collected: 03/05/19 00:37

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 05:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 05:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 05:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 05:54	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 05:54	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 05:54	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 05:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 05:54	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 05:54	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 05:54	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 05:54	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 05:54	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 05:54	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 05:54	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 05:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 05:54	1
Acetone	12		5.0	5.0	ug/L			03/08/19 05:54	1
Benzene	1.4		1.0	0.43	ug/L			03/08/19 05:54	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 05:54	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 05:54	1
Carbon disulfide	1.2		1.0	0.16	ug/L			03/08/19 05:54	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 05:54	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 05:54	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 05:54	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 05:54	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 05:54	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 05:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 05:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 05:54	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 05:54	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 05:54	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24VDR-W-190305

Lab Sample ID: 460-176527-6

Date Collected: 03/05/19 00:37

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 05:54	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 05:54	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 05:54	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 05:54	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 05:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			03/08/19 05:54	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 05:54	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 05:54	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 05:54	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 05:54	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 05:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 05:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 05:54	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 05:54	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 05:54	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 05:54	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 05:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		03/08/19 05:54	1
4-Bromofluorobenzene	91		77 - 124		03/08/19 05:54	1
Dibromofluoromethane (Surr)	97		72 - 131		03/08/19 05:54	1
Toluene-d8 (Surr)	101		80 - 120		03/08/19 05:54	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5000		5000	1800	ug/L			03/07/19 17:58	1
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 10:20	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 10:20	1
Methane	1.9	J	4.0	1.0	ug/L			03/08/19 10:20	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1.2		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 12:00	1
Manganese	0.015		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 12:00	1
Sodium	182	^	1.0	0.32	mg/L		03/09/19 08:47	03/11/19 12:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7640		50.0	28.2	mg/L			03/08/19 12:16	100
Sulfate	859		200	34.9	mg/L			03/08/19 12:16	100
Alkalinity, Total	306		50.0	20.0	mg/L			03/08/19 17:29	5
Nitrate as N	0.14	H	0.050	0.020	mg/L			03/08/19 17:42	1
Nitrite as N	0.034	J H	0.050	0.020	mg/L			03/08/19 17:42	1
Total Organic Carbon	3.9		1.0	0.43	mg/L			03/10/19 15:18	1
Ferric Iron	0.10	U	0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	2.1	HF	0.50	0.38	mg/L			03/07/19 15:00	5

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24D1R-W-190305

Lab Sample ID: 460-176527-7

Date Collected: 03/05/19 01:12

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 06:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 06:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 06:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 06:20	1
1,1-Dichloroethane	0.61	J	1.0	0.26	ug/L			03/08/19 06:20	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 06:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 06:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 06:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 06:20	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 06:20	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 06:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 06:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 06:20	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 06:20	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 06:20	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 06:20	1
Acetone	12		5.0	5.0	ug/L			03/08/19 06:20	1
Benzene	8.6		1.0	0.43	ug/L			03/08/19 06:20	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 06:20	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 06:20	1
Carbon disulfide	4.0		1.0	0.16	ug/L			03/08/19 06:20	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 06:20	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 06:20	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 06:20	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 06:20	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 06:20	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 06:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 06:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 06:20	1
Cyclohexane	0.81	J	1.0	0.32	ug/L			03/08/19 06:20	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 06:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 06:20	1
Ethylbenzene	5.1		1.0	0.30	ug/L			03/08/19 06:20	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 06:20	1
Isopropylbenzene	0.58	J	1.0	0.34	ug/L			03/08/19 06:20	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 06:20	1
Methyl tert-butyl ether	160		1.0	0.47	ug/L			03/08/19 06:20	1
Methylcyclohexane	0.47	J	1.0	0.26	ug/L			03/08/19 06:20	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 06:20	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 06:20	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 06:20	1
Toluene	15		1.0	0.38	ug/L			03/08/19 06:20	1
trans-1,2-Dichloroethene	13		1.0	0.24	ug/L			03/08/19 06:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 06:20	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 06:20	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 06:20	1
Vinyl chloride	36		1.0	0.17	ug/L			03/08/19 06:20	1
Xylenes, Total	21		2.0	0.30	ug/L			03/08/19 06:20	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24D1R-W-190305

Lab Sample ID: 460-176527-7

Date Collected: 03/05/19 01:12

Matrix: Water

Date Received: 03/05/19 17:31

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		74 - 132		03/08/19 06:20	1
4-Bromofluorobenzene	99		77 - 124		03/08/19 06:20	1
Dibromofluoromethane (Surr)	102		72 - 131		03/08/19 06:20	1
Toluene-d8 (Surr)	109		80 - 120		03/08/19 06:20	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	32000		5000	1800	ug/L			03/07/19 18:07	1
Ethane	390		170	33	ug/L			03/08/19 10:39	22
Ethene	210		150	33	ug/L			03/08/19 10:39	22
Methane	3500		88	22	ug/L			03/08/19 10:39	22

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	12.1		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 12:04	1
Manganese	0.16		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 12:04	1
Sodium	998		5.0	1.6	mg/L		03/09/19 08:47	03/12/19 12:02	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1850		10.0	5.6	mg/L			03/08/19 12:56	20
Sulfate	105		40.0	7.0	mg/L			03/08/19 12:56	20
Alkalinity, Total	381		40.0	16.0	mg/L			03/08/19 17:09	4
Nitrate as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:29	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:29	1
Total Organic Carbon	28.3		10.0	4.3	mg/L			03/10/19 16:18	10
Ferric Iron	12.1		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.50	U HF	0.50	0.38	mg/L			03/07/19 15:00	5

Client Sample ID: MW-23D1R-W-190305

Lab Sample ID: 460-176527-8

Date Collected: 03/05/19 02:33

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 16:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 16:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 16:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 16:01	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 16:01	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 16:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 16:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 16:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 16:01	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 16:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 16:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 16:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 16:01	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 16:01	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 16:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 16:01	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-23D1R-W-190305

Lab Sample ID: 460-176527-8

Date Collected: 03/05/19 02:33

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	16		5.0	5.0	ug/L			03/08/19 16:01	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 16:01	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 16:01	1
Bromomethane	1.0	U	1.0	1.0	ug/L			03/08/19 16:01	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 16:01	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 16:01	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 16:01	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 16:01	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 16:01	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 16:01	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 16:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 16:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 16:01	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 16:01	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 16:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 16:01	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 16:01	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 16:01	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 16:01	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 16:01	1
Methyl tert-butyl ether	1.1		1.0	0.47	ug/L			03/08/19 16:01	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 16:01	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 16:01	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 16:01	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 16:01	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 16:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 16:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 16:01	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 16:01	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 16:01	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 16:01	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 16:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	93		74 - 132		03/08/19 16:01	1
4-Bromofluorobenzene	92		77 - 124		03/08/19 16:01	1
Dibromofluoromethane (Surr)	97		72 - 131		03/08/19 16:01	1
Toluene-d8 (Surr)	102		80 - 120		03/08/19 16:01	1

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	1900	J	5000	1800	ug/L			03/07/19 18:16	1
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 10:58	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 10:58	1
Methane	1.6	J	4.0	1.0	ug/L			03/08/19 10:58	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	2.8		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 12:08	1
Manganese	0.13		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 12:08	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-23D1R-W-190305

Lab Sample ID: 460-176527-8

Date Collected: 03/05/19 02:33

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sodium	50.4	^	1.0	0.32	mg/L		03/09/19 08:47	03/11/19 12:08	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	90.0		0.50	0.28	mg/L			03/08/19 13:05	1
Sulfate	9.6		2.0	0.35	mg/L			03/08/19 13:05	1
Alkalinity, Total	35.7		10.0	4.0	mg/L			03/08/19 16:14	1
Nitrate as N	0.049	J H	0.050	0.020	mg/L			03/08/19 14:32	1
Nitrite as N	0.050	U H	0.050	0.020	mg/L			03/08/19 14:32	1
Total Organic Carbon	1.6		1.0	0.43	mg/L			03/10/19 20:19	1
Ferric Iron	2.8		0.10	0.075	mg/L			03/15/19 15:42	1
Ferrous Iron	0.10	U HF	0.10	0.075	mg/L			03/07/19 15:00	1

Client Sample ID: BD-W-190305

Lab Sample ID: 460-176527-9

Date Collected: 03/05/19 00:00

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 07:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 07:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 07:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 07:13	1
1,1-Dichloroethane	0.48	J	1.0	0.26	ug/L			03/08/19 07:13	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 07:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 07:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 07:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 07:13	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 07:13	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 07:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 07:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 07:13	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 07:13	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 07:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 07:13	1
Acetone	8.4		5.0	5.0	ug/L			03/08/19 07:13	1
Benzene	7.0		1.0	0.43	ug/L			03/08/19 07:13	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 07:13	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 07:13	1
Carbon disulfide	3.2		1.0	0.16	ug/L			03/08/19 07:13	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 07:13	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 07:13	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 07:13	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 07:13	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 07:13	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 07:13	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 07:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 07:13	1
Cyclohexane	0.62	J	1.0	0.32	ug/L			03/08/19 07:13	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 07:13	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: BD-W-190305

Lab Sample ID: 460-176527-9

Date Collected: 03/05/19 00:00

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 07:13	1
Ethylbenzene	3.8		1.0	0.30	ug/L			03/08/19 07:13	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 07:13	1
Isopropylbenzene	0.43	J	1.0	0.34	ug/L			03/08/19 07:13	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 07:13	1
Methyl tert-butyl ether	140		1.0	0.47	ug/L			03/08/19 07:13	1
Methylcyclohexane	0.35	J	1.0	0.26	ug/L			03/08/19 07:13	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 07:13	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 07:13	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 07:13	1
Toluene	12		1.0	0.38	ug/L			03/08/19 07:13	1
trans-1,2-Dichloroethene	11		1.0	0.24	ug/L			03/08/19 07:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 07:13	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 07:13	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 07:13	1
Vinyl chloride	30		1.0	0.17	ug/L			03/08/19 07:13	1
Xylenes, Total	16		2.0	0.30	ug/L			03/08/19 07:13	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	97		74 - 132		03/08/19 07:13	1
4-Bromofluorobenzene	93		77 - 124		03/08/19 07:13	1
Dibromofluoromethane (Surr)	96		72 - 131		03/08/19 07:13	1
Toluene-d8 (Surr)	102		80 - 120		03/08/19 07:13	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	8.6		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 12:12	1
Manganese	0.13		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 12:12	1
Sodium	1440		5.0	1.6	mg/L		03/09/19 08:47	03/12/19 12:06	5

Client Sample ID: TB-W-190304

Lab Sample ID: 460-176527-10

Date Collected: 03/04/19 20:05

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 03:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 03:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 03:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 03:14	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 03:14	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 03:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 03:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 03:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 03:14	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 03:14	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 03:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 03:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 03:14	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 03:14	1

TestAmerica Edison

Client Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: TB-W-190304

Lab Sample ID: 460-176527-10

Date Collected: 03/04/19 20:05

Matrix: Water

Date Received: 03/05/19 17:31

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 03:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 03:14	1
Acetone	5.0		5.0	5.0	ug/L			03/08/19 03:14	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 03:14	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 03:14	1
Bromomethane	1.0	U *	1.0	1.0	ug/L			03/08/19 03:14	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 03:14	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 03:14	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 03:14	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 03:14	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 03:14	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 03:14	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 03:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 03:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 03:14	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 03:14	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 03:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 03:14	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 03:14	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 03:14	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 03:14	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 03:14	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			03/08/19 03:14	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 03:14	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 03:14	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 03:14	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 03:14	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 03:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 03:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 03:14	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 03:14	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 03:14	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 03:14	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 03:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	95		74 - 132		03/08/19 03:14	1
4-Bromofluorobenzene	91		77 - 124		03/08/19 03:14	1
Dibromofluoromethane (Surr)	99		72 - 131		03/08/19 03:14	1
Toluene-d8 (Surr)	99		80 - 120		03/08/19 03:14	1

TestAmerica Edison

Surrogate Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (74-132)	BFB (77-124)	DBFM (72-131)	TOL (80-120)
460-176527-1	MW-28D2R-W-190304	96	91	99	102
460-176527-1 MS	MW-28D2R-W-190304	92	94	97	103
460-176527-1 MSD	MW-28D2R-W-190304	98	99	102	108
460-176527-2	AMW-15D3-W-190304	99	96	101	107
460-176527-3	AMW-15VD-W-190304	98	92	98	101
460-176527-4	AMW-15D2-W-190304	96	93	99	101
460-176527-5	MW-24D2-W-190305	94	90	97	101
460-176527-6	MW-24VDR-W-190305	94	91	97	101
460-176527-7	MW-24D1R-W-190305	100	99	102	109
460-176527-8	MW-23D1R-W-190305	93	92	97	102
460-176527-9	BD-W-190305	97	93	96	102
460-176527-10	TB-W-190304	95	91	99	99
LCS 460-593942/3	Lab Control Sample	92	93	98	101
LCS 460-594111/4	Lab Control Sample	90	93	96	102
LCSD 460-594111/5	Lab Control Sample Dup	90	93	97	101
MB 460-593942/8	Method Blank	94	91	99	101
MB 460-594111/9	Method Blank	92	92	99	102

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)

BFB = 4-Bromofluorobenzene

DBFM = Dibromofluoromethane (Surr)

TOL = Toluene-d8 (Surr)

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: MB 460-593942/8

Matrix: Water

Analysis Batch: 593942

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 02:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 02:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 02:47	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 02:47	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 02:47	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 02:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 02:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 02:47	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 02:47	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 02:47	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 02:47	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 02:47	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 02:47	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 02:47	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 02:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 02:47	1
Acetone	5.0	U	5.0	5.0	ug/L			03/08/19 02:47	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 02:47	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 02:47	1
Bromomethane	1.0	U	1.0	1.0	ug/L			03/08/19 02:47	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 02:47	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 02:47	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 02:47	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 02:47	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 02:47	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 02:47	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 02:47	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 02:47	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 02:47	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 02:47	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 02:47	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 02:47	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 02:47	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 02:47	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 02:47	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 02:47	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			03/08/19 02:47	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 02:47	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 02:47	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 02:47	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 02:47	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 02:47	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 02:47	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 02:47	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 02:47	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 02:47	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 02:47	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 02:47	1

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	94		74 - 132		03/08/19 02:47	1
4-Bromofluorobenzene	91		77 - 124		03/08/19 02:47	1
Dibromofluoromethane (Surr)	99		72 - 131		03/08/19 02:47	1
Toluene-d8 (Surr)	101		80 - 120		03/08/19 02:47	1

Lab Sample ID: LCS 460-593942/3

Matrix: Water

Analysis Batch: 593942

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	20.0	21.0		ug/L		105	75 - 125
1,1,2,2-Tetrachloroethane	20.0	17.5		ug/L		87	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.8		ug/L		104	59 - 150
1,1,2-Trichloroethane	20.0	18.6		ug/L		93	78 - 120
1,1-Dichloroethane	20.0	21.2		ug/L		106	77 - 123
1,1-Dichloroethene	20.0	20.4		ug/L		102	74 - 123
1,2,4-Trichlorobenzene	20.0	19.3		ug/L		96	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.3		ug/L		86	55 - 134
1,2-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 120
1,2-Dichloroethane	20.0	19.1		ug/L		95	76 - 121
1,2-Dichloropropane	20.0	20.9		ug/L		104	77 - 123
1,3-Dichlorobenzene	20.0	21.1		ug/L		106	80 - 120
1,4-Dichlorobenzene	20.0	20.7		ug/L		103	80 - 120
2-Butanone (MEK)	100	101		ug/L		101	64 - 120
2-Hexanone	100	115		ug/L		115	71 - 125
4-Methyl-2-pentanone (MIBK)	100	117		ug/L		117	78 - 124
Acetone	100	105		ug/L		105	39 - 150
Benzene	20.0	21.6		ug/L		108	77 - 121
Bromoform	20.0	15.6		ug/L		78	53 - 120
Bromomethane	20.0	30.2	*	ug/L		151	10 - 150
Carbon disulfide	20.0	21.3		ug/L		107	69 - 133
Carbon tetrachloride	20.0	20.3		ug/L		102	70 - 132
Chlorobenzene	20.0	21.1		ug/L		106	80 - 120
Chlorodibromomethane	20.0	18.5		ug/L		92	73 - 120
Chloroethane	20.0	26.6		ug/L		133	52 - 150
Chloroform	20.0	21.1		ug/L		106	80 - 120
Chloromethane	20.0	23.9		ug/L		119	56 - 131
cis-1,2-Dichloroethene	20.0	20.2		ug/L		101	80 - 120
cis-1,3-Dichloropropene	20.0	20.0		ug/L		100	77 - 120
Cyclohexane	20.0	21.3		ug/L		107	56 - 150
Dichlorobromomethane	20.0	20.5		ug/L		103	76 - 120
Dichlorodifluoromethane	20.0	15.7		ug/L		78	50 - 131
Ethylbenzene	20.0	20.7		ug/L		104	80 - 120
Ethylene Dibromide	20.0	17.6		ug/L		88	80 - 120
Isopropylbenzene	20.0	21.6		ug/L		108	80 - 123
Methyl acetate	40.0	42.7		ug/L		107	66 - 144
Methyl tert-butyl ether	20.0	17.1		ug/L		86	79 - 122
Methylcyclohexane	20.0	21.2		ug/L		106	61 - 145
Methylene Chloride	20.0	20.3		ug/L		101	77 - 123
Styrene	20.0	20.9		ug/L		104	80 - 120
Tetrachloroethene	20.0	20.2		ug/L		101	78 - 122
Toluene	20.0	21.6		ug/L		108	80 - 120
trans-1,2-Dichloroethene	20.0	19.4		ug/L		97	79 - 120

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: LCS 460-593942/3

Matrix: Water

Analysis Batch: 593942

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	20.0	18.1		ug/L		91	76 - 120
Trichloroethene	20.0	20.9		ug/L		105	77 - 120
Trichlorofluoromethane	20.0	22.3		ug/L		112	71 - 143
Vinyl chloride	20.0	22.6		ug/L		113	62 - 138
Xylenes, Total	40.0	41.2		ug/L		103	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	92		74 - 132
4-Bromofluorobenzene	93		77 - 124
Dibromofluoromethane (Surr)	98		72 - 131
Toluene-d8 (Surr)	101		80 - 120

Lab Sample ID: 460-176527-1 MS

Matrix: Water

Analysis Batch: 593942

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	200	194		ug/L		97	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	200	176		ug/L		88	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	206		ug/L		103	59 - 150
1,1,2-Trichloroethane	1.0	U	200	182		ug/L		91	78 - 120
1,1-Dichloroethane	1.0	U	200	207		ug/L		104	77 - 123
1,1-Dichloroethene	1.0	U	200	198		ug/L		99	74 - 123
1,2,4-Trichlorobenzene	1.0	U	200	177		ug/L		89	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	200	161		ug/L		81	55 - 134
1,2-Dichlorobenzene	1.0	U	200	197		ug/L		99	80 - 120
1,2-Dichloroethane	1.0	U	200	182		ug/L		91	76 - 121
1,2-Dichloropropane	1.0	U	200	203		ug/L		102	77 - 123
1,3-Dichlorobenzene	1.0	U	200	202		ug/L		101	80 - 120
1,4-Dichlorobenzene	1.0	U	200	198		ug/L		99	80 - 120
2-Butanone (MEK)	5.0	U	1000	968		ug/L		97	64 - 120
2-Hexanone	5.0	U	1000	1100		ug/L		110	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1130		ug/L		113	78 - 124
Acetone	8.7		1000	1080		ug/L		107	39 - 150
Benzene	1.2		200	214		ug/L		106	77 - 121
Bromoform	1.0	U	200	122		ug/L		61	53 - 120
Bromomethane	1.0	U *	200	107		ug/L		53	10 - 150
Carbon disulfide	1.0	U F1	200	248		ug/L		124	69 - 133
Carbon tetrachloride	1.0	U F1	200	119	F1	ug/L		59	70 - 132
Chlorobenzene	1.0	U	200	209		ug/L		105	80 - 120
Chlorodibromomethane	1.0	U	200	155		ug/L		78	73 - 120
Chloroethane	1.0	U	200	256		ug/L		128	52 - 150
Chloroform	1.0	U	200	200		ug/L		100	80 - 120
Chloromethane	1.0	U	200	210		ug/L		105	56 - 131
cis-1,2-Dichloroethene	1.0	U	200	195		ug/L		97	80 - 120
cis-1,3-Dichloropropene	1.0	U	200	175		ug/L		87	77 - 120
Cyclohexane	1.0	U	200	206		ug/L		103	56 - 150

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: 460-176527-1 MS

Matrix: Water

Analysis Batch: 593942

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Dichlorobromomethane	1.0	U	200	176		ug/L		88	76 - 120
Dichlorodifluoromethane	1.0	U	200	142		ug/L		71	50 - 131
Ethylbenzene	1.0	U	200	204		ug/L		102	80 - 120
Ethylene Dibromide	1.0	U	200	172		ug/L		86	80 - 120
Isopropylbenzene	1.0	U	200	210		ug/L		105	80 - 123
Methyl acetate	5.0	U	400	385		ug/L		96	66 - 144
Methyl tert-butyl ether	1.0	U	200	167		ug/L		84	79 - 122
Methylcyclohexane	1.0	U	200	200		ug/L		100	61 - 145
Methylene Chloride	1.0	U	200	190		ug/L		95	77 - 123
Styrene	1.0	U	200	199		ug/L		100	80 - 120
Tetrachloroethene	1.0	U	200	195		ug/L		97	78 - 122
Toluene	1.0	U	200	212		ug/L		106	80 - 120
trans-1,2-Dichloroethene	1.0	U	200	187		ug/L		94	79 - 120
trans-1,3-Dichloropropene	1.0	U	200	153		ug/L		77	76 - 120
Trichloroethene	1.0	U	200	196		ug/L		98	77 - 120
Trichlorofluoromethane	1.0	U	200	205		ug/L		102	71 - 143
Vinyl chloride	1.0	U	200	215		ug/L		108	62 - 138
Xylenes, Total	2.0	U	400	404		ug/L		101	80 - 120

Surrogate	MS %Recovery	MS Qualifier	MS Limits
1,2-Dichloroethane-d4 (Surr)	92		74 - 132
4-Bromofluorobenzene	94		77 - 124
Dibromofluoromethane (Surr)	97		72 - 131
Toluene-d8 (Surr)	103		80 - 120

Lab Sample ID: 460-176527-1 MSD

Matrix: Water

Analysis Batch: 593942

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	200	212		ug/L		106	75 - 125	9	30
1,1,2,2-Tetrachloroethane	1.0	U	200	192		ug/L		96	74 - 120	9	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	218		ug/L		109	59 - 150	6	30
1,1,2-Trichloroethane	1.0	U	200	199		ug/L		100	78 - 120	9	30
1,1-Dichloroethane	1.0	U	200	223		ug/L		112	77 - 123	7	30
1,1-Dichloroethene	1.0	U	200	220		ug/L		110	74 - 123	10	30
1,2,4-Trichlorobenzene	1.0	U	200	201		ug/L		101	80 - 124	13	30
1,2-Dibromo-3-Chloropropane	1.0	U	200	171		ug/L		86	55 - 134	6	30
1,2-Dichlorobenzene	1.0	U	200	214		ug/L		107	80 - 120	8	30
1,2-Dichloroethane	1.0	U	200	198		ug/L		99	76 - 121	8	30
1,2-Dichloropropane	1.0	U	200	218		ug/L		109	77 - 123	7	30
1,3-Dichlorobenzene	1.0	U	200	221		ug/L		110	80 - 120	9	30
1,4-Dichlorobenzene	1.0	U	200	217		ug/L		108	80 - 120	9	30
2-Butanone (MEK)	5.0	U	1000	1010		ug/L		101	64 - 120	4	30
2-Hexanone	5.0	U	1000	1170		ug/L		117	71 - 125	6	30
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	1200		ug/L		120	78 - 124	6	30
Acetone	8.7		1000	1110		ug/L		111	39 - 150	3	30

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: 460-176527-1 MSD

Matrix: Water

Analysis Batch: 593942

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Benzene	1.2		200	231		ug/L		115	77 - 121	8	30
Bromoform	1.0	U	200	137		ug/L		69	53 - 120	12	30
Bromomethane	1.0	U *	200	140		ug/L		70	10 - 150	27	30
Carbon disulfide	1.0	U F1	200	270	F1	ug/L		135	69 - 133	8	30
Carbon tetrachloride	1.0	U F1	200	140		ug/L		70	70 - 132	16	30
Chlorobenzene	1.0	U	200	224		ug/L		112	80 - 120	7	30
Chlorodibromomethane	1.0	U	200	172		ug/L		86	73 - 120	10	30
Chloroethane	1.0	U	200	291		ug/L		145	52 - 150	13	30
Chloroform	1.0	U	200	219		ug/L		109	80 - 120	9	30
Chloromethane	1.0	U	200	233		ug/L		117	56 - 131	10	30
cis-1,2-Dichloroethene	1.0	U	200	215		ug/L		107	80 - 120	10	30
cis-1,3-Dichloropropene	1.0	U	200	192		ug/L		96	77 - 120	9	30
Cyclohexane	1.0	U	200	224		ug/L		112	56 - 150	8	30
Dichlorobromomethane	1.0	U	200	193		ug/L		96	76 - 120	9	30
Dichlorodifluoromethane	1.0	U	200	156		ug/L		78	50 - 131	9	30
Ethylbenzene	1.0	U	200	221		ug/L		111	80 - 120	8	30
Ethylene Dibromide	1.0	U	200	186		ug/L		93	80 - 120	8	30
Isopropylbenzene	1.0	U	200	230		ug/L		115	80 - 123	9	30
Methyl acetate	5.0	U	400	401		ug/L		100	66 - 144	4	30
Methyl tert-butyl ether	1.0	U	200	184		ug/L		92	79 - 122	10	30
Methylcyclohexane	1.0	U	200	220		ug/L		110	61 - 145	10	30
Methylene Chloride	1.0	U	200	212		ug/L		106	77 - 123	11	30
Styrene	1.0	U	200	216		ug/L		108	80 - 120	8	30
Tetrachloroethene	1.0	U	200	213		ug/L		106	78 - 122	9	30
Toluene	1.0	U	200	231		ug/L		115	80 - 120	8	30
trans-1,2-Dichloroethene	1.0	U	200	209		ug/L		104	79 - 120	11	30
trans-1,3-Dichloropropene	1.0	U	200	172		ug/L		86	76 - 120	11	30
Trichloroethene	1.0	U	200	217		ug/L		109	77 - 120	10	30
Trichlorofluoromethane	1.0	U	200	221		ug/L		110	71 - 143	7	30
Vinyl chloride	1.0	U	200	235		ug/L		117	62 - 138	9	30
Xylenes, Total	2.0	U	400	439		ug/L		110	80 - 120	8	30

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		74 - 132
4-Bromofluorobenzene	99		77 - 124
Dibromofluoromethane (Surr)	102		72 - 131
Toluene-d8 (Surr)	108		80 - 120

Lab Sample ID: MB 460-594111/9

Matrix: Water

Analysis Batch: 594111

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.24	ug/L			03/08/19 15:07	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			03/08/19 15:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			03/08/19 15:07	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 15:07	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			03/08/19 15:07	1

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: MB 460-594111/9

Matrix: Water

Analysis Batch: 594111

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			03/08/19 15:07	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			03/08/19 15:07	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			03/08/19 15:07	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			03/08/19 15:07	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			03/08/19 15:07	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			03/08/19 15:07	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			03/08/19 15:07	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			03/08/19 15:07	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			03/08/19 15:07	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			03/08/19 15:07	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			03/08/19 15:07	1
Acetone	5.0	U	5.0	5.0	ug/L			03/08/19 15:07	1
Benzene	1.0	U	1.0	0.43	ug/L			03/08/19 15:07	1
Bromoform	1.0	U	1.0	0.54	ug/L			03/08/19 15:07	1
Bromomethane	1.0	U	1.0	1.0	ug/L			03/08/19 15:07	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			03/08/19 15:07	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			03/08/19 15:07	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			03/08/19 15:07	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			03/08/19 15:07	1
Chloroethane	1.0	U	1.0	0.32	ug/L			03/08/19 15:07	1
Chloroform	1.0	U	1.0	0.33	ug/L			03/08/19 15:07	1
Chloromethane	1.0	U	1.0	0.14	ug/L			03/08/19 15:07	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			03/08/19 15:07	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			03/08/19 15:07	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			03/08/19 15:07	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			03/08/19 15:07	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			03/08/19 15:07	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			03/08/19 15:07	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			03/08/19 15:07	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			03/08/19 15:07	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			03/08/19 15:07	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			03/08/19 15:07	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			03/08/19 15:07	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			03/08/19 15:07	1
Styrene	1.0	U	1.0	0.42	ug/L			03/08/19 15:07	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			03/08/19 15:07	1
Toluene	1.0	U	1.0	0.38	ug/L			03/08/19 15:07	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			03/08/19 15:07	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			03/08/19 15:07	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			03/08/19 15:07	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			03/08/19 15:07	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			03/08/19 15:07	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			03/08/19 15:07	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	92		74 - 132		03/08/19 15:07	1
4-Bromofluorobenzene	92		77 - 124		03/08/19 15:07	1
Dibromofluoromethane (Surr)	99		72 - 131		03/08/19 15:07	1

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: MB 460-594111/9

Matrix: Water

Analysis Batch: 594111

Client Sample ID: Method Blank

Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	102		80 - 120		03/08/19 15:07	1

Lab Sample ID: LCS 460-594111/4

Matrix: Water

Analysis Batch: 594111

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	20.0	19.8		ug/L		99	75 - 125
1,1,2,2-Tetrachloroethane	20.0	16.5		ug/L		83	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	21.9		ug/L		110	59 - 150
1,1,2-Trichloroethane	20.0	17.2		ug/L		86	78 - 120
1,1-Dichloroethane	20.0	20.3		ug/L		102	77 - 123
1,1-Dichloroethene	20.0	20.8		ug/L		104	74 - 123
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		93	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	16.0		ug/L		80	55 - 134
1,2-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 120
1,2-Dichloroethane	20.0	18.1		ug/L		91	76 - 121
1,2-Dichloropropane	20.0	20.4		ug/L		102	77 - 123
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
2-Butanone (MEK)	100	99.0		ug/L		99	64 - 120
2-Hexanone	100	113		ug/L		113	71 - 125
4-Methyl-2-pentanone (MIBK)	100	116		ug/L		116	78 - 124
Acetone	100	121		ug/L		121	39 - 150
Benzene	20.0	20.9		ug/L		105	77 - 121
Bromoform	20.0	13.6		ug/L		68	53 - 120
Bromomethane	20.0	19.8		ug/L		99	10 - 150
Carbon disulfide	20.0	24.2		ug/L		121	69 - 133
Carbon tetrachloride	20.0	15.3		ug/L		76	70 - 132
Chlorobenzene	20.0	20.5		ug/L		102	80 - 120
Chlorodibromomethane	20.0	16.3		ug/L		81	73 - 120
Chloroethane	20.0	27.6		ug/L		138	52 - 150
Chloroform	20.0	19.9		ug/L		99	80 - 120
Chloromethane	20.0	22.4		ug/L		112	56 - 131
cis-1,2-Dichloroethene	20.0	19.9		ug/L		99	80 - 120
cis-1,3-Dichloropropene	20.0	18.6		ug/L		93	77 - 120
Cyclohexane	20.0	22.1		ug/L		111	56 - 150
Dichlorobromomethane	20.0	18.6		ug/L		93	76 - 120
Dichlorodifluoromethane	20.0	18.0		ug/L		90	50 - 131
Ethylbenzene	20.0	20.4		ug/L		102	80 - 120
Ethylene Dibromide	20.0	16.6		ug/L		83	80 - 120
Isopropylbenzene	20.0	21.1		ug/L		105	80 - 123
Methyl acetate	40.0	41.1		ug/L		103	66 - 144
Methyl tert-butyl ether	20.0	16.4		ug/L		82	79 - 122
Methylcyclohexane	20.0	22.0		ug/L		110	61 - 145
Methylene Chloride	20.0	19.1		ug/L		96	77 - 123
Styrene	20.0	20.1		ug/L		101	80 - 120

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: LCS 460-594111/4

Matrix: Water

Analysis Batch: 594111

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	20.0	19.9		ug/L		100	78 - 122
Toluene	20.0	21.2		ug/L		106	80 - 120
trans-1,2-Dichloroethene	20.0	19.2		ug/L		96	79 - 120
trans-1,3-Dichloropropene	20.0	16.5		ug/L		83	76 - 120
Trichloroethene	20.0	20.1		ug/L		100	77 - 120
Trichlorofluoromethane	20.0	22.1		ug/L		110	71 - 143
Vinyl chloride	20.0	22.0		ug/L		110	62 - 138
Xylenes, Total	40.0	40.3		ug/L		101	80 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	90		74 - 132
4-Bromofluorobenzene	93		77 - 124
Dibromofluoromethane (Surr)	96		72 - 131
Toluene-d8 (Surr)	102		80 - 120

Lab Sample ID: LCSD 460-594111/5

Matrix: Water

Analysis Batch: 594111

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
1,1,1-Trichloroethane	20.0	20.8		ug/L		104	75 - 125	5	30
1,1,2,2-Tetrachloroethane	20.0	16.6		ug/L		83	74 - 120	0	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.8		ug/L		114	59 - 150	4	30
1,1,2-Trichloroethane	20.0	17.6		ug/L		88	78 - 120	3	30
1,1-Dichloroethane	20.0	21.1		ug/L		106	77 - 123	4	30
1,1-Dichloroethene	20.0	21.3		ug/L		106	74 - 123	2	30
1,2,4-Trichlorobenzene	20.0	18.9		ug/L		95	80 - 124	1	30
1,2-Dibromo-3-Chloropropane	20.0	15.2		ug/L		76	55 - 134	5	30
1,2-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120	3	30
1,2-Dichloroethane	20.0	18.4		ug/L		92	76 - 121	1	30
1,2-Dichloropropane	20.0	20.7		ug/L		103	77 - 123	2	30
1,3-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 120	3	30
1,4-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120	1	30
2-Butanone (MEK)	100	104		ug/L		104	64 - 120	5	30
2-Hexanone	100	115		ug/L		115	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)	100	118		ug/L		118	78 - 124	1	30
Acetone	100	117		ug/L		117	39 - 150	3	30
Benzene	20.0	21.2		ug/L		106	77 - 121	1	30
Bromoform	20.0	13.6		ug/L		68	53 - 120	0	30
Bromomethane	20.0	20.5		ug/L		103	10 - 150	4	30
Carbon disulfide	20.0	24.8		ug/L		124	69 - 133	3	30
Carbon tetrachloride	20.0	16.1		ug/L		81	70 - 132	5	30
Chlorobenzene	20.0	21.1		ug/L		106	80 - 120	3	30
Chlorodibromomethane	20.0	16.5		ug/L		83	73 - 120	2	30
Chloroethane	20.0	26.6		ug/L		133	52 - 150	4	30
Chloroform	20.0	20.4		ug/L		102	80 - 120	3	30
Chloromethane	20.0	23.2		ug/L		116	56 - 131	3	30

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: LCSD 460-594111/5

Matrix: Water

Analysis Batch: 594111

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
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	80 - 120	2	30
cis-1,3-Dichloropropene	20.0	19.0		ug/L		95	77 - 120	2	30
Cyclohexane	20.0	23.1		ug/L		115	56 - 150	4	30
Dichlorobromomethane	20.0	19.1		ug/L		96	76 - 120	3	30
Dichlorodifluoromethane	20.0	18.7		ug/L		93	50 - 131	3	30
Ethylbenzene	20.0	21.2		ug/L		106	80 - 120	4	30
Ethylene Dibromide	20.0	16.5		ug/L		83	80 - 120	1	30
Isopropylbenzene	20.0	22.0		ug/L		110	80 - 123	4	30
Methyl acetate	40.0	36.1		ug/L		90	66 - 144	13	30
Methyl tert-butyl ether	20.0	17.4		ug/L		87	79 - 122	6	30
Methylcyclohexane	20.0	23.5		ug/L		118	61 - 145	7	30
Methylene Chloride	20.0	20.9		ug/L		104	77 - 123	9	30
Styrene	20.0	20.4		ug/L		102	80 - 120	1	30
Tetrachloroethene	20.0	20.7		ug/L		104	78 - 122	4	30
Toluene	20.0	21.5		ug/L		107	80 - 120	2	30
trans-1,2-Dichloroethene	20.0	20.8		ug/L		104	79 - 120	8	30
trans-1,3-Dichloropropene	20.0	16.7		ug/L		84	76 - 120	1	30
Trichloroethene	20.0	20.6		ug/L		103	77 - 120	3	30
Trichlorofluoromethane	20.0	23.3		ug/L		116	71 - 143	5	30
Vinyl chloride	20.0	23.0		ug/L		115	62 - 138	4	30
Xylenes, Total	40.0	41.4		ug/L		103	80 - 120	3	30

Surrogate	LCSD %Recovery	LCSD Qualifier	LCSD Limits
1,2-Dichloroethane-d4 (Surr)	90		74 - 132
4-Bromofluorobenzene	93		77 - 124
Dibromofluoromethane (Surr)	97		72 - 131
Toluene-d8 (Surr)	101		80 - 120

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-140609/4

Matrix: Water

Analysis Batch: 140609

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	5000	U	5000	1800	ug/L			03/07/19 17:06	1

Lab Sample ID: LCS 200-140609/2

Matrix: Water

Analysis Batch: 140609

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon dioxide	40000	40600		ug/L		102	70 - 130

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Method: RSK-175 - Dissolved Gases (GC) (Continued)

Lab Sample ID: LCSD 200-140609/3

Matrix: Water

Analysis Batch: 140609

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
Carbon dioxide	40000	45900		ug/L		115	70 - 130	12	30

Lab Sample ID: MB 480-462092/5

Matrix: Water

Analysis Batch: 462092

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	7.5	U	7.5	1.5	ug/L			03/08/19 07:49	1
Ethene	7.0	U	7.0	1.5	ug/L			03/08/19 07:49	1
Methane	4.0	U	4.0	1.0	ug/L			03/08/19 07:49	1

Lab Sample ID: LCS 480-462092/6

Matrix: Water

Analysis Batch: 462092

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	14.5	15.6		ug/L		107	79 - 120
Ethene	13.5	14.9		ug/L		110	85 - 120
Methane	7.67	7.69		ug/L		100	85 - 120

Lab Sample ID: LCSD 480-462092/7

Matrix: Water

Analysis Batch: 462092

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
Ethane	14.5	13.5		ug/L		93	79 - 120	14	50
Ethene	13.5	12.7		ug/L		94	85 - 120	16	50
Methane	7.67	6.77		ug/L		88	85 - 120	13	50

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-462133/1-A

Matrix: Water

Analysis Batch: 462498

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 462133

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	0.050	U	0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:06	1
Manganese	0.0030	U	0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:06	1
Sodium	1.0	U ^	1.0	0.32	mg/L		03/09/19 08:47	03/11/19 11:06	1

Lab Sample ID: LCS 480-462133/2-A

Matrix: Water

Analysis Batch: 462498

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 462133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	10.0	9.52		mg/L		95	80 - 120
Manganese	0.200	0.189		mg/L		95	80 - 120

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

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

Lab Sample ID: LCS 480-462133/2-A
Matrix: Water
Analysis Batch: 462928

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 462133

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	10.0	9.66		mg/L		96	80 - 120

Lab Sample ID: 460-176527-1 MS
Matrix: Water
Analysis Batch: 462498

Client Sample ID: MW-28D2R-W-190304
Prep Type: Total/NA
Prep Batch: 462133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	0.56		10.0	9.69		mg/L		91	75 - 125
Manganese	0.29		0.200	0.464		mg/L		88	75 - 125

Lab Sample ID: 460-176527-1 MS
Matrix: Water
Analysis Batch: 462719

Client Sample ID: MW-28D2R-W-190304
Prep Type: Total/NA
Prep Batch: 462133

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	2930		10.0	2890	4	mg/L		-362	75 - 125

Lab Sample ID: 460-176527-1 MSD
Matrix: Water
Analysis Batch: 462498

Client Sample ID: MW-28D2R-W-190304
Prep Type: Total/NA
Prep Batch: 462133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Iron	0.56		10.0	9.66		mg/L		91	75 - 125	0	20
Manganese	0.29		0.200	0.463		mg/L		88	75 - 125	0	20

Lab Sample ID: 460-176527-1 MSD
Matrix: Water
Analysis Batch: 462719

Client Sample ID: MW-28D2R-W-190304
Prep Type: Total/NA
Prep Batch: 462133

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sodium	2930		10.0	2905	4	mg/L		-215	75 - 125	1	20

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 480-462155/4
Matrix: Water
Analysis Batch: 462155

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.50	U	0.50	0.28	mg/L			03/08/19 11:27	1
Sulfate	2.0	U	2.0	0.35	mg/L			03/08/19 11:27	1

Lab Sample ID: LCS 480-462155/3
Matrix: Water
Analysis Batch: 462155

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	50.0	48.90		mg/L		98	90 - 110
Sulfate	50.0	46.91		mg/L		94	90 - 110

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 460-176527-6 MS

Matrix: Water

Analysis Batch: 462155

Client Sample ID: MW-24VDR-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7640		5000	12780	E	mg/L		103	81 - 120
Sulfate	859		5000	5692		mg/L		97	80 - 120

Lab Sample ID: 460-176527-6 MSD

Matrix: Water

Analysis Batch: 462155

Client Sample ID: MW-24VDR-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7640		5000	12630	E	mg/L		100	81 - 120	1	20
Sulfate	859		5000	5593		mg/L		95	80 - 120	2	20

Method: 310.2 - Alkalinity

Lab Sample ID: MB 480-462238/13

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L			03/08/19 16:13	1

Lab Sample ID: MB 480-462238/34

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L			03/08/19 17:07	1

Lab Sample ID: MB 480-462238/46

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L			03/08/19 17:19	1

Lab Sample ID: MB 480-462238/8

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	10.0	U	10.0	4.0	mg/L			03/08/19 16:07	1

Lab Sample ID: LCS 480-462238/14

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	50.45		mg/L		101	90 - 110

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Method: 310.2 - Alkalinity (Continued)

Lab Sample ID: LCS 480-462238/35

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	53.08		mg/L		106	90 - 110

Lab Sample ID: LCS 480-462238/47

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	51.77		mg/L		104	90 - 110

Lab Sample ID: LCS 480-462238/9

Matrix: Water

Analysis Batch: 462238

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	50.0	52.92		mg/L		106	90 - 110

Lab Sample ID: 460-176527-1 MS

Matrix: Water

Analysis Batch: 462238

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	322		20.0	310.3	4	mg/L		-57	60 - 140

Lab Sample ID: 460-176527-1 MSD

Matrix: Water

Analysis Batch: 462238

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity, Total	322		20.0	327.3	4	mg/L		29	60 - 140	5	20

Lab Sample ID: 460-176527-2 MS

Matrix: Water

Analysis Batch: 462238

Client Sample ID: AMW-15D3-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	518		20.0	578.7	4	mg/L		304	60 - 140

Lab Sample ID: 460-176527-2 MSD

Matrix: Water

Analysis Batch: 462238

Client Sample ID: AMW-15D3-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Alkalinity, Total	518		20.0	536.0	4	mg/L		91	60 - 140	8	20

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Method: 353.2 - Nitrogen, Nitrite

Lab Sample ID: MB 480-462245/3

Matrix: Water

Analysis Batch: 462245

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.050	U	0.050	0.020	mg/L	-		03/08/19 17:20	1

Lab Sample ID: LCS 480-462245/4

Matrix: Water

Analysis Batch: 462245

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	1.50	1.58		mg/L	-	105	90 - 110

Method: 9060A - Organic Carbon, Total (TOC)

Lab Sample ID: MB 480-462627/27

Matrix: Water

Analysis Batch: 462627

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.43	mg/L	-		03/10/19 01:20	1

Lab Sample ID: MB 480-462627/4

Matrix: Water

Analysis Batch: 462627

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.43	mg/L	-		03/09/19 13:23	1

Lab Sample ID: MB 480-462627/51

Matrix: Water

Analysis Batch: 462627

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.43	mg/L	-		03/10/19 14:18	1

Lab Sample ID: LCS 480-462627/28

Matrix: Water

Analysis Batch: 462627

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	60.11		mg/L	-	100	90 - 110

Lab Sample ID: LCS 480-462627/5

Matrix: Water

Analysis Batch: 462627

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	60.96		mg/L	-	102	90 - 110

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Method: 9060A - Organic Carbon, Total (TOC) (Continued)

Lab Sample ID: LCS 480-462627/52

Matrix: Water

Analysis Batch: 462627

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	60.0	60.55		mg/L		101	90 - 110

Lab Sample ID: 460-176527-2 MS

Matrix: Water

Analysis Batch: 462627

Client Sample ID: AMW-15D3-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	26.9		88.0	115.0		mg/L		100	54 - 131

Lab Sample ID: 460-176527-4 MS

Matrix: Water

Analysis Batch: 462627

Client Sample ID: AMW-15D2-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	5.8		22.7	24.98		mg/L		84	54 - 131

Lab Sample ID: 460-176527-6 MS

Matrix: Water

Analysis Batch: 462627

Client Sample ID: MW-24VDR-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	3.9		22.7	24.76		mg/L		92	54 - 131

Lab Sample ID: 460-176527-8 MS

Matrix: Water

Analysis Batch: 462627

Client Sample ID: MW-23D1R-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	1.6		22.7	23.93		mg/L		98	54 - 131

Lab Sample ID: 460-176527-1 DU

Matrix: Water

Analysis Batch: 462627

Client Sample ID: MW-28D2R-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	5.0		5.89		mg/L		17	20

Lab Sample ID: 460-176527-3 DU

Matrix: Water

Analysis Batch: 462627

Client Sample ID: AMW-15VD-W-190304

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	2.6		2.74		mg/L		3	20

Lab Sample ID: 460-176527-5 DU

Matrix: Water

Analysis Batch: 462627

Client Sample ID: MW-24D2-W-190305

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Organic Carbon	5.6		6.38		mg/L		14	20

TestAmerica Edison

QC Sample Results

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Lab Sample ID: 460-176527-7 DU
Matrix: Water
Analysis Batch: 462627

Client Sample ID: MW-24D1R-W-190305
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Organic Carbon	28.3		26.77		mg/L		6	20

Method: SM 3500 FE D - Iron, Ferrous and Ferric

Lab Sample ID: MB 480-462308/3
Matrix: Water
Analysis Batch: 462308

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	0.10	U	0.10	0.075	mg/L			03/07/19 15:00	1

Lab Sample ID: LCS 480-462308/4
Matrix: Water
Analysis Batch: 462308

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	2.00	2.14		mg/L		107	90 - 110

Lab Sample ID: 460-176527-4 MS
Matrix: Water
Analysis Batch: 462308

Client Sample ID: AMW-15D2-W-190304
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.10	U HF F1	1.00	0.541	F1	mg/L		54	70 - 130

Lab Sample ID: 460-176527-1 DU
Matrix: Water
Analysis Batch: 462308

Client Sample ID: MW-28D2R-W-190304
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Ferrous Iron	0.10	U HF	0.10	U	mg/L		NC	20

Lab Sample ID: 460-176527-6 DU
Matrix: Water
Analysis Batch: 462308

Client Sample ID: MW-24VDR-W-190305
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Ferrous Iron	2.1	HF	2.03		mg/L		5	20

TestAmerica Edison

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

GC/MS VOA

Analysis Batch: 593942

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	8260C	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	8260C	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	8260C	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	8260C	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	8260C	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	8260C	
460-176527-9	BD-W-190305	Total/NA	Water	8260C	
460-176527-10	TB-W-190304	Total/NA	Water	8260C	
MB 460-593942/8	Method Blank	Total/NA	Water	8260C	
LCS 460-593942/3	Lab Control Sample	Total/NA	Water	8260C	
460-176527-1 MS	MW-28D2R-W-190304	Total/NA	Water	8260C	
460-176527-1 MSD	MW-28D2R-W-190304	Total/NA	Water	8260C	

Analysis Batch: 594111

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	8260C	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	8260C	
MB 460-594111/9	Method Blank	Total/NA	Water	8260C	
LCS 460-594111/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-594111/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 140609

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	RSK-175	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	RSK-175	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	RSK-175	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	RSK-175	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	RSK-175	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	RSK-175	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	RSK-175	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	RSK-175	
MB 200-140609/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-140609/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-140609/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 462092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	RSK-175	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	RSK-175	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	RSK-175	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	RSK-175	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	RSK-175	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	RSK-175	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	RSK-175	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	RSK-175	
MB 480-462092/5	Method Blank	Total/NA	Water	RSK-175	
LCS 480-462092/6	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-462092/7	Lab Control Sample Dup	Total/NA	Water	RSK-175	

TestAmerica Edison

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Metals

Prep Batch: 462133

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	3005A	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	3005A	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	3005A	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	3005A	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	3005A	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	3005A	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	3005A	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	3005A	
460-176527-9	BD-W-190305	Total/NA	Water	3005A	
MB 480-462133/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-462133/2-A	Lab Control Sample	Total/NA	Water	3005A	
460-176527-1 MS	MW-28D2R-W-190304	Total/NA	Water	3005A	
460-176527-1 MSD	MW-28D2R-W-190304	Total/NA	Water	3005A	

Analysis Batch: 462498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	6010C	462133
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	6010C	462133
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	6010C	462133
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	6010C	462133
460-176527-5	MW-24D2-W-190305	Total/NA	Water	6010C	462133
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	6010C	462133
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	6010C	462133
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	6010C	462133
460-176527-9	BD-W-190305	Total/NA	Water	6010C	462133
MB 480-462133/1-A	Method Blank	Total/NA	Water	6010C	462133
LCS 480-462133/2-A	Lab Control Sample	Total/NA	Water	6010C	462133
460-176527-1 MS	MW-28D2R-W-190304	Total/NA	Water	6010C	462133
460-176527-1 MSD	MW-28D2R-W-190304	Total/NA	Water	6010C	462133

Analysis Batch: 462719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	6010C	462133
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	6010C	462133
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	6010C	462133
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	6010C	462133
460-176527-9	BD-W-190305	Total/NA	Water	6010C	462133
460-176527-1 MS	MW-28D2R-W-190304	Total/NA	Water	6010C	462133
460-176527-1 MSD	MW-28D2R-W-190304	Total/NA	Water	6010C	462133

Analysis Batch: 462928

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-462133/2-A	Lab Control Sample	Total/NA	Water	6010C	462133

General Chemistry

Analysis Batch: 462155

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	300.0	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	300.0	

TestAmerica Edison

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

General Chemistry (Continued)

Analysis Batch: 462155 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	300.0	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	300.0	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	300.0	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	300.0	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	300.0	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	300.0	
MB 480-462155/4	Method Blank	Total/NA	Water	300.0	
LCS 480-462155/3	Lab Control Sample	Total/NA	Water	300.0	
460-176527-6 MS	MW-24VDR-W-190305	Total/NA	Water	300.0	
460-176527-6 MSD	MW-24VDR-W-190305	Total/NA	Water	300.0	

Analysis Batch: 462232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	353.2	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	353.2	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	353.2	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	353.2	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	353.2	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	353.2	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	353.2	

Analysis Batch: 462233

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	353.2	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	353.2	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	353.2	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	353.2	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	353.2	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	353.2	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	353.2	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	353.2	

Analysis Batch: 462238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	310.2	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	310.2	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	310.2	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	310.2	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	310.2	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	310.2	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	310.2	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	310.2	
MB 480-462238/13	Method Blank	Total/NA	Water	310.2	
MB 480-462238/34	Method Blank	Total/NA	Water	310.2	
MB 480-462238/46	Method Blank	Total/NA	Water	310.2	
MB 480-462238/8	Method Blank	Total/NA	Water	310.2	
LCS 480-462238/14	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462238/35	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462238/47	Lab Control Sample	Total/NA	Water	310.2	
LCS 480-462238/9	Lab Control Sample	Total/NA	Water	310.2	
460-176527-1 MS	MW-28D2R-W-190304	Total/NA	Water	310.2	

TestAmerica Edison

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

General Chemistry (Continued)

Analysis Batch: 462238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1 MSD	MW-28D2R-W-190304	Total/NA	Water	310.2	
460-176527-2 MS	AMW-15D3-W-190304	Total/NA	Water	310.2	
460-176527-2 MSD	AMW-15D3-W-190304	Total/NA	Water	310.2	

Analysis Batch: 462245

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	353.2	
MB 480-462245/3	Method Blank	Total/NA	Water	353.2	
LCS 480-462245/4	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 462308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	SM 3500 FE D	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	SM 3500 FE D	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	SM 3500 FE D	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	SM 3500 FE D	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	SM 3500 FE D	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	SM 3500 FE D	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	SM 3500 FE D	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	SM 3500 FE D	
MB 480-462308/3	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 480-462308/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
460-176527-4 MS	AMW-15D2-W-190304	Total/NA	Water	SM 3500 FE D	
460-176527-1 DU	MW-28D2R-W-190304	Total/NA	Water	SM 3500 FE D	
460-176527-6 DU	MW-24VDR-W-190305	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 462627

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	9060A	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	9060A	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	9060A	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	9060A	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	9060A	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	9060A	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	9060A	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	9060A	
MB 480-462627/27	Method Blank	Total/NA	Water	9060A	
MB 480-462627/4	Method Blank	Total/NA	Water	9060A	
MB 480-462627/51	Method Blank	Total/NA	Water	9060A	
LCS 480-462627/28	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-462627/5	Lab Control Sample	Total/NA	Water	9060A	
LCS 480-462627/52	Lab Control Sample	Total/NA	Water	9060A	
460-176527-2 MS	AMW-15D3-W-190304	Total/NA	Water	9060A	
460-176527-4 MS	AMW-15D2-W-190304	Total/NA	Water	9060A	
460-176527-6 MS	MW-24VDR-W-190305	Total/NA	Water	9060A	
460-176527-8 MS	MW-23D1R-W-190305	Total/NA	Water	9060A	
460-176527-1 DU	MW-28D2R-W-190304	Total/NA	Water	9060A	
460-176527-3 DU	AMW-15VD-W-190304	Total/NA	Water	9060A	
460-176527-5 DU	MW-24D2-W-190305	Total/NA	Water	9060A	
460-176527-7 DU	MW-24D1R-W-190305	Total/NA	Water	9060A	

TestAmerica Edison

QC Association Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

General Chemistry (Continued)

Analysis Batch: 463256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-176527-1	MW-28D2R-W-190304	Total/NA	Water	SM 3500	
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	SM 3500	
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	SM 3500	
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	SM 3500	
460-176527-5	MW-24D2-W-190305	Total/NA	Water	SM 3500	
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	SM 3500	
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	SM 3500	
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	SM 3500	

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-28D2R-W-190304

Date Collected: 03/04/19 20:55

Date Received: 03/05/19 17:31

Lab Sample ID: 460-176527-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 03:40	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 17:15	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462092	03/08/19 08:46	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 11:14	EMB	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		5	462719	03/12/19 11:36	EMB	TAL BUF
Total/NA	Analysis	300.0		100	462155	03/08/19 11:35	EMD	TAL BUF
Total/NA	Analysis	310.2		5	462238	03/08/19 17:25	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:18	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 14:18	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462627	03/09/19 20:21	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: AMW-15D3-W-190304

Date Collected: 03/04/19 22:18

Date Received: 03/05/19 17:31

Lab Sample ID: 460-176527-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 04:07	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 17:24	MLT	TAL BUR
Total/NA	Analysis	RSK-175		44	462092	03/08/19 09:05	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 11:33	EMB	TAL BUF
Total/NA	Analysis	300.0		20	462155	03/08/19 11:43	EMD	TAL BUF
Total/NA	Analysis	310.2		10	462238	03/08/19 17:10	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:19	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 14:19	DCB	TAL BUF
Total/NA	Analysis	9060A		4	462627	03/10/19 03:20	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		5	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: AMW-15VD-W-190304

Date Collected: 03/04/19 22:35

Date Received: 03/05/19 17:31

Lab Sample ID: 460-176527-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	594111	03/08/19 15:35	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 17:32	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462092	03/08/19 09:24	CAM	TAL BUF

TestAmerica Edison

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 11:37	EMB	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		10	462719	03/12/19 11:55	EMB	TAL BUF
Total/NA	Analysis	300.0		200	462155	03/08/19 11:51	EMD	TAL BUF
Total/NA	Analysis	310.2		5	462238	03/08/19 17:12	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:20	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 14:20	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462627	03/10/19 04:20	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: AMW-15D2-W-190304

Lab Sample ID: 460-176527-4

Date Collected: 03/04/19 23:01

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 05:01	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 17:41	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462092	03/08/19 09:42	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 11:53	EMB	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		5	462719	03/12/19 11:59	EMB	TAL BUF
Total/NA	Analysis	300.0		50	462155	03/08/19 11:59	EMD	TAL BUF
Total/NA	Analysis	310.2		10	462238	03/08/19 17:25	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:21	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 14:21	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462627	03/10/19 08:19	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: MW-24D2-W-190305

Lab Sample ID: 460-176527-5

Date Collected: 03/05/19 00:03

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 05:27	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 17:50	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462092	03/08/19 10:01	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 11:56	EMB	TAL BUF
Total/NA	Analysis	300.0		10	462155	03/08/19 12:07	EMD	TAL BUF
Total/NA	Analysis	310.2		3	462238	03/08/19 17:25	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:22	DCB	TAL BUF

TestAmerica Edison

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24D2-W-190305

Lab Sample ID: 460-176527-5

Date Collected: 03/05/19 00:03

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	353.2		1	462233	03/08/19 14:22	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462627	03/10/19 09:19	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: MW-24VDR-W-190305

Lab Sample ID: 460-176527-6

Date Collected: 03/05/19 00:37

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 05:54	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 17:58	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462092	03/08/19 10:20	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 12:00	EMB	TAL BUF
Total/NA	Analysis	300.0		100	462155	03/08/19 12:16	EMD	TAL BUF
Total/NA	Analysis	310.2		5	462238	03/08/19 17:29	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 17:42	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462245	03/08/19 17:42	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462627	03/10/19 15:18	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		5	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: MW-24D1R-W-190305

Lab Sample ID: 460-176527-7

Date Collected: 03/05/19 01:12

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 06:20	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 18:07	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	462092	03/08/19 10:39	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 12:04	EMB	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		5	462719	03/12/19 12:02	EMB	TAL BUF
Total/NA	Analysis	300.0		20	462155	03/08/19 12:56	EMD	TAL BUF
Total/NA	Analysis	310.2		4	462238	03/08/19 17:09	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:29	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 14:29	DCB	TAL BUF
Total/NA	Analysis	9060A		10	462627	03/10/19 16:18	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF

TestAmerica Edison

Lab Chronicle

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Client Sample ID: MW-24D1R-W-190305

Lab Sample ID: 460-176527-7

Date Collected: 03/05/19 01:12

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 3500 FE D		5	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: MW-23D1R-W-190305

Lab Sample ID: 460-176527-8

Date Collected: 03/05/19 02:33

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	594111	03/08/19 16:01	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	140609	03/07/19 18:16	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	462092	03/08/19 10:58	CAM	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 12:08	EMB	TAL BUF
Total/NA	Analysis	300.0		1	462155	03/08/19 13:05	EMD	TAL BUF
Total/NA	Analysis	310.2		1	462238	03/08/19 16:14	SAH	TAL BUF
Total/NA	Analysis	353.2		1	462232	03/08/19 14:32	DCB	TAL BUF
Total/NA	Analysis	353.2		1	462233	03/08/19 14:32	DCB	TAL BUF
Total/NA	Analysis	9060A		1	462627	03/10/19 20:19	CLA	TAL BUF
Total/NA	Analysis	SM 3500		1	463256	03/15/19 15:42	LMH	TAL BUF
Total/NA	Analysis	SM 3500 FE D		1	462308	03/07/19 15:00	MDL	TAL BUF

Client Sample ID: BD-W-190305

Lab Sample ID: 460-176527-9

Date Collected: 03/05/19 00:00

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 07:13	MZS	TAL EDI
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		1	462498	03/11/19 12:12	EMB	TAL BUF
Total/NA	Prep	3005A			462133	03/09/19 08:47	MV	TAL BUF
Total/NA	Analysis	6010C		5	462719	03/12/19 12:06	EMB	TAL BUF

Client Sample ID: TB-W-190304

Lab Sample ID: 460-176527-10

Date Collected: 03/04/19 20:05

Matrix: Water

Date Received: 03/05/19 17:31

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	593942	03/08/19 03:14	MZS	TAL EDI

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

TestAmerica Edison

Accreditation/Certification Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Laboratory: TestAmerica Edison

All accreditations/certifications held by this laboratory are listed. Not all accreditations/certifications are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Connecticut	State Program	1	PH-0200	09-30-20
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	N/A	12-31-19
New Jersey	NELAP	2	12028	06-30-19
New York	NELAP	2	11452	04-01-19
Pennsylvania	NELAP	3	68-00522	02-28-20
Rhode Island	State Program	1	LAO00132	12-30-19
USDA	Federal		NJCA-003-08	05-03-21

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
SM 3500		Water	Ferric Iron
SM 3500 FE D		Water	Ferrous Iron

Laboratory: TestAmerica Burlington

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10391	04-01-19 *

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
RSK-175		Water	Carbon dioxide

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

TestAmerica Edison

Method Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
RSK-175	Dissolved Gases (GC)	RSK	TAL BUF
RSK-175	Dissolved Gases (GC)	RSK	TAL BUR
6010C	Metals (ICP)	SW846	TAL BUF
300.0	Anions, Ion Chromatography	MCAWW	TAL BUF
310.2	Alkalinity	MCAWW	TAL BUF
353.2	Nitrate	EPA	TAL BUF
353.2	Nitrogen, Nitrite	MCAWW	TAL BUF
9060A	Organic Carbon, Total (TOC)	SW846	TAL BUF
SM 3500	Iron, Ferric	SM	TAL BUF
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL BUF
3005A	Preparation, Total Metals	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL EDI

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.

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater"

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

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

TAL EDI = TestAmerica Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Sample Summary

Client: ARCADIS U.S. Inc
Project/Site: MNA Analysis

TestAmerica Job ID: 460-176527-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
460-176527-1	MW-28D2R-W-190304	Water	03/04/19 20:55	03/05/19 17:31
460-176527-2	AMW-15D3-W-190304	Water	03/04/19 22:18	03/05/19 17:31
460-176527-3	AMW-15VD-W-190304	Water	03/04/19 22:35	03/05/19 17:31
460-176527-4	AMW-15D2-W-190304	Water	03/04/19 23:01	03/05/19 17:31
460-176527-5	MW-24D2-W-190305	Water	03/05/19 00:03	03/05/19 17:31
460-176527-6	MW-24VDR-W-190305	Water	03/05/19 00:37	03/05/19 17:31
460-176527-7	MW-24D1R-W-190305	Water	03/05/19 01:12	03/05/19 17:31
460-176527-8	MW-23D1R-W-190305	Water	03/05/19 02:33	03/05/19 17:31
460-176527-9	BD-W-190305	Water	03/05/19 00:00	03/05/19 17:31
460-176527-10	TB-W-190304	Water	03/04/19 20:05	03/05/19 17:31

- 1
- 2
- 3
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- 5
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- 8
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- 10
- 11
- 12
- 13
- 14
- 15

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

THE LEADER IN ENVIRONMENTAL TESTING

[illegible]

Job Number:

196527

Number of Coolers		Room #		Cooler Temperatures	
1	2	3	4	5	6
Cooler #1	3	Cooler #4	4	Cooler #7	6
Cooler #2	5	Cooler #5	10	Cooler #8	10
Cooler #3	1	Cooler #6	10	Cooler #9	0

[illegible]

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____

Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____

Expiration Date: _____

The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

* Samples for Metal analysis which are out of compliance must be acidified at least 24 hours prior to analysis.

Initials: JS

Date: 3/5/19

Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Lab PM: Schove, John R		COC No: 460-54195.1				
Client Contact: Shipping/Receiving		Phone:		Page: 1 of 1				
Company: TestAmerica Laboratories, Inc.		E-Mail: john.schove@testamericainc.com		State of Origin: New York				
Address: 30 Community Drive, Suite 11, South Burlington, VT, 05403		Accreditations Required (See note): NELAP - New York		Job #: 460-176527-1				
Due Date Requested: 3/15/2019		Analysis Requested		Preservation Codes:				
TAT Requested (days):				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)				
PO #:				Other:				
WO #:								
Project #:								
MNA Analysis								
SSOW#:								
Chevron Oceanside - CVX# 6518040								
Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=overstall, BT=Tras, A=Al)	Field Filtered Sample (Yes or No)	RSK, 175, CO2 Dissolved Gases - CO2	Total Number of Containers	Special Instructions/Note:
MW-28D2R-W-190304 (460-176527-1)	3/4/19	08:55 Eastern		Water		X	3	
AMW-15D3-W-190304 (460-176527-2)	3/4/19	22:18 Eastern		Water		X	3	
AMW-15VD-W-190304 (460-176527-3)	3/4/19	22:35 Eastern		Water		X	3	
AMW-15D2-W-190304 (460-176527-4)	3/4/19	23:01 Eastern		Water		X	3	
MW-24D2-W-190305 (460-176527-5)	3/5/19	00:03 Eastern		Water		X	3	
MW-24VDR-W-190305 (460-176527-6)	3/5/19	00:37 Eastern		Water		X	3	
MW-24D1R-W-190305 (460-176527-7)	3/5/19	01:12 Eastern		Water		X	3	
MW-23D1R-W-190305 (460-176527-8)	3/5/19	02:33 Eastern		Water		X	3	
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.								
Possible Hazard Identification Unconfirmed Deliverable Requested: I, II, III, IV, Other (specify) _____ Primary Deliverable Rank: 2								
Empty Kit Relinquished by: _____ Date: _____ Time: _____ Relinquished by: _____ Date/Time: 3/6/19 1900 Company: TAE Company: TAE Relinquished by: _____ Date/Time: _____ Company: _____ Relinquished by: _____ Date/Time: _____ Company: _____ Custody Seals Intact: Yes ☒ No ☐ Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks: 0.3								

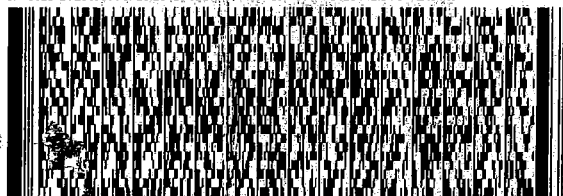
SHIP DATE: 06MAR19
ACTWGT: 16.60 LB
CAD: 0358159/CAFE3211

BILL, RECIPIENT

EXCEPT FOR

(802) 655-1203
PO: YES

REF: S460-110372



FedEx
Express



1181318060501114

TRK# 4137-2538 3167
0201

THU - 07 MAR 10:30A
PRIORITY OVERNIGHT

NC BTVA

05403
VT-US BTV



Chain of Custody Record



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Client Information (Sub Contract Lab)		Sampler:		Lab PM:	Carrier Tracking No(s):	COC No:
Client Contact:		Phone:		Schove, John R		460-54191.1
Shipping/Receiving				E-Mail:	State of Origin:	Page:
Company:				john.schove@testamericainc.com	New York	Page 1 of 1
Address:		Due Date Requested:		Accreditations Required (See note):		
10 Hazelwood Drive,		3/15/2019		NELAP - New York		
City:		TAT Requested (days):		Preservation Codes:		
Amherst				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 Other:		
State, Zip:		PO #:		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)		
Phone:		WO #:				
716-691-2600(Tel) 716-691-7991(Fax)						
Email:		Project #:				
		48016199				
Site:		SSOW#:				
Chevron Oceanside - CVX# 6518040						

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=biomass, A=air)	Field Filtered Sample (Yes or No)	9060A Organic Carbon, Total (TOC)	353.2 Nitrogen, Nitrate-Nitrite	Nitrate-Calc/ 353.2 - Nitrate	353.2 Nitrite/Nitrogen, Nitrite	6010C/3005A_TOT Metals ICP - Fe, Mn & Na	300.0 28D/IC - Sulfate & Chloride	RSK_175/ Dissolved Gases (GC)	310.2/ Alkalinity	3500_Fe_D/ Iron, Ferric	3500_Fe_D/ Iron, Ferrous	Total Number of Containers	Special Instructions/Note:
MW-28D2R-W-190304 (460-176527-1)	3/4/19	08:55 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
AMW-15D3-W-190304 (460-176527-2)	3/4/19	22:18 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
AMW-15VD-W-190304 (460-176527-3)	3/4/19	22:35 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
AMW-15D2-W-190304 (460-176527-4)	3/4/19	23:01 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
MW-24D2-W-190305 (460-176527-5)	3/5/19	00:03 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
MW-24VDR-W-190305 (460-176527-6)	3/5/19	00:37 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
MW-24D1R-W-190305 (460-176527-7)	3/5/19	01:12 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
MW-23D1R-W-190305 (460-176527-8)	3/5/19	02:33 Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	11	
BD-W-190305 (460-176527-9)	3/5/19	Eastern	Water	Water	X	X	X	X	X	X	X	X	X	X	X	1	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon our subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/test/matrix being analyzed, the samples must be shipped back to the TestAmerica laboratory or other instructions will be provided. Any changes to accreditation status should be brought to TestAmerica Laboratories, Inc. attention immediately. If all requested accreditations are current to date, return the signed Chain of Custody attesting to said compliance to TestAmerica Laboratories, Inc.

Possible Hazard Identification		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
Unconfirmed		Return To Client ☐ Disposal By Lab ☐ Archive For ☐ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Primary Deliverable Rank: 2		Method of Shipment:	
Empty Kit Relinquished by:		Date:	
Relinquished by:		Date/Time: 3/6/19 1900	
Relinquished by:		Date/Time: 3/7/19 0900	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact:		Cooler Temperature(s) °C and Other Remarks: #1 3.4°C	
Δ Yes Δ No			

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-176527-1

Login Number: 176527

List Source: TestAmerica Edison

List Number: 1

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
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 $<6\text{mm}$ (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-176527-1

Login Number: 176527

List Source: TestAmerica Edison

List Number: 2

Creator: DiGuardia, Joseph L

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background		
The cooler's custody seal, if present, is intact.		
The cooler or samples do not appear to have been compromised or tampered with.		
Samples were received on ice.		
Cooler Temperature is acceptable.		
Cooler Temperature is recorded.		
COC is present.		
COC is filled out in ink and legible.		
COC is filled out with all pertinent information.		
Is the Field Sampler's name present on COC?		
There are no discrepancies between the sample IDs on the containers and the COC.		
Samples are received within Holding Time (Excluding tests with immediate HTs)..		
Sample containers have legible labels.		
Containers are not broken or leaking.		
Sample collection date/times are provided.		
Appropriate sample containers are used.		
Sample bottles are completely filled.		
Sample Preservation Verified		
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs		
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.		
If necessary, staff have been informed of any short hold time or quick TAT needs		
Multiphasic samples are not present.		
Samples do not require splitting or compositing.		
Sampling Company provided.		
Samples received within 48 hours of sampling.		
Samples requiring field filtration have been filtered in the field.		
Chlorine Residual checked.		

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-176527-1

Login Number: 176527

List Number: 4

Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo

List Creation: 03/07/19 02:48 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
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	3.4 #1
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 sample IDs on the containers 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	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	N/A	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-176527-1

Login Number: 176527

List Number: 3

Creator: McNabb, Robert W

List Source: TestAmerica Burlington

List Creation: 03/07/19 12:47 PM

Question	Answer	Comment
Radioactivity wasn't checked or is $\leq$ background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
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	0.3°C
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?	N/A	Received project as a subcontract.
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.	N/A	
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 $<6\text{mm}$ (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	