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Subject:  
**First Quarter 2019 Groundwater Monitoring Report**  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal – 3705 Hampton Road, Oceanside, New York  
 NYSDEC Site #130165

ENVIRONMENT

Dear Mr. Mashhadi:

On behalf of Chevron Environmental Management Company (CEMC), Arcadis of New York, Inc. (Arcadis) has prepared this First Quarter 2019 Groundwater Monitoring Report for the New York State Department of Environmental Conservation (NYSDEC) in accordance with the Order on Consent and Administrative Settlement for the former Gulf Oil Terminal in Oceanside, New York, NYDEC Site #130165 (site; **Figure 1**). This monitoring report summarizes the March 4 through March 6, 2019 groundwater sampling event. On December 7, 2017, NYSDEC and CEMC agreed to quarterly progress reporting in lieu of monthly reporting. Relevant site features and existing groundwater monitoring wells are presented on **Figure 2**.

Date:  
**May 17, 2019**

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## GROUNDWATER GAUGING

On February 18, 2019, 34 monitoring wells (AMW-3, AMW-7R, AMW-13-D1, AMW-13-D2, AMW-13-VD, AMW-14-D1, AMW-14-D2, AMW-14-VD, AMW-15-D1, AMW-15-D2, AMW-15-VD, AMW-15-D3, MW-23-D1R, MW-23-D2R, MW-24-D1R, MW-24-D2, MW-24-VDR, MW-26-D1, MW-26-D2, MW-26-VD, MW-27-D1R, MW-27-D2, MW-28-D1, MW-28-D2R, MW-29-D1, MW-29-D2, MW-29-VD, MW-30-D1, MW-30-D2, MW-30-VD, MW-31-D1R, MW-31-D2R, MW-32D, OW-2-D1) were gauged prior to deploying HydraSleeves. Monitoring wells were gauged with a water interface probe. HydraSleeves were deployed in 20 monitoring wells. Monitoring well, MW-18R, was not gauged because it was found to be damaged.

Measured depth-to-groundwater in the D1 horizon ranged from 7.19 feet below top of inner casing (btic) in MW-29-D1 to 11.54 feet btic in MW-24-D1R. Measured depth-to-groundwater in the D2 horizon ranged from 5.38 feet btic in MW-29-D2 to 10.53 feet btic in MW-23-D2R. Measured depth-to-groundwater in the VD horizon ranged from 5.27 feet btic in MW-29-VD to 9.82 feet btic in AMW-15-VD. Groundwater contour evaluation is ongoing and groundwater elevation

contour maps were not generated for this quarter. The well gauging data is summarized in **Table 1** and the gauging log is included as **Attachment 1**.

## GROUNDWATER SAMPLING

On March 4 through 6, 2019, groundwater samples were collected from HydraSleeves that were deployed in 20 monitoring wells (AMW-7R, AMW-14-D1, AMW-14-D2, AMW-14-VD, AMW-15-D1, AMW-15-D2, AMW-15-VD, AMW-15-D3, MW-23-D1R, MW-23-D2R, MW-24-D1R, MW-24-D2, MW-24-VDR, MW-26-D1, MW-26-D2, MW-27-D1R, MW-27-D2, MW-28-D1, MW-28-D2R, MW-29-D1). Prior to collection, groundwater parameters (pH, temperature, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity) were collected. Groundwater sampling logs are included as **Attachment 1**. The groundwater samples were placed in laboratory-supplied containers, packaged on ice, and transported to TestAmerica Analytical Laboratories, Inc. (TestAmerica) in Buffalo, New York (New York Certification #10026) and to TestAmerica in Burlington, Vermont (New York Certification #10391). Groundwater samples were collected for:

- dissolved-phase volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) Method 8260C
- Total iron, sodium, and manganese by Method 6010C
- Nitrite and nitrate by Method 353.2
- Alkalinity by Method 310.2
- Sulfate and chloride by Method 300.0\_28D-1C
- Sulfide by Method SM 4500 S2 F
- Total organic carbon by Method 9060A
- Ferric and ferrous iron by Methods SM 3500 and SM 3500 FE D
- Carbon dioxide, ethane, ethene, and methane by Method RSK-175.

Due to a laboratory error, laboratory containers for the sulfide analysis were not provided during the first night of sampling. Monitoring wells AMW-15-D2, AMW-15-D3, AMW-15-VD, MW-23-D1R, MW-24-D2, MW-24-D1R, MW-24-VDR, MW-25-D2R, and MW-28-D2R were not sampled for sulfide during the first quarter sampling event. The following summarizes the dissolved VOC constituents that were detected above the New York State Department of Environmental Conservation Technical and Operational Guidance Series (TOGS) in the samples collected for the March 4 through March 6, 2019 sampling event:

- Benzene exceeded the TOGS Water Guidance value of (1 microgram per Liter [ $\mu\text{g}/\text{L}$ ]) at monitoring wells AMW-14-D1 (8.5  $\mu\text{g}/\text{L}$ , estimated), AMW-15-D3 (4.4  $\mu\text{g}/\text{L}$ ), MW-23-D2R (6.3  $\mu\text{g}/\text{L}$ ), MW-24-D1R (8.6  $\mu\text{g}/\text{L}$ ), MW-24-VDR (1.4  $\mu\text{g}/\text{L}$ ), MW-25-D2R (1.2  $\mu\text{g}/\text{L}$ ), MW-26-D1 (6.5  $\mu\text{g}/\text{L}$ , estimated), and MW-28-D2R (1.2  $\mu\text{g}/\text{L}$ ).
- Toluene exceeded the TOGS Water Guidance value of 5  $\mu\text{g}/\text{L}$  at monitoring well MW-24-D1R (15  $\mu\text{g}/\text{L}$ ).
- Ethylbenzene exceeded the TOGS Water Guidance value of 5  $\mu\text{g}/\text{L}$  at monitoring well MW-24-D1R (5.1  $\mu\text{g}/\text{L}$ ).
- Total xylenes exceeded the TOGS Water Guidance value of 5  $\mu\text{g}/\text{L}$  at monitoring wells AMW-14-D1(10  $\mu\text{g}/\text{L}$ , estimated) and at MW-24-D1R (21 J  $\mu\text{g}/\text{L}$ ).

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- Methyl tert-butyl ether (MTBE) exceeded the TOGS Water Guidance value of 10 µg/L at monitoring wells AMW-14-D1 (250 µg/L), AMW-15-D2 (33 µg/L), AMW-15-D3 (64 µg/L), MW-24-D1R (160 µg/L) MW-26-D1 (89 µg/L), and MW-26-D2 (100 µg/L).
- Trichloroethene (TCE) exceeded the TOGS Water Guidance value of 1 µg/L at monitoring well AMW-15-D3 (58 µg/L).
- Methylene chloride exceeded the TOGS Water Guidance value of 5 µg/L at monitoring wells AMW-14-D1 (10 µg/L), MW-26-D1 (11 µg/L), and MW-26-D2 (6.1 µg/L).
- Vinyl chloride exceeded the TOGS Water Guidance value of 2 µg/L at monitoring wells AMW-15-D3 (6.9 µg/L) and MW-24-D1R (36 µg/L).
- Trans-1,2-dichloroethene exceeded the TOGS Water Guidance Value of 5 µg/L at monitoring well MW-24-D1R (13 µg/L).
- cis-1,2-Dichloroethene exceeded the TOGS Water Guidance Value of 5 µg/L at monitoring well AMW-15-D3 (11 µg/L).
- Acetone exceeded the TOGS Water Guidance Value of 50 µg/L in monitoring well AMW-15-D3 (90 µg/L).

A blind duplicate sample was collected from monitoring well MW-24-D1R. Duplicate sample results were within acceptable ranges of the parent sample. The analytical results are summarized in **Table 2** and are illustrated on **Figure 3**. A copy of the laboratory analytical report is included in **Attachment 2**. Historical groundwater analytical results are presented in **Table 3**.

## FUTURE SITE ACTIVITIES

The next quarterly sampling event is scheduled for May 2019. If you have any questions regarding this progress report or require any additional information, please do not hesitate to contact me at 646.760.0584 or at [Loretta.Kwong@arcadis.com](mailto:Loretta.Kwong@arcadis.com).

Arcadis of New York, Inc.



Loretta Kwong  
Project Manager

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Enclosures:

**Tables**

- 1 Groundwater Elevation Data
- 2 Summary of Analytical Groundwater Results – March 4 through 6, 2019
- 3 Summary of Historical Groundwater Analytical Results – VOCs – 2016 through 2018

**Figures**

- 1 Site Location Map
- 2 Site Plan
- 3 Groundwater Analytical Results March 4<sup>th</sup> through 6<sup>th</sup>, 2019

**Attachments**

- 1 Groundwater Gauging and Sampling Logs
- 2 Laboratory Analytical Reports

# TABLES



**Table 1**  
**Groundwater Elevation Data**  
**Chevron Facility #6518040**  
**Former Gulf Oil Terminal**  
**Oceanside, Township of Hempstead, New York**

Monitoring Well ID	Date	Well Diameter (in)	Well Depth (feet below TOC)	TOC Elevation (feet above MSL)*	Depth to LNAPL (feet below TOC)	Depth to Groundwater (feet below TOC)	Groundwater Table Elevation (feet above MSL)
<b>Shallow Fill Unit Monitoring Wells</b>							
AMW-3	02/18/19	2	12.42	9.05	ND	6.22	2.83
AMW-7R	02/18/19	2	14.42	9.95	ND	8.60	1.35
MW-18R	02/18/19	2	10.17	7.98	NG	NG	NG
<b>D1 Horizon Monitoring Wells</b>							
AMW-13-D1	02/18/19	2	34.01	9.87	ND	8.84	1.03
AMW-14-D1	02/18/19	2	33.15	9.38	ND	10.42	-1.04
AMW-15-D1	02/18/19	2	36.20	9.74	ND	11.41	-1.67
MW-23-D1R	02/18/19	2	25.78	9.84	ND	11.39	-1.55
MW-24-D1R	02/18/19	2	32.23	9.82	ND	11.54	-1.72
MW-26-D1	02/18/19	2	28.80	9.95	ND	11.48	-1.53
MW-27-D1R	02/18/19	2	32.99	9.01	ND	10.65	-1.64
MW-28-D1	02/18/19	2	30.38	8.25	ND	9.61	-1.36
MW-29-D1	02/18/19	2	23.45	5.21	ND	7.19	-1.98
MW-30-D1	02/18/19	2	30.00	8.74	ND	7.95	0.79
MW-31-D1R	02/18/19	2	30.04	8.39	ND	7.50	0.89
MW-32D	02/18/19	2	37.45	8.85	ND	8.19	0.66
OW-2-D1	02/18/19	2	33.95	9.94	ND	8.90	1.04
<b>D2 Horizon Monitoring Wells</b>							
AMW-13-D2	02/18/19	2	43.95	9.76	ND	8.74	1.02
AMW-14-D2	02/18/19	2	43.17	9.37	ND	10.33	-0.96
AMW-15-D2	02/18/19	2	36.20	9.71	ND	11.36	-1.65
MW-23-D2R	02/18/19	2	44.63	10.52	ND	12.01	-1.49
MW-24-D2	02/18/19	2	42.20	10.00	ND	9.99	0.01
MW-26-D2	02/18/19	2	43.76	9.40	ND	10.92	-1.52
MW-27-D2	02/18/19	2	46.97	9.09	ND	8.55	0.54
MW-28-D2R	02/18/19	2	46.69	8.40	ND	8.36	0.04
MW-29-D2	02/18/19	2	39.82	5.38	ND	4.64	0.74
MW-30-D2	02/18/19	2	46.63	8.72	ND	8.02	0.70
MW-31-D2R	02/18/19	2	45.15	8.35	ND	7.95	0.40
<b>D3 Horizon Monitoring Wells</b>							
AMW-15-D3	02/18/19	2	48.60	9.81	ND	11.38	-1.57
<b>VD Horizon Monitoring Wells</b>							
AMW-13-VD	02/18/19	2	71.82	9.77	ND	8.42	1.35
AMW-14-VD	02/18/19	2	75.61	9.25	ND	10.03	-0.78
AMW-15-VD	02/18/19	2	72.15	9.82	ND	10.11	-0.29
MW-24-VDR	02/18/19	2	73.98	9.72	ND	9.72	0.00
MW-26-VD	02/18/19	2	68.25	9.99	ND	8.44	1.55
MW-29-VD	02/18/19	2	67.22	5.27	ND	5.74	-0.47
MW-30-VD	02/18/19	2	83.40	8.70	ND	7.24	1.46

**Notes:**

\*Top of casing elevations were surveyed by Borbas Surveying & Mapping , LLC, September 18, 2017 and re-drilled wells on June 1, 2018.

in = Inches

MSL = Mean Sea Level

LNAPL = Light Non Aqueous Phase Liquid

TOC = Top of Casing

NG = Not Gauged

Table 2  
 Summary of Analytical Groundwater Results - March 4 through 6, 2019  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside Township of Hempstead, NY

Parameter Name Date Sampled	NYSDEC TOGS 1.1.1	Units	AMW-7R 3/6/2019	AMW-14-D1 3/5/2019	AMW-14-D2 3/5/2019	AMW-14-VD 3/5/2019	AMW-15-D2 3/4/2019	AMW-15-D3 3/4/2019	AMW-15-VD 3/4/2019	MW-23D-1R 3/5/2019	MW-23D-2R 3/5/2019
<b>Volatile Organics</b>											
1,1,1-Trichloroethane	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromoethane	0.0006	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	40 U	100 U	10 U	10 U	5.0 U	11	5.0 U	5.0 U	10 U
2-Hexanone	50	ug/L	20 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone	NE	ug/L	20 U	50 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	50	ug/L	40 U	100 U	5.5 J	4.6 J	5.0 U	90	5.0 U	16	10 U
Benzene	1	ug/L	4.0 U	8.5 J	1.0 U	1.0 U	1.0 U	4.4	1.0 U	1.0 U	6.3
Bromodichloromethane	50	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	50	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U*	1.0 U*	1.0 U	1.0 U	1.0 U
Carbon disulfide	60	ug/L	4.0 U	10 U	1.0 U	0.37 J	1.0 U	1.9	1.0 U	1.0 U	0.20 J
Carbon Tetrachloride	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroform	7	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	11	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	NE	ug/L	10	10 U	1.0 U	1.0 U	1.0 U	0.33 J	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	ug/L	4.0 U *	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U *
Dichlorodifluoromethane (Freon 12)	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Ethylbenzene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	0.79 J	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl acetate	NE	ug/L	10 U	25 U	2.5 U	2.5 U	5.0 U	5.0 U	5.0 U	5.0 U	2.5 U
Methyl-t-butyl ether	10	ug/L	4.0 U	250	3.0	0.63 J	33	64	0.99 J	1.1	2.8
Methylcyclohexane	NE	ug/L	12	2.4 J	1.0 U						
Methylene chloride (Dichloromethane)	5	ug/L	3.0 J B	10	1.0 U	1.0 U	1.0 U	0.43 J	1.0 U	1.0 U	1.0 U
Styrene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	0.38 J	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (Trichloroethylene)	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	58	1.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	4.0 U	10 U	1.0 U	1.0 U	1.0 U	6.9	1.0 U	1.0 U	1.0 U
Xylene (total)	5	ug/L	8.0 U	10 J	2.0 U	2.0 U	2.0 U	1.7 J	2.0 U	2.0 U	2.0 U

See Notes on Page 4.

Table 2  
 Summary of Analytical Groundwater Results - March 4 through 6, 2019  
 Chevron Facility #6518040  
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Parameter Name Date Sampled	NYSDEC TOGS 1.1.1	Units	AMW-7R 3/6/2019	AMW-14-D1 3/5/2019	AMW-14-D2 3/5/2019	AMW-14-VD 3/5/2019	AMW-15-D2 3/4/2019	AMW-15-D3 3/4/2019	AMW-15-VD 3/4/2019	MW-23D-1R 3/5/2019	MW-23D-2R 3/5/2019
<b>GC Volatiles - RSK-175</b>											
Carbon Dioxide	NE	mg/L	55,000	15,000	24,000	23,000	69,000	5,000 U	13,000	1,900 J	3,400 J
Ethane	NE	ug/L	83 U	210 J	7.5 U	1.6 J	7.5 U	330 U	7.5 U	7.5 U	7.5 U
Ethene	NE	ug/L	77 U	620 U	7.0 U	7.0 U	7.0 U	310 U	7.0 U	7.0 U	7.0 U
Methane	NE	ug/L	620	940	44	81	200	2,100	29	1.6 J	130
<b>Inorganics</b>											
Iron	0.3	ug/L	64.1	3.0	3.2	4.8	1.6	0.20	2.6	2.8	2.2
Manganese	0.3	ug/L	1.1	0.012	0.036	0.30	0.086	0.0097	0.15	0.13	0.16
Sodium	20	ug/L	116 ^	896 ^	584 ^	2,860	2,230	653 ^	5,590	50.4 ^	1,430
<b>General Chemistry</b>											
Alkalinity, Total as CaCO3	NE	ug/L	399	260	66.7	88.2	639	518	393	35.7	506
Chloride	250	mg/L	97.5	1,410	1,110	6,460	3,750	878	15,500	90.0	1,650
Ferric Iron	NE	mg/L	62.8	3.0	3.2	4.3	1.6	0.20	2.6	2.8	2.2
Ferrous Iron	NE	ug/L	1.3 HF	0.10 U HF	0.10 U HF	0.49 J HF	0.10 U HF F1	0.50 U HF	0.10 U HF	0.10 U HF	0.10 U HF
Nitrate as Nitrogen	10	ug/L	0.050 U	0.050 U	0.62	0.050 U	0.050 U H	0.046 J H	0.050 U H	0.049 J H	0.033 J
Nitrite as Nitrogen	1	mg/L	0.050 U	0.050 U	0.050 U	0.050 U	0.050 U H	0.050 U H	0.050 U H	0.050 U H	0.050 U
Sulfide	NE	ug/L	6.8	47.2	1.0 U	2.0	--	--	--	--	11.2
Total Organic Carbon	NE	ug/L	11.6	42.0	2.4	23.9	5.8	26.9	2.6	1.6	11.8
Sulfate	NE	ug/L	240	123	77.9	644	241	42.9	1,800	9.6	167

See Notes on Page 4.

**Table 2**  
**Summary of Analytical Groundwater Results - March 4 through 6, 2019**  
**Chevron Facility #6518040**  
**Former Gulf Oil Terminal**  
**Oceanside Township of Hempstead, NY**

Parameter Name Date Sampled	NYSDEC TOGS 1.1.1	Units	MW-24-D1R 3/5/2019	MW-24-D2 3/5/2019	MW-24-VDR 3/5/2019	MW-25-D2R 3/4/2019	MW-26-D1 3/5/2019	MW-26-D2 3/5/2019	MW-27-D2 3/5/2019	MW-28-D2R 3/4/2019	MW-29-D1 3/6/2019
<b>Volatile Organics</b>											
1,1,1-Trichloroethane	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	1	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,1-Dichloroethane	5	ug/L	<b>0.61 J [0.48 J]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,1-Dichloroethene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,2-Dibromoethane	0.0006	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,2-Dichloroethane	0.6	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,2-Dichloropropane	1	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	3	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	3	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	100 U	40 U	40 U	10 U	10 U
2-Hexanone	50	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	50 U	20 U	20 U	5.0 U	5.0 U
4-Methyl-2-pentanone	NE	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	50 U	20 U	20 U	5.0 U	5.0 U
Acetone	50	ug/L	<b>12 [8.4]</b>	<b>14</b>	<b>12</b>	<b>8.7</b>	100 U	40 U	40 U	<b>8.7</b>	<b>3.4 J</b>
Benzene	1	ug/L	<b>8.6 [7.0]</b>	1.0 U	<b>1.4</b>	<b>1.2</b>	<b>6.5 J</b>	4.0 U	4.0 U	<b>1.2</b>	<b>0.70 J</b>
Bromodichloromethane	50	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Bromoform	50	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	5	ug/L	1.0 U * [1.0 U *]	1.0 U *	1.0 U *	1.0 U *	10 U	4.0 U	4.0 U	1.0 U *	1.0 U
Carbon disulfide	60	ug/L	<b>4.0 [3.2]</b>	1.0 U	<b>1.2</b>	1.0 U F1	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Carbon Tetrachloride	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U F1	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Chlorobenzene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Chloroethane	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Chloroform	7	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Chloromethane (Methyl chloride)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
cis-1,2-Dichloroethene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	0.4	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Cyclohexane	NE	ug/L	<b>0.81 J [0.62 J]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	<b>3.8</b>
Dibromochloromethane	50	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U *	1.0 U *
Dichlorodifluoromethane (Freon 12)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Ethylbenzene	5	ug/L	<b>5.1 [3.8]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Isopropylbenzene	5	ug/L	<b>0.58 J [0.43 J]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	<b>2.0</b>
Methyl acetate	NE	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	25 U	10 U	10 U	2.5 U	2.5 U
Methyl-t-butyl ether	10	ug/L	<b>160 [140]</b>	<b>4.8</b>	1.0 U	1.0 U	<b>89</b>	<b>100</b>	<b>9.5</b>	1.0 U	<b>7.5</b>
Methylcyclohexane	NE	ug/L	<b>0.47 J [0.35 J]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	<b>1.2</b>
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	<b>11</b>	<b>6.1</b>	<b>3.9 J</b>	1.0 U	1.0 U
Styrene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Tetrachloroethene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Toluene	5	ug/L	<b>15 [12]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	ug/L	<b>13 [11]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	0.4	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Trichloroethene (Trichloroethylene)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	<b>36 [30]</b>	1.0 U	1.0 U	1.0 U	10 U	4.0 U	4.0 U	1.0 U	1.0 U
Xylene (total)	5	ug/L	<b>21 [16]</b>	2.0 U	2.0 U	2.0 U	20 U	8.0 U	8.0 U	2.0 U	2.0 U

See Notes on Page 4.

Table 2

Summary of Analytical Groundwater Results - March 4 through 6, 2019

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside Township of Hempstead, NY

Parameter Name Date Sampled	NYSDEC TOGS 1.1.1	Units	MW-24-D1R 3/5/2019	MW-24-D2 3/5/2019	MW-24-VDR 3/5/2019	MW-25-D2R 3/4/2019	MW-26-D1 3/5/2019	MW-26-D2 3/5/2019	MW-27-D2 3/5/2019	MW-28-D2R 3/4/2019	MW-29-D1 3/6/2019
<b>GC Volatiles - RSK-175</b>											
Carbon Dioxide	NE	mg/L	32,000	1,800 J	5,000	11,000	80,000	85,000	86,000	11,000	35,000
Ethane	NE	ug/L	390	7.5 U	7.5 U	7.5 U	330 U	170 U	170 U	7.5 U	170 U
Ethene	NE	ug/L	210	7.0 U	7.0 U	7.0 U	310 U	150 U	150 U	7.0 U	150 U
Methane	NE	ug/L	3,500	4.0 U	1.9 J	6.7	950	530	1,500	6.7	1,800
<b>Inorganics</b>											
Iron	0.3	ug/L	12.1 [8.6]	1.7	1.2	0.56	0.36	0.13	0.85	0.56	9.0
Manganese	0.3	ug/L	0.16 [0.13]	0.012	0.015	0.29	0.023	0.056	0.18	0.29	0.26
Sodium	20	ug/L	998 [1,440]	192 ^	182 ^	2,930	1,610	2,210	319 ^	2,930	673 ^
<b>General Chemistry</b>											
Alkalinity, Total as CaCO <sub>3</sub>	NE	ug/L	381	217	306	322	516	660	302	322	97.9
Chloride	250	mg/L	1,850	658	7,640	6,930	2,540	3,950	824	6,930	1,110
Ferric Iron	NE	mg/L	12.1	1.6	0.10 U	0.56	0.36	0.13	0.59	0.56	8.9
Ferrous Iron	NE	ug/L	0.50 U HF	0.091 J HF	2.1 HF	0.1 U HF	0.10 U HF	0.10 U HF	0.26 HF	0.10 U HF	0.12 HF
Nitrate as Nitrogen	10	ug/L	0.050 U H	0.050 U H	0.14 H	0.05 U H	0.050 U	0.050 U	0.35	0.050 U H	0.050 U
Nitrite as Nitrogen	1	mg/L	0.050 U H	0.050 U H	0.034 J H	0.050 U H	0.050 U	0.050 U	0.050 U	0.050 U H	0.050 U
Sulfide	NE	ug/L	--	--	--	--	26.4	45.6	27.2	--	1.2
Total Organic Carbon	NE	ug/L	28.3	5.6	3.9	5	28.8	8.8	12.8	5.0	3.2
Sulfate	NE	ug/L	105	43.5	859	833	215	373	56.2	833	14.3 J

**Notes:**

ID = Identification

NYSDEC = New York State Department of Environmental Conservation

TOGS = NYSDEC Technical and Operational Guidance Series ambient water quality standards and guidance values of June 1998

mg/L = milligrams per liter

ug/L = micrograms per liter

**Bolded** values = compound detected

Shaded cells = concentration above the TOGS

Shaded cells = concentration exceeding the reporting limit

B = Compound was found in the blank and sample.

F1 = Matrix spike and/or matrix spike duplicate recovery is outside acceptance limits.

H = Sample was prepped or analyzed beyond the specified holding time.

HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.

J = Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

NE = Not established

U = Less than indicated reporting limit

[ ] = Duplicate analysis results

\* = LCS or LCSD above the control limits

^ = Instrument related quality control is outside acceptance limits.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-12 480-93983-1 01/14/2016	AMW-13-D1 480-102264-1 06/24/2016	AMW-13-D1 480-103800-3 07/27/2016	AMW-13-D2 480-102279-8 06/23/2016	AMW-13-D2 480-103800-4 07/27/2016	AMW-13-VD 480-102279-7 06/23/2016	AMW-13-VD 480-103800-6 07/27/2016	AMW-14-D1 480-102264-2 06/24/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 10	< 10	< 10	< 10	<b>3.2 J</b>	<b>5.8 J</b>	< 10
2-Hexanone	50	ug/L	< 25	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 25	< 5.0	< 5.0	<b>3.3 J</b>	< 5.0	< 5.0	<b>2.4 J</b>	< 5.0
Acetone	50	ug/L	<b>25 J</b>	<b>6.5 J</b>	<b>3.4 J</b>	<b>3.2 J</b>	<b>4.8 J</b>	<b>18</b>	<b>46</b>	<b>4.6 J</b>
Benzene	1	ug/L	<b>80</b>	< 1.0	<b>4.5</b>	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 5.0	<b>0.99 J</b>	< 1.0	<b>0.97 J</b>	< 1.0	< 1.0	< 1.0	<b>0.85 J</b>
Bromoform	50	ug/L	< 5.0	<b>3.4</b>	<b>1.1</b>	<b>4.2</b>	<b>0.62 J</b>	<b>3.1</b>	< 1.0	<b>2.5</b>
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 5.0	<b>2.7</b>	<b>2.8</b>	<b>0.66 J</b>	<b>12</b>	<b>1.5</b>	<b>7.9</b>	<b>2.6</b>
Carbon Tetrachloride	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 5.0	<b>0.37 J</b>	< 1.0	<b>0.36 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	<b>12</b>	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 5.0	<b>2.4</b>	<b>0.82 J</b>	<b>2.6</b>	<b>0.41 J</b>	<b>2.1</b>	< 1.0	<b>2</b>
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 5.0	< 1.0	<b>1.8</b>	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	<b>24</b>	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 13	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>32</b>	<b>10</b>	<b>63 F1</b>	<b>3.5</b>	<b>41</b>	<b>5</b>	<b>3.4</b>	<b>12</b>
Methylcyclohexane	NE	ug/L	<b>5.4</b>	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 5.0	<b>0.38 J</b>	< 1.0	<b>0.57 J</b>	< 1.0	<b>1.5</b>	<b>1</b>	< 1.0
Toluene	5	ug/L	< 5.0	< 1.0	< 1.0	<b>1.3</b>	< 1.0	<b>1.6</b>	<b>1.3</b>	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-D1 480-103718-1 07/26/2016	AMW-14-D1 480-120664-3 07/05/2017	AMW-14-D1 480-123322-1 08/27/2017	AMW-14-D1 480-125815-7 10/11/2017	AMW-14-D1 480-139008-2 07/12/2018	AMW-14-D1 480-143739-2 10/17/2018	AMW-14-D2 480-102279-6 06/23/2016	AMW-14-D2 480-103718-2 07/26/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	<b>0.91 J</b>	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	<b>0.46 J</b>	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 10	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 40	< 40	< 20	< 80	< 50	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 20	< 20	< 10	< 40	< 10	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 20	< 20	< 10	< 40	< 10	<b>3.2 J</b>	< 5.0
Acetone	50	ug/L	<b>3.9 J</b>	< 40	< 40	< 20	< 80	< 25	<b>3.3 J</b>	<b>3.1 J</b>
Benzene	1	ug/L	<b>4.3</b>	<b>2.0 J</b>	< 4.0	<b>4.7</b>	<b>5.3 J</b>	<b>0.98 J</b>	< 1.0	<b>0.88 J</b>
Bromodichloromethane	50	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	<b>0.99 J</b>	< 1.0
Bromoform	50	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	<b>4.6</b>	<b>1.3</b>
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	<b>2.8</b>	< 4.0	< 4.0	<b>1.3 J</b>	< 8.0	< 1.0	<b>5.5</b>	<b>12</b>
Carbon Tetrachloride	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	<b>1</b>	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	<b>1.9</b>	< 4.0	< 4.0	<b>3</b>	< 8.0	< 5.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	<b>2.6</b>	<b>0.79 J</b>
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	<b>3.6</b>	< 4.0	< 4.0	<b>7.2</b>	<b>7.5 J</b>	<b>1</b>	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 10	< 10	< 5.0	< 20	< 10	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>140 E</b>	<b>170</b>	<b>170</b>	<b>170</b>	<b>160</b>	<b>120</b>	<b>3.1</b>	<b>24</b>
Methylcyclohexane	NE	ug/L	<b>0.97 J</b>	< 4.0	< 4.0	<b>2.4</b>	<b>1.7 J</b>	<b>0.40 J</b>	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 4.0	< 4.0	<b>0.95 J</b>	< 8.0	< 5.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	<b>7.1</b>	< 4.0	< 4.0	<b>1.0 J</b>	< 8.0	<b>0.27 J</b>	<b>0.81 J</b>	<b>0.64 J</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-D2 480-103800-5 07/27/2016	AMW-14-D2 480-123322-2 08/27/2017	AMW-14-D2 480-125815-6 10/11/2017	AMW-14-D2 480-139008-3 07/12/2018	AMW-14-D2 480-143739-3 10/17/2018	AMW-14-VD 480-102279-5 06/23/2016	AMW-14-VD 480-103800-1 07/27/2016	AMW-14-VD 480-120664-4 07/05/2017
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 10	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 20	< 50	<b>3.9 J</b>	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 10	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 10	<b>2.1 J</b>	< 5.0	< 5.0
Acetone	50	ug/L	<b>9.6 J</b>	< 10	< 10	< 20	< 25	<b>22</b>	<b>8.9 J</b>	<b>3.7 J</b>
Benzene	1	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<b>0.87 J</b>	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<b>3</b>	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	<b>8.4</b>	<b>2.7</b>	<b>0.94 J</b>	< 2.0	< 1.0	<b>0.63 J</b>	<b>9.9</b>	<b>0.25 J</b>
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	<b>0.37 J</b>	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 5.0	<b>0.32 J</b>	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	<b>2</b>	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 5.0	< 10	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>0.58 J</b>	<b>14</b>	<b>48</b>	<b>62</b>	<b>44</b>	<b>0.91 J</b>	<b>0.59 J</b>	<b>0.51 J</b>
Methylcyclohexane	NE	ug/L	< 1.0	<b>0.27 J</b>	< 1.0	< 2.0	< 5.0	<b>0.36 J</b>	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	<b>0.38 J</b>	< 1.0	< 1.0	< 2.0	< 1.0	<b>0.59 J</b>	<b>0.41 J</b>	< 1.0
Toluene	5	ug/L	<b>7.7</b>	< 1.0	< 1.0	< 2.0	< 1.0	<b>10</b>	<b>8.2</b>	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-VD 480-123322-3 08/27/2017	AMW-14-VD 480-125815-5 10/11/2017	AMW-14-VD 480-139008-4 07/12/2018	AMW-14-VD 480-143739-1 10/17/2018	AMW-15-D1 480-102279-4 06/23/2016	AMW-15-D1 480-103800-9 07/27/2016	AMW-15-D1 480-108537-3 10/26/2016	AMW-15-D1 480-108537-5 10/26/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 5.0	< 10	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 50	< 10	< 50	< 100	< 40
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 25	< 50	< 20
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 10	<b>2.1 J</b>	< 25	< 50	< 20
Acetone	50	ug/L	< 10	< 10	< 10	< 25	<b>4.2 J</b>	< 50	< 100	< 40
Benzene	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>0.48 J</b>	<b>3.9 J</b>	<b>11</b>	<b>5.1</b>
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>2.2</b>	< 5.0	< 10	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Carbon disulfide	60	ug/L	< 1.0	<b>1.6</b>	< 1.0	< 1.0	<b>0.46 J</b>	< 5.0	< 10	<b>1.7 J</b>
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>0.51 J</b>	< 5.0	< 10	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>20</b>	<b>220</b>	<b>81</b>	<b>38</b>
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 10	<b>2.0 J</b>
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>1.1</b>	< 5.0	< 10	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 13	< 25	< 10
Methyl-t-butyl ether	10	ug/L	<b>0.42 J</b>	<b>0.65 J</b>	<b>0.49 J</b>	< 1.0	<b>29</b>	<b>51</b>	<b>110</b>	<b>180</b>
Methylcyclohexane	NE	ug/L	< 1.0	<b>0.58 J</b>	< 1.0	< 5.0	< 1.0	< 5.0	<b>3.3 J</b>	<b>0.87 J</b>
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	<b>9.9</b>	<b>140</b>	<b>8.9 J</b>	<b>4.1</b>
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>0.43 J</b>	< 5.0	< 10	< 4.0
Toluene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	<b>3</b>	<b>7.5</b>	<b>18</b>	<b>6.6</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-D1 480-120664-6 07/05/2017	AMW-15-D1 480-123322-4 08/27/2017	AMW-15-D1 480-125815-12 10/11/2017	AMW-15-D1 480-143644-5 10/17/2018	AMW-15-D2 480-102279-9 06/23/2016	AMW-15-D2 480-102279-3 06/23/2016	AMW-15-D2 480-103800-10 07/27/2016	AMW-15-D2 480-108537-4 10/26/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	<b>1.5 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 4.0	< 2.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 40	< 20	< 250	< 10	<b>1.3 J</b>	< 10	< 10
2-Hexanone	50	ug/L	< 20	< 20	< 10	< 50	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 20	< 10	< 50	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 40	< 40	< 20	< 130	<b>9.3 J</b>	<b>11</b>	<b>3.8 J</b>	<b>13</b>
Benzene	1	ug/L	< 4.0	<b>12</b>	<b>11</b>	<b>12</b>	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 4.0	<b>2.7 J</b>	<b>2</b>	<b>1.7 J</b>	<b>1.8</b>	<b>1.6</b>	<b>0.42 J</b>	<b>0.75 J</b>
Carbon Tetrachloride	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 4.0	<b>5.1</b>	<b>1.6 J</b>	< 5.0	<b>3.3</b>	<b>3</b>	<b>1.7</b>	<b>0.86 J</b>
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 4.0	< 2.0	<b>2.8 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 4.0	<b>4.1</b>	<b>4.3</b>	<b>5</b>	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 10	< 5.0	< 50	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>170</b>	<b>200</b>	<b>300 E</b>	<b>170</b>	<b>68</b>	<b>66</b>	<b>43</b>	<b>42</b>
Methylcyclohexane	NE	ug/L	< 4.0	< 4.0	< 2.0	<b>1.2 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	<b>2.2 J</b>	< 2.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 4.0	<b>17</b>	<b>5.9</b>	<b>1.5 J</b>	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-D2 480-108537-6 10/26/2016	AMW-15-D2 480-120664-5 07/05/2017	AMW-15-D2 480-123322-5 08/27/2017	AMW-15-D2 480-125815-11 10/11/2017	AMW-15-D2 480-143644-7 10/17/2018	AMW-15-D3 480-102279-10 06/23/2016	AMW-15-D3 480-102279-2 06/23/2016	AMW-15-D3 480-103800-7 07/27/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 10	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 40	< 40	< 40	< 50	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 20	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 20	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	<b>5.1 J</b>	< 40	< 40	< 40	< 25	<b>6.9 J</b>	<b>7.3 J</b>	<b>3.6 J</b>
Benzene	1	ug/L	<b>0.47 J</b>	< 4.0	<b>9.8</b>	<b>2.7 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	<b>0.42 J</b>	< 4.0	< 4.0	< 4.0	<b>0.34 J</b>	<b>4.4</b>	<b>4.6</b>	<b>1.4</b>
Carbon Tetrachloride	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	<b>1.6</b>	< 4.0	< 4.0	< 4.0	<b>0.26 J</b>	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 4.0	<b>5.1</b>	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 10	< 10	< 10	< 10	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>110 E</b>	<b>120</b>	<b>350</b>	<b>160</b>	<b>120</b>	<b>2.4</b>	<b>2.6</b>	<b>23</b>
Methylcyclohexane	NE	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 4.0	<b>7.8</b>	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-D3 480-123322-12 08/27/2017	AMW-15-D3 480-125815-10 10/11/2017	AMW-15-D3 480-139008-16 07/13/2018	AMW-15-D3 480-143644-6 10/17/2018	AMW-15-VD 480-102279-1 06/23/2016	AMW-15-VD 480-103800-8 07/27/2016	AMW-15-VD 480-123322-6 08/27/2017	AMW-15-VD 480-125815-9 10/11/2017
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloroproppane (DBCP)	0.04	ug/L	< 4.0	< 2.0	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 20	< 20	< 50	< 10	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 20	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 10	< 10	< 10	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	<b>36 J</b>	< 20	<b>16 J</b>	< 25	<b>3.2 J</b>	<b>8.3 J</b>	< 10	<b>5.0 J</b>
Benzene	1	ug/L	<b>3.7 J</b>	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	<b>2.4</b>	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	<b>1.8 J</b>	< 2.0	<b>0.70 J</b>	<b>0.42 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	<b>0.74 J</b>	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	<b>19</b>	< 2.0	<b>3.1</b>	<b>0.44 J</b>	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	<b>1</b>	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	<b>3.4 J</b>	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 5.0	< 5.0	< 10	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>64</b>	< 2.0	<b>22</b>	<b>10</b>	<b>1.1</b>	< 1.0	<b>1.2</b>	<b>0.94 J</b>
Methylcyclohexane	NE	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	<b>2.4 J</b>	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	<b>0.52 J</b>	<b>15</b>	< 1.0	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-VD 480-139008-17 07/13/2018	AMW-15-VD 480-143644-8 10/17/2018	AMW-3 480-93930-2 01/13/2016	AMW-3 480-102059-9 06/21/2016	AMW-7 480-93930-17 01/12/2016	AMW-7 480-102059-1 06/21/2016	AMW-7 480-139008-1 07/11/2018	AMW-7 480-143739-4 10/17/2018
<b>Volatile Organics</b>										
1,1-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	<b>4.8 J</b>	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 10	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 50	< 50	<b>3.4 J</b>	< 50	< 10	< 20	< 50
2-Hexanone	50	ug/L	< 5.0	< 10	< 25	< 5.0	< 25	< 5.0	< 10	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 10	< 25	< 5.0	< 25	< 5.0	< 10	< 10
Acetone	50	ug/L	< 10	< 25	< 50	<b>21</b>	<b>30 J</b>	<b>6.2 J</b>	< 20	<b>8.1 J</b>
Benzene	1	ug/L	< 1.0	< 1.0	<b>280</b>	< 1.0	<b>5.7</b>	<b>1.1</b>	<b>0.82 J</b>	<b>0.78 J</b>
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 1.0	< 5.0	<b>0.51 J</b>	< 5.0	<b>0.43 J</b>	< 2.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 5.0	<b>57</b>	< 1.0	< 5.0	<b>18</b>	<b>16</b>	<b>29</b>
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	<b>29</b>	< 1.0	< 5.0	< 1.0	< 2.0	<b>0.19 J</b>
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	<b>65</b>	< 1.0	< 5.0	<b>2.8</b>	<b>7.1</b>	<b>4.9</b>
Methyl acetate	NE	ug/L	< 2.5	< 10	< 13	< 2.5	< 13	< 2.5	< 5.0	< 10
Methyl-t-butyl ether	10	ug/L	<b>0.44 J</b>	<b>1.3</b>	< 5.0	<b>0.40 J</b>	<b>1.4 J</b>	<b>0.23 J</b>	< 2.0	< 1.0
Methylcyclohexane	NE	ug/L	< 1.0	< 5.0	<b>27</b>	< 1.0	<b>1.5 J</b>	<b>9.4</b>	<b>29</b>	<b>50</b>
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 5.0	<b>15</b>	< 1.0	< 5.0	< 1.0	<b>1.1 J</b>	< 5.0
Styrene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0	<b>6.9</b>	< 1.0	< 5.0	< 1.0	<b>1.0 J</b>	<b>0.60 J</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	ASB-2 480-101220-1 06/06/2016	ASB-3 480-101384-3 06/08/2016	ASB-4 480-101294-3 06/07/2016	ASB-5 480-101077-2 06/02/2016	ASB-7 480-101077-1 06/02/2016	MW-18R 480-102224-7 06/22/2016	MW-18R 480-139008-5 07/11/2018	MW-18R 480-143739-5 10/17/2018
<b>Volatile Organics</b>										
1,1-Dichloroethene	5	ug/L	< 1.0	< 1.0	<b>4.2 J</b>	< 1.0	< 2.0	< 10	< 20	< 5.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 50	<b>1.4 J</b>	< 20	< 100	<b>74 J</b>	<b>70 J</b>
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 25	< 5.0	< 10	< 50	< 100	< 50
4-Methyl-2-pentanone	NE	ug/L	<b>6</b>	< 5.0	< 25	<b>5</b>	<b>5.3 J</b>	< 50	< 100	< 50
Acetone	50	ug/L	<b>20</b>	<b>5.5 J</b>	< 50	<b>12</b>	< 20	< 100	<b>330</b>	<b>230</b>
Benzene	1	ug/L	<b>1.8</b>	< 1.0	<b>3.0 J</b>	< 1.0	< 2.0	<b>310</b>	<b>48</b>	<b>69</b>
Bromodichloromethane	50	ug/L	<b>1.9</b>	<b>0.75 J</b>	< 5.0	<b>1.5</b>	<b>3.3</b>	< 10	< 20	< 5.0
Bromoform	50	ug/L	< 1.0	<b>2.4</b>	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Carbon disulfide	60	ug/L	<b>1.1</b>	<b>0.27 J</b>	<b>0.95 J</b>	<b>0.53 J</b>	<b>1.1 J</b>	< 10	<b>6.2 J</b>	<b>2.4 J</b>
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Chloroform	7	ug/L	<b>14</b>	<b>0.92 J</b>	< 5.0	<b>19</b>	<b>21</b>	< 10	< 20	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
cis-1,2-Dichloroethene	5	ug/L	<b>5.6</b>	<b>2.8</b>	<b>1600 E</b>	<b>2.2</b>	<b>67</b>	<b>14</b>	< 20	< 5.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	<b>5</b>	< 1.0	< 2.0	<b>20</b>	< 20	<b>8.3 J</b>
Dibromochloromethane	50	ug/L	<b>0.35 J</b>	<b>1.5</b>	< 5.0	< 1.0	<b>0.65 J</b>	< 10	< 20	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	<b>6.7</b>	< 1.0	< 2.0	< 10	< 20	<b>1.2 J</b>
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	<b>14</b>	< 20	<b>6.8</b>
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 13	< 2.5	< 5.0	< 25	< 50	< 50
Methyl-t-butyl ether	10	ug/L	<b>55</b>	<b>8.5</b>	<b>13</b>	<b>4.6</b>	<b>5.5</b>	<b>65</b>	<b>11 J</b>	<b>28</b>
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	<b>4.5 J</b>	< 1.0	< 2.0	<b>4.4 J</b>	<b>5.1 J</b>	<b>6.2 J</b>
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	<b>0.60 J</b>	<b>330</b>	< 1.0	< 2.0	< 10	< 20	< 25
Styrene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Tetrachloroethene	5	ug/L	<b>1.4</b>	<b>1.3</b>	<b>6.7</b>	<b>1.2</b>	<b>1.2 J</b>	< 10	< 20	< 5.0
Toluene	5	ug/L	<b>0.87 J</b>	< 1.0	<b>9</b>	< 1.0	< 2.0	< 10	< 20	<b>4.1 J</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-23-D1 480-108537-7 10/26/2016	MW-23-D1 480-108537-8 10/26/2016	MW-23D-1R 480-93930-13 01/12/2016	MW-23D-1R 480-101997-2 06/20/2016	MW-23D-1R 480-120664-8 07/05/2017	MW-23D-1R 480-123322-13 08/27/2017	MW-23D-1R 480-125815-16 10/12/2017	MW-23D-1R 480-139008-6 07/12/2018
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,1-Dichloroethane	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,2-Dichloropropane	1	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 20	< 50	< 50	< 10	< 40	< 40	< 40	< 40
2-Hexanone	50	ug/L	< 10	< 25	< 25	< 5.0	< 20	< 20	< 20	< 20
4-Methyl-2-pentanone	NE	ug/L	< 10	< 25	< 25	< 5.0	< 20	< 20	< 20	< 20
Acetone	50	ug/L	< 20	< 50	< 50	<b>6.4 J</b>	< 40	< 40	< 40	< 40
Benzene	1	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	<b>2.7 J</b>
Bromodichloromethane	50	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Bromoform	50	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Carbon disulfide	60	ug/L	<b>0.53 J</b>	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Carbon Tetrachloride	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Chlorobenzene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Chloroethane	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Chloroform	7	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
cis-1,2-Dichloroethene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
cis-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Cyclohexane	NE	ug/L	<b>0.40 J</b>	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Dibromochloromethane	50	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Ethylbenzene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Isopropylbenzene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Methyl acetate	NE	ug/L	< 5.0	< 13	< 13	< 2.5	< 10	< 10	< 10	< 10
Methyl-t-butyl ether	10	ug/L	<b>140</b>	<b>180</b>	<b>210</b>	<b>30</b>	<b>140</b>	<b>130</b>	<b>150</b>	<b>91</b>
Methylcyclohexane	NE	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Methylene chloride (Dichloromethane)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Styrene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Tetrachloroethene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Toluene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-23D-1R 480-143644-4 10/17/2018	MW-23D-2R 480-93930-14 01/12/2016	MW-23D-2R 480-101997-1 06/20/2016	MW-23D-2R 480-120664-9 07/05/2017	MW-23D-2R 480-123322-14 08/27/2017	MW-23D-2R 480-125815-13 10/12/2017	MW-23D-2R 480-139008-7 07/12/2018	MW-24-D1 480-93930-8 01/13/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 10	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 50	< 10	< 10	< 40	< 10	< 80	< 50
2-Hexanone	50	ug/L	< 10	< 25	< 5.0	< 5.0	< 20	< 5.0	< 40	< 25
4-Methyl-2-pentanone	NE	ug/L	< 10	< 25	< 5.0	< 5.0	< 20	< 5.0	< 40	< 25
Acetone	50	ug/L	< 25	< 50	<b>23</b>	<b>4.0 J</b>	< 40	< 10	< 80	< 50
Benzene	1	ug/L	<b>3.8</b>	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Bromodichloromethane	50	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Bromoform	50	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Carbon disulfide	60	ug/L	<b>0.29 J</b>	< 5.0	< 1.0	< 1.0	< 4.0	<b>0.44 J</b>	< 8.0	< 5.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Chlorobenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Chloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Chloroform	7	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
cis-1,2-Dichloroethene	5	ug/L	<b>1.7</b>	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	<b>10</b>
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Cyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Dibromochloromethane	50	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Ethylbenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Isopropylbenzene	5	ug/L	<b>0.56 J</b>	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Methyl acetate	NE	ug/L	< 10	< 13	< 2.5	< 2.5	< 10	< 2.5	< 20	< 13
Methyl-t-butyl ether	10	ug/L	<b>94</b>	<b>130</b>	<b>26</b>	<b>8</b>	<b>72</b>	<b>150 E</b>	<b>180</b>	<b>220</b>
Methylcyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Styrene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Tetrachloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Toluene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-D1 480-102059-8 06/21/2016	MW-24-D1 480-108537-11 10/26/2016	MW-24-D1 480-108537-1 10/26/2016	MW-24-D1 480-108537-2 10/26/2016	MW-24-D1 480-139008-8 07/12/2018	MW-24-D1 480-143644-1 10/16/2018	MW-24-D2 480-93930-10 01/13/2016	MW-24-D2 480-93930-7 01/13/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,1-Dichloroethane	5	ug/L	< 4.0	<b>0.56 J</b>	<b>0.74 J</b>	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 50	< 5.0	< 5.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 10	< 10	< 40	< 80	< 250	< 50	< 50
2-Hexanone	50	ug/L	< 20	< 5.0	< 5.0	< 20	< 40	< 50	< 25	< 25
4-Methyl-2-pentanone	NE	ug/L	< 20	< 5.0	< 5.0	< 20	< 40	< 50	< 25	< 25
Acetone	50	ug/L	< 40	< 10	< 10	< 40	< 80	< 130	< 50	< 50
Benzene	1	ug/L	<b>5.4</b>	<b>4.1</b>	<b>4.9</b>	< 4.0	<b>11</b>	<b>8.3</b>	<b>3.3 J</b>	<b>3.1 J</b>
Bromodichloromethane	50	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Bromoform	50	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Carbon disulfide	60	ug/L	<b>1.6 J</b>	<b>1.7</b>	<b>1.3</b>	< 4.0	<b>2.1 J</b>	<b>1.4 J</b>	< 5.0	< 5.0
Carbon Tetrachloride	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Chlorobenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Chloroethane	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Chloroform	7	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
cis-1,2-Dichloroethene	5	ug/L	<b>4.9</b>	<b>4</b>	<b>6.1</b>	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Cyclohexane	NE	ug/L	<b>1.9 J</b>	<b>1.6</b>	<b>1.4</b>	< 4.0	< 8.0	< 25	< 5.0	< 5.0
Dibromochloromethane	50	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	5	ug/L	<b>3.1 J</b>	<b>2.3</b>	<b>2.2</b>	< 4.0	<b>7.1 J</b>	<b>6.1</b>	< 5.0	< 5.0
Isopropylbenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Methyl acetate	NE	ug/L	< 10	< 2.5	< 2.5	< 10	< 20	< 50	< 13	< 13
Methyl-t-butyl ether	10	ug/L	<b>160</b>	<b>140 E</b>	<b>120 E</b>	<b>81</b>	<b>290</b>	<b>270</b>	<b>260</b>	<b>250</b>
Methylcyclohexane	NE	ug/L	<b>1.3 J</b>	<b>0.64 J</b>	<b>0.66 J</b>	< 4.0	< 8.0	< 25	< 5.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 25	< 5.0	< 5.0
Styrene	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Tetrachloroethene	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Toluene	5	ug/L	< 4.0	<b>0.68 J</b>	<b>0.64 J</b>	< 4.0	<b>23</b>	<b>17</b>	< 5.0	< 5.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-D2 480-102059-5 06/21/2016	MW-24-D2 480-108437-5 10/25/2016	MW-24-D2 480-108437-6 10/25/2016	MW-24-D2 480-120664-7 07/05/2017	MW-24-D2 480-123322-7 08/27/2017	MW-24-D2 480-125815-8 10/11/2017	MW-24-D2 480-139008-9 07/12/2018	MW-24-D2 480-143644-2 10/17/2018
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 40	< 50	< 80	< 80	< 20	< 20	< 50
2-Hexanone	50	ug/L	< 5.0	< 20	< 25	< 40	< 40	< 10	< 10	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 20	< 25	< 40	< 40	< 10	< 10	< 10
Acetone	50	ug/L	< 10	<b>62</b>	<b>56</b>	< 80	< 80	< 20	< 20	<b>2.8 J</b>
Benzene	1	ug/L	<b>0.97 J</b>	< 4.0	<b>3.0 J</b>	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Carbon disulfide	60	ug/L	<b>0.31 J</b>	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	<b>0.24 J</b>
Carbon Tetrachloride	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	<b>1.6</b>	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	<b>0.52 J</b>
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0
Dibromochloromethane	50	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Ethylbenzene	5	ug/L	<b>0.84 J</b>	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 10	< 13	< 20	< 20	< 5.0	< 5.0	< 10
Methyl-t-butyl ether	10	ug/L	<b>140 E</b>	<b>120</b>	<b>270</b>	<b>220</b>	<b>87</b>	<b>60</b>	<b>2.5</b>	<b>2</b>
Methylcyclohexane	NE	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	<b>120</b>	<b>84 F1</b>	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0
Styrene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Toluene	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-VD 480-139008-10 07/12/2018	MW-24-VD 480-143644-3 10/17/2018	MW-26-D1 480-93930-12 01/12/2016	MW-26-D1 480-102224-3 06/22/2016	MW-26-D1 480-108437-1 10/25/2016	MW-26-D1 480-108437-2 10/25/2016	MW-26-D1 480-120664-10 07/05/2017	MW-26-D1 480-123322-8 08/27/2017
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,1-Dichloroethane	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 10	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,2-Dichloropropane	1	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 50	< 50	< 40	< 100	< 40	< 100	< 100
2-Hexanone	50	ug/L	< 20	< 10	< 25	< 20	< 50	< 20	< 50	< 50
4-Methyl-2-pentanone	NE	ug/L	< 20	< 10	< 25	< 20	< 50	< 20	< 50	< 50
Acetone	50	ug/L	< 40	< 25	< 50	< 40	< 100	< 40	< 100	< 100
Benzene	1	ug/L	< 4.0	< 1.0	<b>9.1</b>	<b>9.3</b>	<b>8.6 J</b>	<b>12</b>	<b>8.7 J</b>	<b>9.5 J</b>
Bromodichloromethane	50	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Bromoform	50	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Carbon disulfide	60	ug/L	< 4.0	<b>0.64 J</b>	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Carbon Tetrachloride	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Chlorobenzene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Chloroethane	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Chloroform	7	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
cis-1,2-Dichloroethene	5	ug/L	< 4.0	<b>0.28 J</b>	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Cyclohexane	NE	ug/L	< 4.0	< 5.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Dibromochloromethane	50	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Ethylbenzene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	<b>3.0 J</b>	< 10	< 10
Isopropylbenzene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Methyl acetate	NE	ug/L	< 10	< 10	< 13	< 10	< 25	< 10	< 25	< 25
Methyl-t-butyl ether	10	ug/L	<b>4.2</b>	<b>2.9</b>	<b>380</b>	<b>340</b>	<b>310</b>	<b>390</b>	<b>290</b>	<b>240</b>
Methylcyclohexane	NE	ug/L	< 4.0	< 5.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 5.0	< 5.0	< 4.0	< 10	<b>3.6 J</b>	< 10	< 10
Styrene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Tetrachloroethene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Toluene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D1 480-125815-4 10/11/2017	MW-26-D1 480-139008-11 07/13/2018	MW-26-D1 480-143739-6 10/17/2018	MW-26-D2 480-93930-15 01/12/2016	MW-26-D2 480-102224-2 06/22/2016	MW-26-D2 480-108437-3 10/25/2016	MW-26-D2 480-108437-4 10/25/2016	MW-26-D2 480-120664-11 07/05/2017
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 2.0	< 2.0	< 10	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 2.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 20	< 20	< 50	< 50	< 10	< 20	< 20	< 10
2-Hexanone	50	ug/L	< 10	< 10	< 10	< 25	< 5.0	< 10	< 10	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 10	< 10	< 10	< 25	< 5.0	< 10	< 10	< 5.0
Acetone	50	ug/L	<b>6.5 J</b>	< 20	< 25	< 50	< 10	<b>9.4 J</b>	<b>37</b>	< 10
Benzene	1	ug/L	< 2.0	<b>17</b>	<b>4.9</b>	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Bromodichloromethane	50	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Bromoform	50	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Carbon disulfide	60	ug/L	< 2.0	< 2.0	<b>0.45 J</b>	< 5.0	<b>1.4</b>	<b>0.60 J</b>	< 2.0	<b>0.37 J</b>
Carbon Tetrachloride	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Chlorobenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Chloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Chloroform	7	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 2.0	< 2.0	<b>0.42 J</b>	< 5.0	<b>0.86 J</b>	< 2.0	< 2.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Cyclohexane	NE	ug/L	< 2.0	< 2.0	< 5.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Dibromochloromethane	50	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Ethylbenzene	5	ug/L	< 2.0	<b>3.5</b>	<b>0.95 J</b>	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Isopropylbenzene	5	ug/L	< 2.0	< 2.0	<b>0.43 J</b>	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Methyl acetate	NE	ug/L	< 5.0	< 5.0	< 10	< 13	< 2.5	< 5.0	< 5.0	< 2.5
Methyl-t-butyl ether	10	ug/L	< 2.0	<b>220 E</b>	<b>110</b>	< 5.0	<b>59</b>	<b>85</b>	<b>43</b>	< 1.0
Methylcyclohexane	NE	ug/L	< 2.0	< 2.0	< 5.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 2.0	< 2.0	< 5.0	< 5.0	< 1.0	<b>15</b>	<b>81</b>	< 1.0
Styrene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Tetrachloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Toluene	5	ug/L	< 2.0	< 2.0	<b>0.23 J</b>	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D2 480-123322-9 08/27/2017	MW-26-D2 480-125815-3 10/11/2017	MW-26-D2 480-143739-7 10/17/2018	MW-26-VD 480-93930-4 01/13/2016	MW-26-VD 480-102224-1 06/22/2016	MW-27-D1 480-93930-3 01/13/2016	MW-27-D1 480-102059-4 06/21/2016	MW-27-D1 480-120664-1 07/05/2017
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,1-Dichloroethane	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,2,4-Trichlorobenzene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 8.0	< 1.0	< 10	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,2-Dichloropropane	1	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 80	< 10	< 50	< 10	< 10	< 50	<b>1.7 J</b>	< 20
2-Hexanone	50	ug/L	< 40	< 5.0	< 10	< 5.0	< 5.0	< 25	< 5.0	< 10
4-Methyl-2-pentanone	NE	ug/L	< 40	< 5.0	< 10	< 5.0	< 5.0	< 25	< 5.0	< 10
Acetone	50	ug/L	< 80	< 10	< 25	< 10	<b>170</b>	<b>53</b>	<b>5.0 J</b>	< 20
Benzene	1	ug/L	< 8.0	< 1.0	<b>0.69 J</b>	< 1.0	< 1.0	< 5.0	< 1.0	<b>1.1 J</b>
Bromodichloromethane	50	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Bromoform	50	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Carbon disulfide	60	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	<b>0.19 J</b>	< 5.0	<b>0.66 J</b>	< 2.0
Carbon Tetrachloride	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Chlorobenzene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Chloroethane	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Chloroform	7	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
cis-1,2-Dichloroethene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	<b>1</b>	<b>2.2</b>
cis-1,3-Dichloropropene	0.4	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Cyclohexane	NE	ug/L	< 8.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Dibromochloromethane	50	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Ethylbenzene	5	ug/L	< 8.0	< 1.0	<b>0.39 J</b>	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Isopropylbenzene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Methyl acetate	NE	ug/L	< 20	< 2.5	< 10	< 2.5	< 2.5	< 13	< 2.5	< 5.0
Methyl-t-butyl ether	10	ug/L	< 8.0	<b>14</b>	<b>76</b>	< 1.0	<b>0.96 J</b>	< 5.0	<b>10</b>	<b>84</b>
Methylcyclohexane	NE	ug/L	< 8.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Methylene chloride (Dichloromethane)	5	ug/L	< 8.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Styrene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Tetrachloroethene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Toluene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D1 480-123322-10 08/27/2017	MW-27-D1 480-139008-12 07/13/2018	MW-27-D1 480-143739-11 10/18/2018	MW-27-D2 480-93930-1 01/13/2016	MW-27-D2 480-102059-10 06/21/2016	MW-27-D2 480-120664-2 07/05/2017	MW-27-D2 480-123322-11 08/27/2017	MW-27-D2 480-125815-14 10/12/2017
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 2.0	< 2.0	< 10	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 20	< 20	< 50	< 50	<b>8.2 J</b>	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 10	< 10	< 10	< 25	< 20	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 10	< 10	< 10	< 25	< 20	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 20	< 20	< 25	< 50	<b>38 J</b>	< 10	< 10	< 10
Benzene	1	ug/L	<b>1.6 J</b>	<b>7.8</b>	<b>3.6</b>	< 5.0	<b>160</b>	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 2.0	<b>0.64 J</b>	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	<b>3.2</b>	<b>2</b>	<b>1</b>	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 2.0	< 2.0	< 5.0	< 5.0	<b>22</b>	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	<b>92</b>	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	<b>38</b>	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 5.0	< 5.0	< 10	< 13	< 10	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>100</b>	<b>62</b>	<b>38</b>	< 5.0	<b>8.1</b>	< 1.0	< 1.0	< 1.0
Methylcyclohexane	NE	ug/L	< 2.0	< 2.0	< 5.0	< 5.0	<b>26</b>	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	<b>0.94 J</b>	< 2.0	< 5.0	< 5.0	<b>5.7</b>	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 2.0	<b>1.6 J</b>	<b>1</b>	< 5.0	<b>17</b>	< 1.0	< 1.0	< 1.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D2 480-139008-13 07/13/2018	MW-27-D2 480-143739-10 10/18/2018	MW-28-D1 480-102264-3 06/24/2016	MW-28-D1 480-103861-2 07/28/2016	MW-28-D1 480-120664-12 07/05/2017	MW-28-D1 480-123322-15 08/27/2017	MW-28-D1 480-125815-1 10/11/2017	MW-28-D1 480-143739-8 10/17/2018
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 1.0	<b>0.76 J</b>	< 10	<b>0.58 J</b>	< 4.0	< 4.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 10	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 50	<b>2.3 J</b>	< 100	< 10	< 40	< 40	< 50
2-Hexanone	50	ug/L	< 20	< 10	< 5.0	< 50	< 5.0	< 20	< 20	< 10
4-Methyl-2-pentanone	NE	ug/L	< 20	< 10	< 5.0	< 50	< 5.0	< 20	< 20	< 10
Acetone	50	ug/L	< 40	< 25	<b>45</b>	<b>280</b>	< 10	< 40	< 40	<b>9.3 J</b>
Benzene	1	ug/L	< 4.0	< 1.0	<b>2.1</b>	< 10	<b>8.9</b>	<b>2.7 J</b>	<b>3.7 J</b>	<b>5.6</b>
Bromodichloromethane	50	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Carbon disulfide	60	ug/L	< 4.0	< 1.0	<b>1</b>	< 10	<b>0.40 J</b>	< 4.0	<b>4.9</b>	<b>0.47 J</b>
Carbon Tetrachloride	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 5.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0
Dibromochloromethane	50	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Ethylbenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	<b>1.2</b>	< 4.0	< 4.0	<b>1.4</b>
Isopropylbenzene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	<b>0.33 J</b>
Methyl acetate	NE	ug/L	< 10	< 10	< 2.5	< 25	< 2.5	< 10	< 10	< 10
Methyl-t-butyl ether	10	ug/L	<b>3.4 J</b>	< 1.0	<b>6.2</b>	<b>4.7 J</b>	<b>19</b>	<b>6.6</b>	<b>4.8</b>	<b>9.5</b>
Methylcyclohexane	NE	ug/L	< 4.0	< 5.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 5.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0
Styrene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Toluene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	<b>0.39 J</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-28-D2R 480-102264-4 06/24/2016	MW-28-D2R 480-103861-3 07/28/2016	MW-28-D2R 480-120664-13 07/05/2017	MW-28-D2R 480-123322-16 08/27/2017	MW-28-D2R 480-125815-2 10/11/2017	MW-28-D2R 480-139008-14 07/13/2018	MW-28-D2R 480-143739-9 10/17/2018	MW-29-D1 480-93983-5 01/14/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,1-Dichloroethane	5	ug/L	<b>0.48 J</b>	< 1.0	< 1.0	< 4.0	<b>1.3</b>	< 4.0	< 1.0	< 5.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 10	< 5.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,2-Dichloroethane	0.6	ug/L	<b>0.21 J</b>	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 40	< 10	< 40	< 50	< 50
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 20	< 5.0	< 20	< 10	< 25
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 20	< 5.0	< 20	< 10	< 25
Acetone	50	ug/L	<b>3.3 J</b>	<b>4.4 J</b>	< 10	< 40	< 10	< 40	< 25	<b>25 J</b>
Benzene	1	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	<b>81</b>
Bromodichloromethane	50	ug/L	< 1.0	<b>1.2</b>	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Bromoform	50	ug/L	< 1.0	<b>5.6</b>	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Carbon disulfide	60	ug/L	< 1.0	<b>0.52 J</b>	<b>0.38 J</b>	< 4.0	<b>0.95 J</b>	<b>1.0 J</b>	< 1.0	< 5.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Chloroform	7	ug/L	< 1.0	<b>0.51 J</b>	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0	<b>13</b>
Dibromochloromethane	50	ug/L	< 1.0	<b>3.2</b>	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	<b>24</b>
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 10	< 10	< 13
Methyl-t-butyl ether	10	ug/L	< 1.0	<b>0.25 J</b>	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	<b>34</b>
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0	<b>5.5</b>
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0	< 5.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Toluene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-29-D1 480-102059-2 06/21/2016	MW-29-D1 480-108537-10 10/26/2016	MW-29-D1 480-108537-9 10/26/2016	MW-29-D1 480-120664-14 07/05/2017	MW-29-D1 480-123322-17 08/27/2017	MW-29-D1 480-125815-15 10/12/2017	MW-29-D1 480-139008-15 07/13/2018	MW-29-D1 480-143739-12 10/18/2018
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 20	< 20	< 40	< 40	< 50
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 10	< 20	<b>9.1 J</b>	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 10	< 20	< 20	< 10
Acetone	50	ug/L	<b>9.5 J</b>	< 10	< 10	< 20	< 20	< 40	< 40	< 25
Benzene	1	ug/L	<b>6.3</b>	<b>32</b>	<b>5.5</b>	<b>9.7</b>	<b>19</b>	<b>4.3</b>	<b>5.2</b>	<b>3.7</b>
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 1.0	<b>0.21 J</b>	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Cyclohexane	NE	ug/L	<b>8</b>	<b>21</b>	<b>11</b>	<b>7.6</b>	<b>12</b>	<b>5.4</b>	<b>24</b>	<b>20</b>
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	<b>0.31 J</b>
Isopropylbenzene	5	ug/L	<b>5.4</b>	<b>16</b>	<b>6.4</b>	<b>7.7</b>	<b>9.3</b>	<b>5.8</b>	<b>19</b>	<b>16</b>
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 5.0	< 5.0	< 10	< 10	< 10
Methyl-t-butyl ether	10	ug/L	<b>23</b>	<b>44</b>	<b>23</b>	<b>71</b>	<b>28</b>	<b>20</b>	<b>39</b>	<b>33</b>
Methylcyclohexane	NE	ug/L	<b>3.8</b>	<b>10</b>	<b>2.5</b>	<b>1.8 J</b>	<b>5.8</b>	<b>1.5 J</b>	<b>11</b>	<b>11</b>
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 5.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Toluene	5	ug/L	<b>1</b>	<b>3.1</b>	<b>1.6</b>	<b>2.3</b>	<b>1.7 J</b>	< 4.0	<b>3.0 J</b>	<b>2.8</b>

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Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-29-D2 480-93983-6 01/14/2016	MW-29-D2 480-102059-3 06/21/2016	MW-29-VD 480-93983-7 01/14/2016	MW-29-VD 480-102059-6 06/21/2016	MW-30-D1 480-93983-3 01/14/2016	MW-30-D1 480-102224-6 06/22/2016	MW-30-D2 480-93983-10 01/14/2016	MW-30-D2 480-93983-2 01/14/2016
<b>Volatile Organics</b>										
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,1-Dichloroethane	5	ug/L	<b>7.3</b>	<b>4.8</b>	< 10	< 1.0	<b>1.9</b>	<b>2.1</b>	<b>3.2 J</b>	<b>2.9</b>
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 100	< 10	< 10	< 10	< 50	< 20
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 25	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 25	< 10
Acetone	50	ug/L	< 10	< 10	< 100	< 10	< 10	< 10	< 50	< 20
Benzene	1	ug/L	< 1.0	< 1.0	< 10	< 1.0	<b>1.1</b>	< 1.0	< 5.0	< 2.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Carbon disulfide	60	ug/L	< 1.0	<b>0.62 J</b>	< 10	< 1.0	< 1.0	<b>0.19 J</b>	< 5.0	< 2.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 10	< 1.0	<b>0.39 J</b>	<b>0.27 J</b>	< 5.0	< 2.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 13	< 5.0
Methyl-t-butyl ether	10	ug/L	<b>66</b>	<b>51</b>	< 10	<b>0.42 J</b>	<b>100 E</b>	<b>53</b>	<b>7.3</b>	<b>8.1</b>
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Styrene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Toluene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-30-D2 480-102224-5 06/22/2016	MW-30-VD 480-93983-4 01/14/2016	MW-30-VD 480-102224-4 06/22/2016	MW-31D-1R 480-93983-9 01/14/2016	MW-31D-1R 480-102224-8 06/22/2016	MW-31D-2R 480-93983-8 01/14/2016	MW-31D-2R 480-102224-9 06/22/2016
<b>Volatile Organics</b>									
1,1 Dichloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	<b>0.87 J</b>	< 10	< 1.0	< 1.0	< 1.0	< 1.0	<b>0.94 J</b>
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloroproppane (DBCP)	0.04	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 100	< 10	< 10	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 10	< 100	<b>5.9 J</b>	< 10	<b>11</b>	< 10	< 10
Benzene	1	ug/L	< 1.0	< 10	< 1.0	< 1.0	<b>1.1</b>	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 10	< 1.0	< 1.0	<b>0.32 J</b>	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 25	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	<b>3</b>	< 10	<b>0.47 J</b>	< 1.0	<b>3.3</b>	< 1.0	<b>0.32 J</b>
Methylcyclohexane	NE	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-12 480-93983-1 01/14/2016	AMW-13-D1 480-102264-1 06/24/2016	AMW-13-D1 480-103800-3 07/27/2016	AMW-13-D2 480-102279-8 06/23/2016	AMW-13-D2 480-103800-4 07/27/2016	AMW-13-VD 480-102279-7 06/23/2016	AMW-13-VD 480-103800-6 07/27/2016	AMW-14-D1 480-102264-2 06/24/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 5.0	1.3	9.9	< 1.0	< 1.0	< 1.0	< 1.0	1.4
Xylene (total)	5	ug/L	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	NA	3500	NA	2700	NA	26100	NA	410
Manganese	0.3	ug/L	NA	510 B	NA	740 B	NA	1100 B	NA	370 B
Sodium	20	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	569 B	NA	732 B	NA	732 B	NA	886 B
Alkalinity, Total as CaCO3	NE	ug/L	NA	569000 B	NA	732000 B	NA	732000 B	NA	886000 B
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	170000	NA	250000	NA	1860000	NA	103000
Sulfide	NE	ug/L	NA	11900	NA	2600	NA	< 100	NA	48000
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-D1 480-103718-1 07/26/2016	AMW-14-D1 480-120664-3 07/05/2017	AMW-14-D1 480-123322-1 08/27/2017	AMW-14-D1 480-125815-7 10/11/2017	AMW-14-D1 480-139008-2 07/12/2018	AMW-14-D1 480-143739-2 10/17/2018	AMW-14-D2 480-102279-6 06/23/2016	AMW-14-D2 480-103718-2 07/26/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	7.8	< 4.0	< 4.0	13	8.6	< 1.0	< 1.0	0.90 J
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	1600 E	78	7.6	3.2	< 8.0	32	< 1.0	3.6
Xylene (total)	5	ug/L	11	3.2 J	< 8.0	20	16	1.6 J	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	130	79	23	42	120 B	NA	NA
Ethane	NE	ug/L	NA	< 150	< 330	< 170	< 660	< 330	NA	NA
Ethene	NE	ug/L	NA	< 140	200 J	190	260 J	< 310	NA	NA
Methane	NE	ug/L	NA	1100	550	580	2000	1600	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	NA	4700	5200	4400	1600	5000	6600	NA
Manganese	0.3	ug/L	NA	48	49 B	48 B	14 B	55 B	510 B	NA
Sodium	20	ug/L	NA	1690000 ^	1730000	1590000	975000	1560000	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	NA	740 B	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	716000 B	563000 B	563000	623000 B	673000	740000 B	NA
Chloride	250	mg/L	NA	3060	3130	1860	2970	3620	NA	NA
Ferric Iron	NE	mg/L	NA	4.5	5.2	4.4	1.5	4.7	NA	NA
Ferrous Iron	NE	ug/L	NA	170 HF	< 100	< 100	120 HF	260 HF	NA	NA
Nitrogen, Nitrate as N	10	ug/L	NA	< 50	< 50	< 50	< 50	< 50	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	NA	NA
Sulfate (SO4)	NE	ug/L	NA	140000	251000	124000 B	172000	198000 B	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	263000	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	22500	NA
Sulfide	NE	ug/L	NA	38000	56400	50400	50800	48400	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	13100 B	10600 B	23600 B	NA	NA	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-D2 480-103800-5 07/27/2016	AMW-14-D2 480-123322-2 08/27/2017	AMW-14-D2 480-125815-6 10/11/2017	AMW-14-D2 480-139008-3 07/12/2018	AMW-14-D2 480-143739-3 10/17/2018	AMW-14-VD 480-102279-5 06/23/2016	AMW-14-VD 480-103800-1 07/27/2016	AMW-14-VD 480-120664-4 07/05/2017
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 2.0	< 4.0	< 3.0	<b>0.79 J</b>	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	<b>18</b>	<b>100</b>	<b>120</b>	<b>150 B</b>	NA	NA	<b>120</b>
Ethane	NE	ug/L	NA	< 83	< 170	< 330	< 330	NA	NA	< 7.5
Ethene	NE	ug/L	NA	< 77	< 150	< 310	< 310	NA	NA	< 7.0
Methane	NE	ug/L	NA	<b>210</b>	<b>1200</b>	<b>970</b>	<b>2200</b>	NA	NA	<b>20</b>
<b>Inorganics</b>										
Iron	0.3	ug/L	NA	<b>34 J</b>	<b>17300</b>	<b>2500</b>	<b>2700</b>	<b>37800</b>	NA	<b>11300</b>
Manganese	0.3	ug/L	NA	<b>16 B</b>	<b>760 B</b>	<b>78 B</b>	<b>100 B</b>	<b>720 B</b>	NA	<b>300</b>
Sodium	20	ug/L	NA	<b>13500</b>	<b>3260000</b>	<b>2210000</b>	<b>2230000</b>	NA	NA	<b>4800000 ^</b>
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	<b>427</b>	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	<b>439000 B</b>	<b>830000</b>	<b>785000 B</b>	<b>485000 B</b>	<b>427000</b>	NA	<b>440000 B</b>
Chloride	250	mg/L	NA	<b>4930</b>	<b>4070</b>	<b>4380</b>	<b>4510</b>	NA	NA	<b>15200</b>
Ferric Iron	NE	mg/L	NA	< 0.10	<b>17.3</b>	<b>2.5</b>	<b>2.7</b>	NA	NA	<b>11.3</b>
Ferrous Iron	NE	ug/L	NA	< 100	< 100	< 100	< 100	NA	NA	< 100
Nitrogen, Nitrate as N	10	ug/L	NA	< 50	< 50	< 50	< 50	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	< 0.050	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	NA	<b>507000</b>	<b>210000 B</b>	<b>315000</b>	<b>327000 B</b>	NA	NA	<b>1830000</b>
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	<b>1780000</b>	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	< 100	NA	NA
Sulfide	NE	ug/L	NA	<b>4200</b>	<b>27200</b>	<b>56000</b>	<b>58800</b>	NA	NA	<b>800 J</b>
Total Organic Carbon (TOC)	NE	ug/L	NA	<b>7800 B</b>	<b>11600 B</b>	NA	NA	NA	NA	<b>3400 B</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-VD 480-123322-3 08/27/2017	AMW-14-VD 480-125815-5 10/11/2017	AMW-14-VD 480-139008-4 07/12/2018	AMW-14-VD 480-143739-1 10/17/2018	AMW-15-D1 480-102279-4 06/23/2016	AMW-15-D1 480-103800-9 07/27/2016	AMW-15-D1 480-108537-3 10/26/2016	AMW-15-D1 480-108537-5 10/26/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	5.5	73	48	18
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 4.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	70	410	600 F1	240
Xylene (total)	5	ug/L	< 2.0	3.2	< 2.0	< 3.0	< 2.0	6.5 J	15 J	5.5 J
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	100	82	120	110 B	NA	NA	NA	NA
Ethane	NE	ug/L	< 7.5	< 7.5	< 7.5	< 7.5	NA	NA	NA	NA
Ethene	NE	ug/L	< 7.0	< 7.0	< 7.0	< 7.0	NA	NA	NA	NA
Methane	NE	ug/L	18	48	27	24	NA	NA	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	17000	16400	18400	18500	2200	NA	1900 B	95 B
Manganese	0.3	ug/L	420 B	390 B	410 B	390 B	500 B	NA	70 B	110 B
Sodium	20	ug/L	9160000	8680000	8660000	9100000	NA	NA	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	602	NA	130	528
Alkalinity, Total as CaCO3	NE	ug/L	415000 B	454000	472000 B	409000 B	602000	NA	130000	528000
Chloride	250	mg/L	15400	16200	19400	16300	NA	NA	NA	NA
Ferric Iron	NE	mg/L	12.3	14.8	18.4	18.5	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	4700 HF	1600 HF	< 100	< 100	NA	NA	NA	NA
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	< 50	< 50	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	2000000	1890000	1870000	1920000 B	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	166000	NA	63100	164000
Sulfide	NE	ug/L	NA	NA	NA	NA	20500	NA	NA	NA
Sulfide	NE	ug/L	< 1000	800 J	5200 F1	< 1000	NA	NA	8000	36000
Total Organic Carbon (TOC)	NE	ug/L	4000 B	4500 B	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-D1 480-120664-6 07/05/2017	AMW-15-D1 480-123322-4 08/27/2017	AMW-15-D1 480-125815-12 10/11/2017	AMW-15-D1 480-143644-5 10/17/2018	AMW-15-D2 480-102279-9 06/23/2016	AMW-15-D2 480-102279-3 06/23/2016	AMW-15-D2 480-103800-10 07/27/2016	AMW-15-D2 480-108537-4 10/26/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 4.0	28	13	21	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	10	76	24	< 5.0	1.8	1.7	3.5	4.7
Xylene (total)	5	ug/L	< 8.0	17	12	19	< 2.0	< 2.0	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	110	27	34	40	NA	NA	NA	NA
Ethane	NE	ug/L	< 150	92 J	< 330	< 660	NA	NA	NA	NA
Ethene	NE	ug/L	< 140	830	470	< 620	NA	NA	NA	NA
Methane	NE	ug/L	400	4000	2400	5100	NA	NA	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	2100	12400	6900	3900	110	120	NA	50 B
Manganese	0.3	ug/L	84	170 B	100 B	320	5.8 B	6.3 B	NA	85 B
Sodium	20	ug/L	1750000 ^	1520000	1710000 ^	989000	NA	NA	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	181 B	185	NA	99.9
Alkalinity, Total as CaCO3	NE	ug/L	597000	471000 B	641000	442000	181000 B	185000	NA	99900
Chloride	250	mg/L	73.2	2480	2760	1910	NA	NA	NA	NA
Ferric Iron	NE	mg/L	2.1	12.4	6.9	3.8	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	< 100	< 500	< 200	120 HF	NA	NA	NA	NA
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	< 50	79	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	1640000	156000	189000 B	188000	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	166000	165000	NA	243000
Sulfide	NE	ug/L	NA	NA	NA	NA	1800	1900 F1	NA	NA
Sulfide	NE	ug/L	42000	53200	41600	56000	NA	NA	NA	12800
Total Organic Carbon (TOC)	NE	ug/L	9400 B	53400 B	36200 B	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-D2 480-108537-6 10/26/2016	AMW-15-D2 480-120664-5 07/05/2017	AMW-15-D2 480-123322-5 08/27/2017	AMW-15-D2 480-125815-11 10/11/2017	AMW-15-D2 480-143644-7 10/17/2018	AMW-15-D3 480-102279-10 06/23/2016	AMW-15-D3 480-102279-2 06/23/2016	AMW-15-D3 480-103800-7 07/27/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 4.0	<b>5.5</b>	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	<b>30</b>	< 4.0	<b>300</b>	<b>25</b>	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 8.0	<b>12</b>	< 8.0	< 3.0	< 2.0	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	<b>98</b>	<b>94</b>	<b>68</b>	<b>110</b>	NA	NA	NA
Ethane	NE	ug/L	NA	< 150	< 170	< 170	< 330	NA	NA	NA
Ethene	NE	ug/L	NA	< 140	<b>37 J</b>	< 150	< 310	NA	NA	NA
Methane	NE	ug/L	NA	<b>430</b>	<b>880</b>	<b>280</b>	<b>560</b>	NA	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	< 50	<b>700</b>	<b>3500</b>	<b>4500</b>	<b>750</b>	<b>98</b>	<b>120</b>	NA
Manganese	0.3	ug/L	<b>98 B</b>	<b>110</b>	<b>140 B</b>	<b>130 B</b>	<b>55</b>	<b>250 B</b>	<b>240 B</b>	NA
Sodium	20	ug/L	NA	<b>2090000 ^</b>	<b>2200000</b>	<b>2150000 ^</b>	<b>2130000</b>	NA	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	<b>600</b>	NA	NA	NA	NA	<b>617 B</b>	<b>12.2 B</b>	NA
Alkalinity, Total as CaCO3	NE	ug/L	<b>600000</b>	<b>687000</b>	<b>673000 B</b>	<b>811000</b>	<b>461000</b>	<b>617000 B</b>	<b>12200 B</b>	NA
Chloride	250	mg/L	NA	<b>3700</b>	<b>3650</b>	<b>3710 F1</b>	<b>3790</b>	NA	NA	NA
Ferric Iron	NE	mg/L	NA	<b>0.53</b>	<b>3.5</b>	<b>4.5</b>	<b>0.75</b>	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	<b>170 HF</b>	< 100	< 100	< 100	NA	NA	NA
Nitrogen, Nitrate as N	10	ug/L	NA	< 50	< 50	< 50	< 50	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	< 0.050	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	<b>269000</b>	<b>237000</b>	<b>254000 B</b>	<b>262000 B</b>	NA	NA	NA
Sulfate (SO4)	NE	ug/L	<b>216000</b>	NA	NA	NA	NA	<b>1790000</b>	<b>784000</b>	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	< 100	< 100	NA
Sulfide	NE	ug/L	<b>36000</b>	<b>34000</b>	<b>58000</b>	<b>45200</b>	<b>48000</b>	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	<b>10300 B</b>	<b>10900 B</b>	<b>9800 B</b>	NA	NA	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-D3 480-123322-12 08/27/2017	AMW-15-D3 480-125815-10 10/11/2017	AMW-15-D3 480-139008-16 07/13/2018	AMW-15-D3 480-143644-6 10/17/2018	AMW-15-VD 480-102279-1 06/23/2016	AMW-15-VD 480-103800-8 07/27/2016	AMW-15-VD 480-123322-6 08/27/2017	AMW-15-VD 480-125815-9 10/11/2017
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	140	< 2.0	20	3.5	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	16	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	17	< 4.0	< 4.0	< 3.0	< 2.0	< 2.0	< 2.0	3
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	5.1	< 5	7.6	100	NA	NA	31	40
Ethane	NE	ug/L	< 330	< 170	< 330	< 170	NA	NA	< 7.5	< 7.5
Ethene	NE	ug/L	< 310	< 150	< 310	< 150	NA	NA	< 7.0	< 7.0
Methane	NE	ug/L	2400	610	1500	2800	NA	NA	24	8
<b>Inorganics</b>										
Iron	0.3	ug/L	2300	450	3100	260	4200	NA	11800	11700
Manganese	0.3	ug/L	450 B	99 B	1100 B	200	200 B	NA	350 B	340 B
Sodium	20	ug/L	2980000 ^	2500000 ^	3870000	2610000	NA	NA	8910000	9180000 ^
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	303	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	408000 B	508000	518000 B	108000	303000	NA	135000 B	329000
Chloride	250	mg/L	4230	7530	4670	7380	NA	NA	16100	16000
Ferric Iron	NE	mg/L	2.3	0.45	3.1	0.26	NA	NA	11.5	11.7
Ferrous Iron	NE	ug/L	< 500	< 100	< 100	< 100	NA	NA	280 HF	< 100
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	< 50	< 50	NA	NA	< 50	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	NA	NA	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	495000	897000 B	482000	916000	NA	NA	2140000	2070000 B
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	1810000	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	< 100	NA	NA	NA
Sulfide	NE	ug/L	16400	39200	22800	35600	NA	NA	< 1000	< 1000
Total Organic Carbon (TOC)	NE	ug/L	34300 B	7200 B	NA	NA	NA	NA	3500 B	3400 B

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-15-VD 480-139008-17 07/13/2018	AMW-15-VD 480-143644-8 10/17/2018	AMW-3 480-93930-2 01/13/2016	AMW-3 480-102059-9 06/21/2016	AMW-7 480-93930-17 01/12/2016	AMW-7 480-102059-1 06/21/2016	AMW-7 480-139008-1 07/11/2018	AMW-7 480-143739-4 10/17/2018
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 3.0	20	< 2.0	< 10	0.79 J	< 4.0	0.61 J
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	41	37	NA	NA	NA	NA	82	94 B
Ethane	NE	ug/L	< 7.5	< 7.5	NA	NA	NA	NA	< 330	< 330
Ethene	NE	ug/L	< 7.0	< 7.0	NA	NA	NA	NA	< 310	< 310
Methane	NE	ug/L	37	27	NA	NA	NA	NA	3500	5800
<b>Inorganics</b>										
Iron	0.3	ug/L	10600	10700	NA	16200	NA	170	20000	12500
Manganese	0.3	ug/L	320 B	310	NA	1400 B	NA	74 B	2500 B	2900 B
Sodium	20	ug/L	8290000	8770000	NA	NA	NA	NA	199000	168000
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	351	NA	199 B	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	357000 B	271000	NA	351000	NA	199000 B	881000 B	997000
Chloride	250	mg/L	19200	13200	NA	NA	NA	NA	253	192
Ferric Iron	NE	mg/L	10.6	10.7	NA	NA	NA	NA	19.7	12.5
Ferrous Iron	NE	ug/L	< 100	< 100	NA	NA	NA	NA	320 HF	< 100
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	NA	NA	NA	NA	< 50	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	NA	NA	NA	NA	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	1890000	1530000 B	NA	NA	NA	NA	41900	22600 B
Sulfate (SO4)	NE	ug/L	NA	NA	NA	970000	NA	82300	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	5300	NA	5200	NA	NA
Sulfide	NE	ug/L	800 J	< 1000	NA	NA	NA	NA	3800	1600
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	ASB-2 480-101220-1 06/06/2016	ASB-3 480-101384-3 06/08/2016	ASB-4 480-101294-3 06/07/2016	ASB-5 480-101077-2 06/02/2016	ASB-7 480-101077-1 06/02/2016	MW-18R 480-102224-7 06/22/2016	MW-18R 480-139008-5 07/11/2018	MW-18R 480-143739-5 10/17/2018
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	13	< 1.0	< 2.0	< 10	< 20	< 5.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Trichloroethene (Trichloroethylene)	5	ug/L	4.4	1.2	1500 E	4.8	1.7 J	< 10	< 20	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0
Vinyl chloride (Chloroethene)	2	ug/L	6	81	400	11	31	< 10	< 20	< 5.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	36	0.89 J	< 4.0	< 20	< 40	5.2 J
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	2.2 J	11 B
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	< 660	< 660
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	< 620	< 620
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	3800	9700
<b>Inorganics</b>										
Iron	0.3	ug/L	NA	NA	NA	NA	NA	11500 B	1400	450
Manganese	0.3	ug/L	NA	NA	NA	NA	NA	470 B	17 B	26 B
Sodium	20	ug/L	NA	NA	NA	NA	NA	NA	161000	193000
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	515 B	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	NA	NA	NA	NA	515000 B	184000 B	365000
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	367	259
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	1.3	0.45
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	110 HF	< 100
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	NA	NA	NA	< 50	< 50
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	120000	20000 B
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	27800	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	< 100	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	12200	11600
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-23-D1 480-108537-7 10/26/2016	MW-23-D1 480-108537-8 10/26/2016	MW-23D-1R 480-93930-13 01/12/2016	MW-23D-1R 480-101997-2 06/20/2016	MW-23D-1R 480-120664-8 07/05/2017	MW-23D-1R 480-123322-13 08/27/2017	MW-23D-1R 480-125815-16 10/12/2017	MW-23D-1R 480-139008-6 07/12/2018
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
trans-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 2.0	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0
Xylene (total)	5	ug/L	< 4.0	< 10	< 10	< 2.0	< 8.0	< 8.0	< 8.0	< 8.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	82	75	55	64
Ethane	NE	ug/L	NA	NA	NA	NA	< 150	< 83	< 170	< 330
Ethene	NE	ug/L	NA	NA	NA	NA	< 140	< 77	< 150	< 310
Methane	NE	ug/L	NA	NA	NA	NA	150	1500	1300	4800
<b>Inorganics</b>										
Iron	0.3	ug/L	< 50	240 B	NA	660	17100	33900	3800	4300
Manganese	0.3	ug/L	21 B	670 B	NA	690 B	3100	2200 B	1000 B	810 B
Sodium	20	ug/L	NA	NA	NA	NA	1190000 ^	1190000 ^	1230000 ^	1360000
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	555	525	NA	485	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	555000	525000	NA	485000	500000	512000 B	562000	495000 B
Chloride	250	mg/L	NA	NA	NA	NA	1970	2190	2270	2250
Ferric Iron	NE	mg/L	NA	NA	NA	NA	17.1	31.9	3.8	4
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	< 100	2000 HF	< 100	260 HF
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	NA	< 50	23 J H	< 50	< 50
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	259000	173000	178000 B	149000
Sulfate (SO4)	NE	ug/L	148000	156000	NA	180000	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	16900 F1	NA	NA	NA	NA
Sulfide	NE	ug/L	6400	13600	NA	NA	8400	15400	26800	28800
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	16100 B	17300 B	15400 B	NA

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Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-23D-1R 480-143644-4 10/17/2018	MW-23D-2R 480-93930-14 01/12/2016	MW-23D-2R 480-101997-1 06/20/2016	MW-23D-2R 480-120664-9 07/05/2017	MW-23D-2R 480-123322-14 08/27/2017	MW-23D-2R 480-125815-13 10/12/2017	MW-23D-2R 480-139008-7 07/12/2018	MW-24-D1 480-93930-8 01/13/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Trichloroethylene (Trichloroethylene)	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	< 8.0	< 5.0
Vinyl chloride (Chloroethylene)	2	ug/L	1	< 5.0	< 1.0	< 1.0	< 4.0	1.2	< 8.0	99
Xylene (total)	5	ug/L	< 3.0	< 10	< 2.0	< 2.0	< 8.0	< 2.0	< 16	< 10
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	63	NA	NA	130	110	100	120	NA
Ethane	NE	ug/L	< 660	NA	NA	< 38	< 83	< 170	< 170	NA
Ethene	NE	ug/L	< 620	NA	NA	< 35	< 77	< 150	< 150	NA
Methane	NE	ug/L	3600	NA	NA	73	360	200	730	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	1900	NA	40 J	4400	1800	2800	420	NA
Manganese	0.3	ug/L	930	NA	110 B	210	170 B	140 B	110 B	NA
Sodium	20	ug/L	1220000	NA	NA	2190000 ^	1930000 ^	2570000 ^	1820000	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	543	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	360000	NA	543000	520000	434000 B	654000	641000 B	NA
Chloride	250	mg/L	2260	NA	NA	5260	5420	4460	3620	NA
Ferric Iron	NE	mg/L	1.9	NA	NA	4.2	1.8	2.8	0.42	NA
Ferrous Iron	NE	ug/L	< 100	NA	NA	170 HF	< 100	< 100	< 100	NA
Nitrogen, Nitrate as N	10	ug/L	< 50	NA	NA	< 50	37 J H	< 50	< 50	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	NA
Sulfate (SO4)	NE	ug/L	177000	NA	NA	861000	665000	478000 B	358000	NA
Sulfate (SO4)	NE	ug/L	NA	NA	317000	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	700	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	25200	NA	NA	29600	36200	20000	40000	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	5200 B	6100 B	9700 B	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-D1 480-102059-8 06/21/2016	MW-24-D1 480-108537-11 10/26/2016	MW-24-D1 480-108537-1 10/26/2016	MW-24-D1 480-108537-2 10/26/2016	MW-24-D1 480-139008-8 07/12/2018	MW-24-D1 480-143644-1 10/16/2018	MW-24-D2 480-93930-10 01/13/2016	MW-24-D2 480-93930-7 01/13/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	11	6.5	6.8	< 4.0	22	12	< 5.0	< 5.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 5.0	< 5.0
Vinyl chloride (Chloroethylene)	2	ug/L	35	33	15	< 4.0	160	22	180	170
Xylene (total)	5	ug/L	9.3	7.2	6.6	< 8.0	29	25	< 10	< 10
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	67	59	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA	130 J	< 660	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA	1100	550 J	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA	5900	6000	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	32 J	< 50	58 B	24 J B	10100	2900	NA	NA
Manganese	0.3	ug/L	60 B	49 B	8.9 B	59 B	120 B	91	NA	NA
Sodium	20	ug/L	NA	NA	NA	NA	2140000	1070000	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	642 B	526	324	577	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	642000 B	526000	324000	577000	875000 B	583000	NA	NA
Chloride	250	mg/L	NA	NA	NA	NA	4220	2370	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	10.1	2.9	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	< 100	< 100	NA	NA
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	NA	< 50	< 50	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	< 0.050	< 0.050	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	200000	75300	NA	NA
Sulfate (SO4)	NE	ug/L	189000	217000	248000	219000	NA	NA	NA	NA
Sulfide	NE	ug/L	79300	NA	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	64000 F1	60000	56000	66400	56400	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-D2 480-102059-5 06/21/2016	MW-24-D2 480-108437-5 10/25/2016	MW-24-D2 480-108437-6 10/25/2016	MW-24-D2 480-120664-7 07/05/2017	MW-24-D2 480-123322-7 08/27/2017	MW-24-D2 480-125815-8 10/11/2017	MW-24-D2 480-139008-9 07/12/2018	MW-24-D2 480-143644-2 10/17/2018
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	<b>0.98 J</b>	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 4.0	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	<b>38</b>	<b>20</b>	<b>280 F1</b>	<b>250 F1</b>	<b>72</b>	<b>18</b>	< 2.0	<b>0.23 J</b>
Xylene (total)	5	ug/L	< 2.0	< 8.0	< 10	< 16	< 16	< 4.0	< 4.0	< 3.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	<b>130</b>	<b>110</b>	<b>54</b>	<b>15</b>	<b>5.7</b>
Ethane	NE	ug/L	NA	NA	NA	< 150	< 170	< 170	< 7.5	< 170
Ethene	NE	ug/L	NA	NA	NA	< 140	< 150	< 150	< 7.0	< 150
Methane	NE	ug/L	NA	NA	NA	<b>130</b>	<b>980</b>	<b>410</b>	<b>44</b>	<b>370</b>
<b>Inorganics</b>										
Iron	0.3	ug/L	<b>40 J</b>	<b>49 J</b>	< 50	<b>1800</b>	<b>6600</b>	<b>5500</b>	<b>1100</b>	<b>610</b>
Manganese	0.3	ug/L	<b>55 B</b>	<b>62</b>	<b>56</b>	<b>88</b>	<b>160 B</b>	<b>140 B</b>	<b>33 B</b>	<b>32</b>
Sodium	20	ug/L	NA	NA	NA	<b>2520000 ^</b>	<b>2260000</b>	<b>2380000 ^</b>	<b>94900</b>	<b>108000 ^</b>
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	<b>741 B</b>	<b>512</b>	<b>759</b>	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	<b>741000 B</b>	<b>512000</b>	<b>759000</b>	<b>667000</b>	<b>774000 B</b>	<b>804000</b>	<b>114000 B</b>	<b>102000</b>
Chloride	250	mg/L	NA	NA	NA	<b>4060</b>	<b>4100</b>	<b>3720</b>	<b>182</b>	<b>201</b>
Ferric Iron	NE	mg/L	NA	NA	NA	<b>1.8</b>	<b>6.6</b>	<b>5.5</b>	<b>1.1</b>	<b>0.61</b>
Ferrous Iron	NE	ug/L	NA	NA	NA	< 100	< 100	< 100	< 100	< 100
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	< 50	< 50	< 50	<b>51 H</b>	< 50
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	< 0.050	< 0.050	< 0.050	<b>0.020 J H</b>	< 0.050
Sulfate (SO4)	NE	ug/L	NA	NA	NA	<b>541000</b>	<b>346000</b>	<b>298000 B</b>	<b>28000</b>	<b>29900</b>
Sulfate (SO4)	NE	ug/L	<b>270000</b>	<b>374000</b>	<b>270000</b>	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	<b>92200</b>	NA						
Sulfide	NE	ug/L	NA	<b>48000</b>	<b>64000</b>	<b>84000</b>	<b>61800</b>	<b>56400</b>	<b>800 J</b>	<b>800 J</b>
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	<b>12500 B</b>	<b>11600 B</b>	<b>10800 B</b>	NA	NA

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-VD 480-139008-10 07/12/2018	MW-24-VD 480-143644-3 10/17/2018	MW-26-D1 480-93930-12 01/12/2016	MW-26-D1 480-102224-3 06/22/2016	MW-26-D1 480-108437-1 10/25/2016	MW-26-D1 480-108437-2 10/25/2016	MW-26-D1 480-120664-10 07/05/2017	MW-26-D1 480-123322-8 08/27/2017
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10
Vinyl chloride (Chloroethylene)	2	ug/L	< 4.0	<b>0.55 J</b>	<b>16</b>	<b>20</b>	<b>18</b>	<b>51</b>	<b>28</b>	< 10
Xylene (total)	5	ug/L	< 8.0	< 3.0	< 10	< 8.0	< 20	< 8.0	< 20	< 20
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	<b>89</b>	<b>79</b>	NA	NA	NA	NA	<b>120</b>	<b>95</b>
Ethane	NE	ug/L	<b>2.1 J</b>	< 7.5	NA	NA	NA	NA	< 150	< 170
Ethene	NE	ug/L	<b>2.3 J</b>	< 7.0	NA	NA	NA	NA	< 140	< 150
Methane	NE	ug/L	<b>160</b>	<b>120</b>	NA	NA	NA	NA	<b>250</b>	<b>1200</b>
<b>Inorganics</b>										
Iron	0.3	ug/L	<b>37900</b>	<b>26100</b>	NA	< 50	< 50	< 50	<b>230</b>	<b>640</b>
Manganese	0.3	ug/L	<b>910 B</b>	<b>740</b>	NA	<b>35 B</b>	<b>25</b>	<b>37</b>	<b>41</b>	<b>48 B</b>
Sodium	20	ug/L	<b>8960000</b>	<b>8730000</b>	NA	NA	NA	NA	<b>1570000 ^</b>	<b>1500000</b>
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	<b>569 B</b>	<b>479</b>	<b>591</b>	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	<b>454000 B</b>	<b>416000</b>	NA	<b>569000 B</b>	<b>479000</b>	<b>591000</b>	<b>542000</b>	<b>532000 B</b>
Chloride	250	mg/L	<b>16000</b>	<b>13100</b>	NA	NA	NA	NA	<b>2520</b>	<b>2530</b>
Ferric Iron	NE	mg/L	<b>37.8</b>	<b>26.1</b>	NA	NA	NA	NA	<b>0.23</b>	<b>0.64</b>
Ferrous Iron	NE	ug/L	<b>100 HF</b>	< 100	NA	NA	NA	NA	< 100	< 100
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	NA	NA	NA	NA	< 50	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	NA	NA	NA	NA	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	<b>1640000</b>	<b>1300000</b>	NA	NA	NA	NA	<b>313000</b>	<b>203000</b>
Sulfate (SO4)	NE	ug/L	NA	NA	NA	<b>139000</b>	<b>252000</b>	<b>131000</b>	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	<b>70600 F1</b>	NA	NA	NA	NA
Sulfide	NE	ug/L	< 1000	< 1000	NA	NA	<b>48000</b>	<b>56000</b>	<b>44000</b>	<b>43200</b>
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	<b>9100 B</b>	<b>10800 B</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D1 480-125815-4 10/11/2017	MW-26-D1 480-139008-11 07/13/2018	MW-26-D1 480-143739-6 10/17/2018	MW-26-D2 480-93930-15 01/12/2016	MW-26-D2 480-102224-2 06/22/2016	MW-26-D2 480-108437-3 10/25/2016	MW-26-D2 480-108437-4 10/25/2016	MW-26-D2 480-120664-11 07/05/2017
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 2.0	13	< 1.0	< 5.0	1.2	< 2.0	< 2.0	< 1.0
Xylene (total)	5	ug/L	< 4.0	< 4.0	< 3.0	< 10	< 2.0	< 4.0	< 4.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	10	110	65 B	NA	NA	NA	NA	130
Ethane	NE	ug/L	< 7.5	< 330	< 170	NA	NA	NA	NA	< 7.5
Ethene	NE	ug/L	< 7.0	< 310	< 150	NA	NA	NA	NA	< 7.0
Methane	NE	ug/L	10	2900	1800	NA	NA	NA	NA	76
<b>Inorganics</b>										
Iron	0.3	ug/L	190	320	280	NA	490 B	55	< 50	970
Manganese	0.3	ug/L	75 B	35 B	24 B	NA	700 B	63	140	420
Sodium	20	ug/L	304000	1640000	1510000	NA	NA	NA	NA	3930000 ^
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	344	NA	653	NA
Alkalinity, Total as CaCO3	NE	ug/L	177000	558000	416000	NA	344000	NA	653000	348000
Chloride	250	mg/L	483	2810	2540	NA	NA	NA	NA	9010
Ferric Iron	NE	mg/L	0.19	0.32	0.28	NA	NA	NA	NA	0.97
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	NA	NA	NA	NA	< 100
Nitrogen, Nitrate as N	10	ug/L	600	< 50	< 50	NA	NA	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	5.1	< 0.050	< 0.050	NA	NA	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	69200	237000	264000 B	NA	NA	NA	NA	1580000
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	1200000	NA	382000	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	1700	NA	NA	NA
Sulfide	NE	ug/L	< 1000	44800	28400	NA	NA	40000	36000	24400
Total Organic Carbon (TOC)	NE	ug/L	22900 B	NA	NA	NA	NA	NA	NA	4300 B

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D2 480-123322-9 08/27/2017	MW-26-D2 480-125815-3 10/11/2017	MW-26-D2 480-143739-7 10/17/2018	MW-26-VD 480-93930-4 01/13/2016	MW-26-VD 480-102224-1 06/22/2016	MW-27-D1 480-93930-3 01/13/2016	MW-27-D1 480-102059-4 06/21/2016	MW-27-D1 480-120664-1 07/05/2017
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	<b>0.97 J</b>	<b>28</b>
Xylene (total)	5	ug/L	< 16	< 2.0	< 3.0	< 2.0	< 2.0	< 10	< 2.0	< 4.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	<b>110</b>	<b>55</b>	<b>110 B</b>	NA	NA	NA	NA	<b>26</b>
Ethane	NE	ug/L	< 83	< 170	< 170	NA	NA	NA	NA	< 380
Ethene	NE	ug/L	< 77	< 150	< 150	NA	NA	NA	NA	< 350
Methane	NE	ug/L	<b>92</b>	<b>670</b>	<b>1100</b>	NA	NA	NA	NA	<b>550</b>
<b>Inorganics</b>										
Iron	0.3	ug/L	<b>970</b>	<b>1100</b>	<b>150</b>	NA	<b>74000 B</b>	NA	<b>430</b>	<b>2800</b>
Manganese	0.3	ug/L	<b>310 B</b>	<b>160 B</b>	<b>52 B</b>	NA	<b>2600 B</b>	NA	<b>200 B</b>	<b>56</b>
Sodium	20	ug/L	<b>3370000</b>	<b>2770000</b>	<b>2190000</b>	NA	NA	NA	NA	<b>1130000 ^</b>
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	<b>176 B</b>	NA	<b>795 B</b>	NA
Alkalinity, Total as CaCO3	NE	ug/L	<b>379000</b>	<b>435000</b>	<b>509000</b>	NA	<b>176000 B</b>	NA	<b>795000 B</b>	<b>394000 B</b>
Chloride	250	mg/L	<b>7980</b>	<b>8600</b>	<b>3820</b>	NA	NA	NA	NA	<b>2860</b>
Ferric Iron	NE	mg/L	<b>0.97</b>	<b>1.1</b>	<b>0.15</b>	NA	NA	NA	NA	<b>2.8</b>
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	NA	NA	NA	NA	< 100
Nitrogen, Nitrate as N	10	ug/L	< 50	<b>28 J</b>	< 50	NA	NA	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	NA	NA	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	<b>1100000</b>	<b>1100000</b>	<b>361000 B</b>	NA	NA	NA	NA	<b>308000</b>
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	<b>497000</b>	NA	<b>290000</b>	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	<b>6000</b>	NA	<b>97300</b>	NA
Sulfide	NE	ug/L	<b>16000</b>	<b>26800</b>	<b>25600</b>	NA	NA	NA	NA	<b>14400</b>
Total Organic Carbon (TOC)	NE	ug/L	<b>4800 B</b>	<b>8800 B</b>	NA	NA	NA	NA	NA	<b>13700 B</b>

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D1 480-123322-10 08/27/2017	MW-27-D1 480-139008-12 07/13/2018	MW-27-D1 480-143739-11 10/18/2018	MW-27-D2 480-93930-1 01/13/2016	MW-27-D2 480-102059-10 06/21/2016	MW-27-D2 480-120664-2 07/05/2017	MW-27-D2 480-123322-11 08/27/2017	MW-27-D2 480-125815-14 10/12/2017
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	5	4.1	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Trichloroethylene (Trichloroethylene)	5	ug/L	< 2.0	< 2.0	0.26 J	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 2.0	< 2.0	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	110	88	70	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 4.0	< 4.0	< 3.0	< 10	68	< 2.0	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	100	140	150 B	NA	NA	130	100	81
Ethane	NE	ug/L	< 170	< 660	< 170	NA	NA	< 75	< 83	< 170
Ethene	NE	ug/L	< 150	< 620	< 150	NA	NA	< 70	< 77	< 150
Methane	NE	ug/L	1100	3700	3900	NA	NA	53	180	350
<b>Inorganics</b>										
Iron	0.3	ug/L	1300	8200	2100	NA	1300	12400	11600	9500
Manganese	0.3	ug/L	330 B	170 B	61 B	NA	38 B	550	1200 B	1700 B
Sodium	20	ug/L	960000	1690000	1770000	NA	NA	2690000 ^	3140000 ^	4460000 ^
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	279 B	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	884000	526000 B	725000	NA	279000 B	408000 B	303000	374000
Chloride	250	mg/L	5640	2770	3890	NA	NA	6330	9140	8290
Ferric Iron	NE	mg/L	1.3	8	2	NA	NA	12.4	11.6	9.1
Ferrous Iron	NE	ug/L	< 100	170 HF	91 J HF	NA	NA	< 100	< 100	450 HF
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	< 50	NA	NA	< 50	< 50	40 J
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	NA	NA	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	699000	157000	183000	NA	NA	808000	1300000	1120000 B
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	49200	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	160	NA	NA	NA
Sulfide	NE	ug/L	1400	63200	63200	NA	NA	12800	16600	8800
Total Organic Carbon (TOC)	NE	ug/L	14400 B	NA	NA	NA	NA	6300 B	4800 B	4700 B

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D2 480-139008-13 07/13/2018	MW-27-D2 480-143739-10 10/18/2018	MW-28-D1 480-102264-3 06/24/2016	MW-28-D1 480-103861-2 07/28/2016	MW-28-D1 480-120664-12 07/05/2017	MW-28-D1 480-123322-15 08/27/2017	MW-28-D1 480-125815-1 10/11/2017	MW-28-D1 480-143739-8 10/17/2018
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 4.0	< 1.0	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0
Xylene (total)	5	ug/L	< 8.0	< 3.0	< 2.0	< 20	< 2.0	< 8.0	< 8.0	<b>2.6 J</b>
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	<b>140</b>	<b>130 B</b>	NA	NA	<b>51</b>	<b>15</b>	<b>3.8 J</b>	<b>8.9 B</b>
Ethane	NE	ug/L	< 330	< 170	NA	NA	< 150	< 170	< 170	< 330
Ethene	NE	ug/L	< 310	< 150	NA	NA	< 140	< 150	< 150	< 310
Methane	NE	ug/L	<b>1500</b>	<b>1200</b>	NA	NA	<b>290</b>	<b>1000</b>	<b>520</b>	<b>1500</b>
<b>Inorganics</b>										
Iron	0.3	ug/L	<b>4600</b>	<b>2800</b>	<b>79</b>	NA	<b>3600</b>	<b>740</b>	<b>950</b>	<b>980</b>
Manganese	0.3	ug/L	<b>340 B</b>	<b>940 B</b>	<b>68 B</b>	NA	<b>67</b>	<b>19 B</b>	<b>27 B</b>	<b>22 B</b>
Sodium	20	ug/L	<b>2530000</b>	<b>3580000</b>	NA	NA	<b>418000 ^</b>	<b>1040000 ^</b>	<b>998000</b>	<b>386000</b>
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	<b>745 B</b>	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	<b>3630000 B</b>	<b>195000</b>	<b>745000 B</b>	NA	<b>457000</b>	<b>393000</b>	<b>196000</b>	<b>102000</b>
Chloride	250	mg/L	<b>7510</b>	<b>8300</b>	NA	NA	<b>3120</b>	<b>3310</b>	<b>1530</b>	<b>945</b>
Ferric Iron	NE	mg/L	<b>4.6</b>	<b>2.8</b>	NA	NA	<b>3.6</b>	<b>0.74</b>	<b>0.95</b>	<b>0.98</b>
Ferrous Iron	NE	ug/L	< 100	< 100	NA	NA	< 100	< 100	< 100	< 100
Nitrogen, Nitrate as N	10	ug/L	< 50	< 50	NA	NA	< 50	< 50	< 50	<b>76</b>
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	NA	NA	< 0.050	< 0.050	< 0.050	<b>0.044 J</b>
Sulfate (SO4)	NE	ug/L	<b>844000</b>	<b>1250000</b>	NA	NA	<b>340000</b>	<b>349000</b>	<b>196000</b>	<b>231000</b>
Sulfate (SO4)	NE	ug/L	NA	NA	<b>155000</b>	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	<b>54400</b>	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	<b>10800</b>	<b>7200</b>	NA	NA	<b>4000</b>	<b>18200</b>	<b>32800</b>	<b>7200</b>
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	<b>13000 B</b>	<b>14400 B</b>	<b>23900 B</b>	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-28-D2R 480-102264-4 06/24/2016	MW-28-D2R 480-103861-3 07/28/2016	MW-28-D2R 480-120664-13 07/05/2017	MW-28-D2R 480-123322-16 08/27/2017	MW-28-D2R 480-125815-2 10/11/2017	MW-28-D2R 480-139008-14 07/13/2018	MW-28-D2R 480-143739-9 10/17/2018	MW-29-D1 480-93983-5 01/14/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 5.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 2.0	< 8.0	< 2.0	< 8.0	< 3.0	< 10
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	120	120	91	91	140 B	NA
Ethane	NE	ug/L	NA	NA	< 7.5	< 83	< 170	< 330	< 170	NA
Ethene	NE	ug/L	NA	NA	< 7.0	< 77	< 150	< 310	< 150	NA
Methane	NE	ug/L	NA	NA	67	62	370	880	240	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	52800	NA	6800	6000	9300	5200	2200	NA
Manganese	0.3	ug/L	1100 B	NA	340	500 B	470 F1 B	190 B	710 B	NA
Sodium	20	ug/L	NA	NA	3810000 ^	5340000	4750000	3000000	4670000	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	182	NA	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	182000	NA	334000	337000 B	412000	468000 B	333000	NA
Chloride	250	mg/L	NA	NA	9090	11300 B	6670	4010	9820	NA
Ferric Iron	NE	mg/L	NA	NA	6.7	5.6	9.1	5.2	2.2	NA
Ferrous Iron	NE	ug/L	NA	NA	92 J HF	420 HF	160 HF	< 100	< 100	NA
Nitrogen, Nitrate as N	10	ug/L	NA	NA	< 50	< 50	< 50	< 50	260	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	NA
Sulfate (SO4)	NE	ug/L	NA	NA	1620000	1370000	938000	432000	1330000	NA
Sulfate (SO4)	NE	ug/L	1080000	NA	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	< 100	NA	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	2400	4000	3600	11200	3200	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	4000 B	4800 B	4500 B	NA	NA	NA

See Notes on Page 45.

Table 3

## Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018

Chevron Facility #6518040

Former Gulf Oil Terminal

Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-29-D1 480-102059-2 06/21/2016	MW-29-D1 480-108537-10 10/26/2016	MW-29-D1 480-108537-9 10/26/2016	MW-29-D1 480-120664-14 07/05/2017	MW-29-D1 480-123322-17 08/27/2017	MW-29-D1 480-125815-15 10/12/2017	MW-29-D1 480-139008-15 07/13/2018	MW-29-D1 480-143739-12 10/18/2018
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0
Xylene (total)	5	ug/L	2	9.7	4	3.7 J	4.3	4.3 J	5.5 J	8.1
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	180	150	140	180	210 B
Ethane	NE	ug/L	NA	NA	NA	< 300	< 660	< 170	< 660	< 1700
Ethene	NE	ug/L	NA	NA	NA	< 280	< 620	< 150	< 620	< 1500
Methane	NE	ug/L	NA	NA	NA	680	11000	5200	15000	19000
<b>Inorganics</b>										
Iron	0.3	ug/L	520	220 B	< 50	460	2400	3400	1300	1500
Manganese	0.3	ug/L	270 B	250 B	5.2 B	350	150 B	300 B	340 B	270 B
Sodium	20	ug/L	NA	NA	NA	951000 ^	2470000 ^	893000 ^	988000	960000
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	567 B	540	547	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	567000 B	540000	547000	556000	560000 B	619000	563000 B	535000
Chloride	250	mg/L	NA	NA	NA	1610	1580	1530	1680	1550
Ferric Iron	NE	mg/L	NA	NA	NA	0.46	2.4	3.4	1.3	1.5
Ferrous Iron	NE	ug/L	NA	NA	NA	< 100	< 100	< 100	< 100	< 100
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	< 50	< 50	< 50	< 50	< 50
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	NA	NA	NA	< 100000	< 100000	< 40000	< 40000	13600 J
Sulfate (SO4)	NE	ug/L	< 5000	< 5000	1800 J	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	230	NA	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	1200	< 2000	800 J	101000	1200	1200	800 J
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	13500 B	12900 B	11300 B	NA	NA

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-29-D2 480-93983-6 01/14/2016	MW-29-D2 480-102059-3 06/21/2016	MW-29-VD 480-93983-7 01/14/2016	MW-29-VD 480-102059-6 06/21/2016	MW-30-D1 480-93983-3 01/14/2016	MW-30-D1 480-102224-6 06/22/2016	MW-30-D2 480-93983-10 01/14/2016	MW-30-D2 480-93983-2 01/14/2016
<b>Volatile Organics (cont.)</b>										
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 10	< 4.0
<b>GC Volatiles - RSK-175</b>										
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics</b>										
Iron	0.3	ug/L	NA	64	NA	390	NA	360 B	NA	NA
Manganese	0.3	ug/L	NA	150 B	NA	62 B	NA	93 B	NA	NA
Sodium	20	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
<b>General Chemistry</b>										
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	453 B	NA	229 B	NA	841 B	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	453000 B	NA	229000 B	NA	841000 B	NA	NA
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	939000	NA	1890000	NA	90000	NA	NA
Sulfide	NE	ug/L	NA	17000	NA	< 100	NA	92700	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

Table 3

Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018  
 Chevron Facility #6518040  
 Former Gulf Oil Terminal  
 Oceanside, Township of Hempstead, New York

Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-30-D2 480-102224-5 06/22/2016	MW-30-VD 480-93983-4 01/14/2016	MW-30-VD 480-102224-4 06/22/2016	MW-31D-1R 480-93983-9 01/14/2016	MW-31D-1R 480-102224-8 06/22/2016	MW-31D-2R 480-93983-8 01/14/2016	MW-31D-2R 480-102224-9 06/22/2016
<b>Volatile Organics (cont.)</b>									
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethylene)	2	ug/L	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 20	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
<b>GC Volatiles - RSK-175</b>									
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA
<b>Inorganics</b>									
Iron	0.3	ug/L	< 50	NA	<b>4900 B</b>	NA	<b>230 B</b>	NA	<b>2200 B</b>
Manganese	0.3	ug/L	<b>110 B</b>	NA	<b>260 B</b>	NA	<b>25 B</b>	NA	<b>430 B</b>
Sodium	20	ug/L	NA	NA	NA	NA	NA	NA	NA
<b>General Chemistry</b>									
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	<b>755 B</b>	NA	<b>713 B</b>	NA	<b>221 B</b>	NA	<b>508 B</b>
Alkalinity, Total as CaCO3	NE	ug/L	<b>755000 B</b>	NA	<b>713000 B</b>	NA	<b>221000 B</b>	NA	<b>508000 B</b>
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10	ug/L	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	<b>241000</b>	NA	<b>1770000</b>	NA	<b>47200</b>	NA	<b>750000</b>
Sulfide	NE	ug/L	<b>64100 F1</b>	NA	< 100	NA	<b>600</b>	NA	<b>2800</b>
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA

See Notes on Page 45.

**Table 3**

**Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018**

**Chevron Facility #6518040**

**Former Gulf Oil Terminal**

**Oceanside, Township of Hempstead, New York**

**Notes:**

ID = Identification

NYSDEC = New York State Department of Environmental Conservation

TOGS = NYSDEC Technical and Operational Guidance Series ambient water quality standards and guidance values of June 1998

ug/L = micrograms per liter

Bolded values = compound was detected

Shaded cells = concentration above the TOGS

< = Less than indicated reporting limit

NE = Not established

J = Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentrations within this range are estimated.

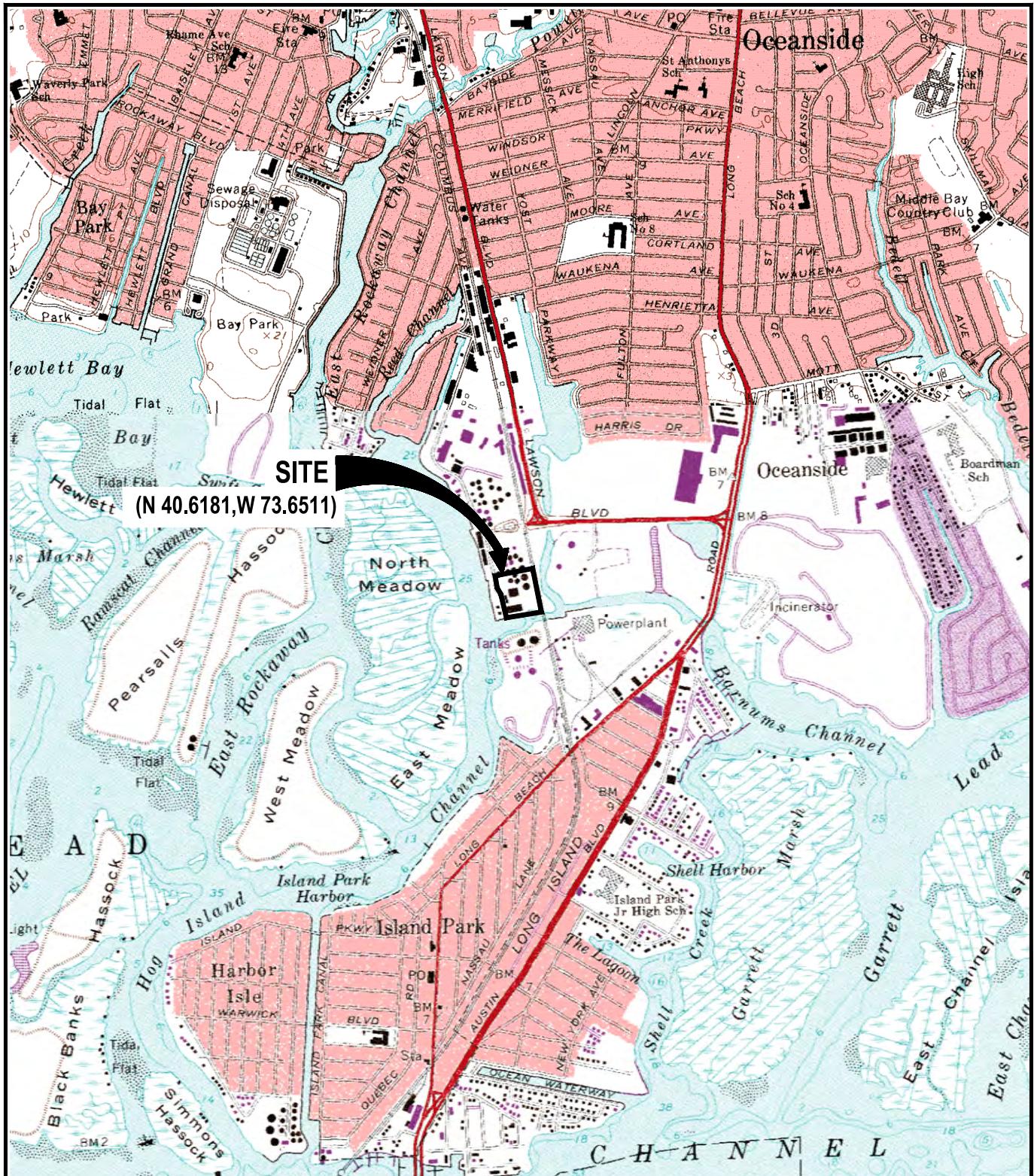
[ ] = Duplicate analysis results

D = Sample was diluted due to high concentration of target analytes

\* = LCS or LCSD above the control limits

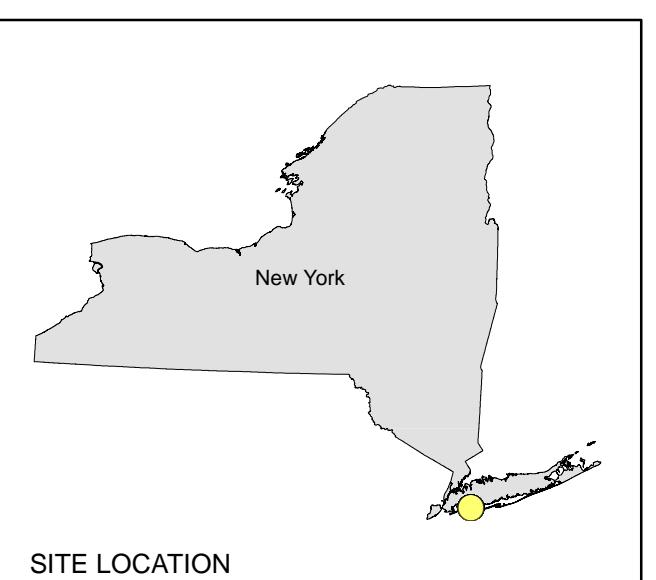
## FIGURES





FORMER GULF OIL TERMINAL  
(CHEVRON FACILITY #6518040)  
OCEANSIDE, NEW YORK

### SITE LOCATION MAP



#### SITE LOCATION

#### LEGEND:

- SHALLOW FILL UNIT MONITORING WELLS
- D1 HORIZON MONITORING WELLS
- D2 HORIZON MONITORING WELLS
- D3 HORIZON MONITORING WELLS
- VD HORIZON MONITORING WELLS

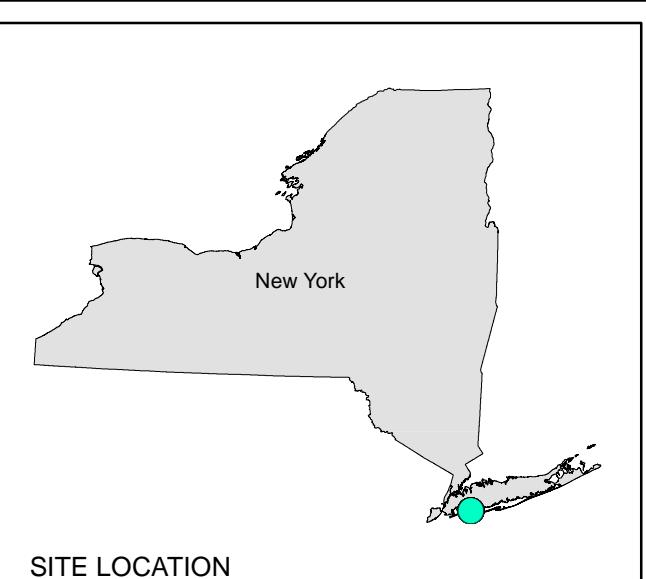
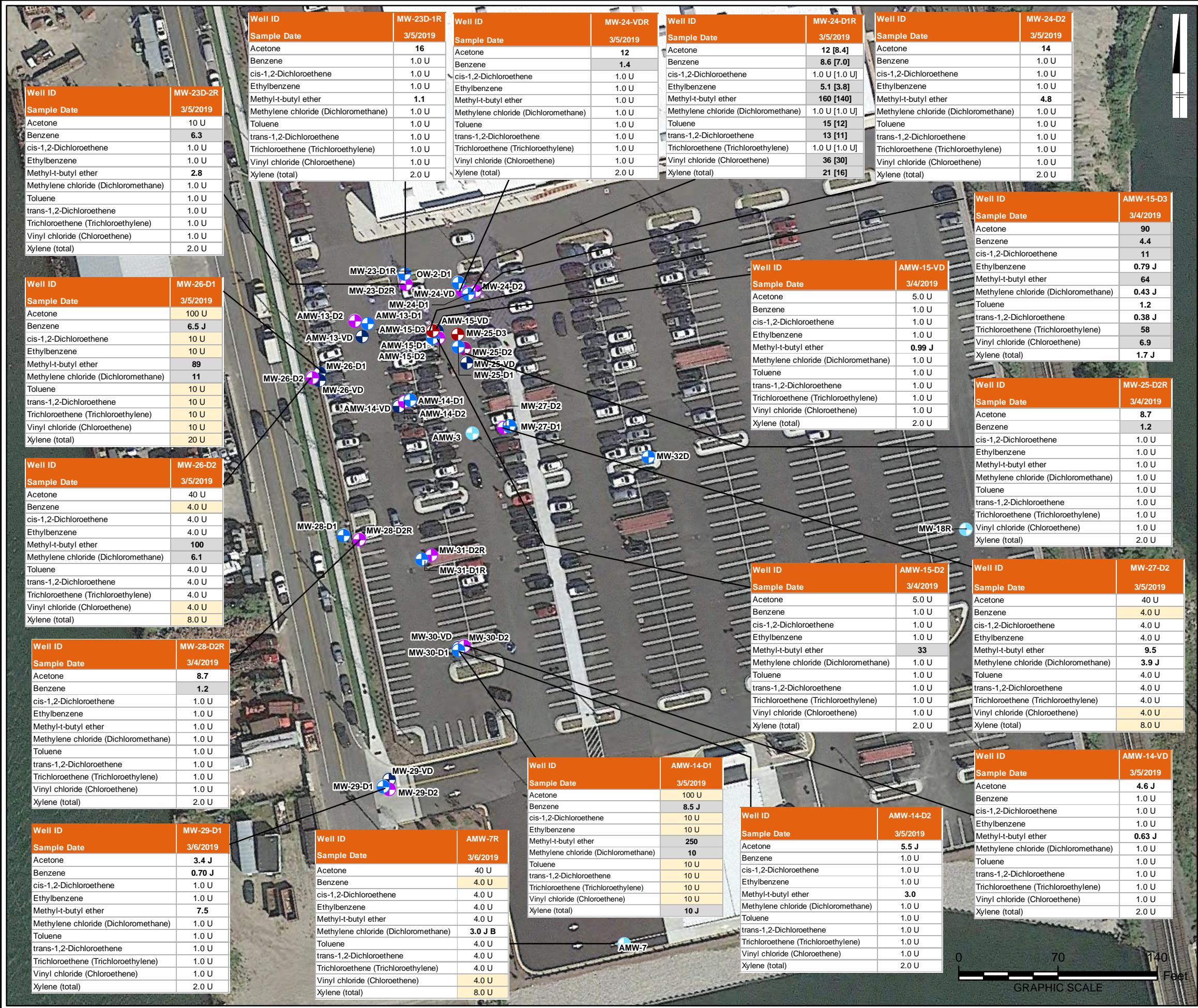
0 70 140  
Feet  
GRAPHIC SCALE

#### NOTE:

1. 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.

CHEVRON FACILITY 6518040  
3705 HAMPTON RD  
OCEANSIDE, NY

#### SITE PLAN



### SITE LOCATION

#### LEGEND:

- Shallow Fill Unit Monitoring Wells
- D1 Horizon Monitoring Wells
- D2 Horizon Monitoring Wells
- D3 Horizon Monitoring Wells
- VD Horizon Monitoring Wells

Parameter Name	NYSDEC TOGS 1.1.1
Acetone	50 ug/L
Benzene	1 ug/L
cis-1,2-Dichloroethene	5 ug/L
Ethylbenzene	5 ug/L
Methyl-t-butyl ether	10 ug/L
Methylene chloride (Dichloromethane)	5 ug/L
Toluene	5 ug/L
trans-1,2-Dichloroethene	5 ug/L
Trichloroethene (Trichloroethylene)	5 ug/L
Vinyl chloride (Chloroethene)	2 ug/L
Xylene (total)	5 ug/L

#### NOTES/ABBREVIATIONS:

- 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.
- ID = Identification
- NYSDEC = New York State Department of Environmental Conservation
- TOGS = NYSDEC Technical and Operational Guidance Series ambient water quality standards and guidance values of June 1998.
- ug/L = micrograms per liter
- All results are reported in ug/L
- Bolded** values = compound was detected
- Shaded cells = concentration above the TOGS
- Shaded cells = concentration exceeding the reporting limit
- J = Analyte detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL).
- Concentrations within this range are estimated.
- U = Less than indicated reporting limit
- [ ] = Duplicate analysis results

CHEVRON FACILITY 6518040  
3705 HAMPTON RD  
OCEANSIDE, NY

### GROUNDWATER ANALYTICAL RESULTS MARCH 4TH THROUGH 6TH, 2019

# **ATTACHMENT 1**

**Groundwater Gauging and Sampling Logs**



2

**TABLE 2**  
**SUMMARY OF GROUNDWATER GAUGING DATA**  
**FORMER GULF OIL TERMINAL**  
**OCEANSIDE, TOWNSHIP OF HEMPSTEAD, NEW YORK**

Monitoring Well	Date	Well Diameter (in)	Well Depth (ft btoc)	Top of Casing Elevation (ft)*	Depth to Water (ft btoc)	Corrected Groundwater Elevation (ft amsl)
AMW-3	02/18/19	2	12.42	9.05	2.37	
AMW-13-D1		2	34.01	9.87	8.84	
AMW-13-D2		2	43.95	9.76	8.74	
AMW-13-VD		2	71.82	9.77	8.42	
OW-2-D1		2	33.95	9.94	8.90	
MW-26-VD		2	68.25	9.99	8.44	
MW-29-D2		2	39.82	5.38	4.64	
MW-29-VD		2	67.22	5.27	5.74	
MW-30-D1		2	30	8.74	7.95	
MW-30-D2		2	46.63	8.72	8.02	
MW-30-VD		2	83.40	8.70	7.24	
MW-31-D1R		2	30.04	8.39	7.50	
MW-31-D2R		2	45.15	8.35	7.95	
MW-32D		2	37.45	8.85	8.19	
MW-27-D2		2	46.97	9.09	8.55	
MW-28-D2R		2	46.69	8.40	8.36	
<b>MW-24-D2</b>		2	42.20	10.00	9.99	
<b>MW-24-VDR</b>		2	73.98	9.72	9.72	
<b>AMW-15-VD</b>		2	72.15	9.82	10.11	
<b>AMW-7R</b>		2	14.42	9.95	9.60	
<b>AMW-14-VD</b>		2	75.61	9.25	10.03	
<b>AMW-14-D2</b>		2	43.17	9.37	10.33	
<b>MW-28-D1</b>		2	30.38	8.25	9.61	
<b>MW-26-D2</b>		2	43.76	9.40	10.92	
<b>MW-23-D2R</b>		2	44.63	10.52	12.01	
<b>AMW-15-D2</b>		2	36.2	9.71	11.36	
<b>AMW-15-D3</b>		2	48.6	9.81	11.38	
<b>MW-23-D1R</b>		2	25.78	9.84	11.39	
<b>AMW-15-D1</b>		2	36.2	9.74	11.89	
<b>MW-27-D1R</b>		2	32.99	9.01	10.65	
<b>MW-26-D1</b>		2	28.8	9.95	11.48	
<b>MW-29-D1</b>		2	23.45	5.21	7.19	
<b>MW-18R</b>	Part of 14-205	2	10.17	7.98		
<b>AMW-14-D1</b>		2	33.15	9.38	10.42	
<b>MW-24-D1R</b>		2	32.23	9.82	11.54	

**Notes:**

\*Top of casing elevations were surveyed by Borbas Surveying & Mapping, LLC, September 18, 2017 and re-drilled wells on June 1, 2018.  
in - inches

ft btoc - Feet below top of casing

ft amsl - Feet above mean sea level

NG - Not gauged

Highlighted **RED Bolded** wells **need** to be gauged in that order. Highlighted wells should be gauged before red wells and after regular wells, but in no specific order. Regular wells can be gauged in any order so long as they are before

First, any order      second, any order      Last, in specified order

DTW: 6.22

DTW: 11.41

MW-18R : Damaged bolts - No Access

Date: 3/4/19  
Technician:

## ATTACHMENT 2

Laboratory Analytical Reports





## LINKS

Review your project  
results through

Total Access

Have a Question?



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## ANALYTICAL REPORT

TestAmerica Buffalo  
10 Hazelwood Drive  
Amherst, NY 14228-2298  
Tel: (716)691-2600

Laboratory Job ID: 480-149865-1

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

Sampling Event: MNA Analysis  
Revision: 1

For:

ARCADIS U.S. Inc  
655 Third Avenue  
12th Floor  
New York City, New York 10017-9118

Attn: Loretta Kwong

Authorized for release by:

4/15/2019 2:22:29 PM

Rebecca Jones, Project Management Assistant I  
[rebecca.jones@testamericainc.com](mailto:rebecca.jones@testamericainc.com)

Designee for

John Schove, Project Manager II  
(716)504-9838  
[john.schove@testamericainc.com](mailto:john.schove@testamericainc.com)

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

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# 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.
□	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

Job ID: 480-149865-1

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

## 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**

Date Collected: 03/05/19 20:07

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-1**

Matrix: Ground Water

**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
<b>Methyl tert-butyl ether</b>	<b>100</b>		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
<b>Methylene Chloride</b>	<b>6.1</b>		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
<b>Benzene</b>	<b>6.5</b>	<b>J</b>	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
<b>Methyl tert-butyl ether</b>	<b>89</b>		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
<b>Methylene Chloride</b>	<b>11</b>		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
<b>Carbon dioxide</b>	<b>80000</b>		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
<b>Methane</b>	<b>950</b>		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**

**Matrix: Water**

Date Collected: 03/05/19 20:32

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**

**Matrix: Water**

Date Collected: 03/05/19 21:08

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
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.21	ug/L			03/08/19 02:17	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**

**Matrix: Water**

Date Collected: 03/05/19 21:08

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
<b>Methyl tert-butyl ether</b>	<b>3.0</b>		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
<b>Carbon dioxide</b>	<b>24000</b>		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
<b>Methane</b>	<b>44</b>		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
<b>Iron</b>	<b>3.2</b>		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:04	1
<b>Manganese</b>	<b>0.036</b>		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:04	1
<b>Sodium</b>	<b>584</b>	<sup>A</sup>	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
<b>Chloride</b>	<b>1110</b>		10.0	5.6	mg/L			03/08/19 15:41	20
<b>Sulfate</b>	<b>77.9</b>		40.0	7.0	mg/L			03/08/19 15:41	20
<b>Alkalinity, Total</b>	<b>66.7</b>		10.0	4.0	mg/L			03/12/19 18:43	1
<b>Nitrate as N</b>	<b>0.62</b>		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
<b>Total Organic Carbon</b>	<b>2.4</b>		1.0	0.43	mg/L			03/10/19 17:01	1
<b>Ferric Iron</b>	<b>3.2</b>		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
<b>Benzene</b>	<b>8.5</b>	<b>J</b>	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
<b>Methyl tert-butyl ether</b>	<b>250</b>		10	1.6	ug/L			03/08/19 02:45	10
<b>Methylcyclohexane</b>	<b>2.4</b>	<b>J</b>	10	1.6	ug/L			03/08/19 02:45	10
<b>Methylene Chloride</b>	<b>10</b>		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
<b>Xylenes, Total</b>	<b>10</b>	<b>J</b>	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**

Matrix: Water

Date Collected: 03/05/19 21:40

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	1
Manganese	0.012		0.0030	0.00040	mg/L			03/08/19 07:34	1
Sodium	896	^	1.0	0.32	mg/L			03/08/19 07:34	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**

Matrix: Water

Date Collected: 03/05/19 22:24

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
<b>Acetone</b>	<b>4.6</b>	<b>J</b>	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
<b>Carbon disulfide</b>	<b>0.37</b>	<b>J</b>	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
<b>Methyl tert-butyl ether</b>	<b>0.63</b>	<b>J</b>	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
<b>Carbon dioxide</b>	<b>23000</b>		5000	1800	ug/L			03/08/19 14:49	1
<b>Ethane</b>	<b>1.6</b>	<b>J</b>	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
<b>Methane</b>	<b>81</b>		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
<b>Iron</b>	<b>4.8</b>		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**

**Matrix: Water**

Date Collected: 03/05/19 22:24

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**

**Matrix: Water**

Date Collected: 03/05/19 23:03

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**

**Matrix: Water**

Date Collected: 03/05/19 23:03

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
<b>Methyl tert-butyl ether</b>	<b>9.5</b>		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
<b>Methylene Chloride</b>	<b>3.9</b>	<b>J</b>	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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>		<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Carbon dioxide</b>	<b>86000</b>		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
<b>Methane</b>	<b>1500</b>		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
<b>Iron</b>	<b>0.85</b>		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:12	1
<b>Manganese</b>	<b>0.18</b>		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:12	1
<b>Sodium</b>	<b>319</b>	<b>A</b>	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
<b>Chloride</b>	<b>824</b>		5.0	2.8	mg/L			03/08/19 18:50	10
<b>Sulfate</b>	<b>56.2</b>		20.0	3.5	mg/L			03/08/19 18:50	10
<b>Alkalinity, Total</b>	<b>302</b>		50.0	20.0	mg/L			03/12/19 18:48	5
<b>Nitrate as N</b>	<b>0.35</b>		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
<b>Total Organic Carbon</b>	<b>12.8</b>		1.0	0.43	mg/L			03/10/19 18:26	1
<b>Ferric Iron</b>	<b>0.59</b>		0.10	0.075	mg/L			03/18/19 15:43	1
<b>Ferrous Iron</b>	<b>0.26</b>	<b>HF</b>	0.10	0.075	mg/L			03/07/19 15:00	1
<b>Sulfide</b>	<b>27.2</b>		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**

**Matrix: Water**

Date Collected: 03/05/19 23:40

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
<b>Benzene</b>	<b>6.3</b>		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
<b>Carbon disulfide</b>	<b>0.20</b>	<b>J</b>	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
<b>Methyl tert-butyl ether</b>	<b>2.8</b>		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**

**Matrix: Water**

Date Collected: 03/05/19 23:40

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**

**Matrix: Water**

Date Collected: 03/06/19 00:12

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**

**Matrix: Water**

Date Collected: 03/06/19 00:12

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
<b>Cyclohexane</b>	<b>10</b>		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
<b>Methylcyclohexane</b>	<b>12</b>		4.0	0.64	ug/L			03/09/19 17:23	4
<b>Methylene Chloride</b>	<b>3.0</b> 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
<b>Carbon dioxide</b>	<b>55000</b>		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
<b>Methane</b>	<b>620</b>		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**

**Matrix: Water**

Date Collected: 03/06/19 00:12

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**

**Matrix: Water**

Date Collected: 03/06/19 00:46

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**

**Matrix: Water**

Date Collected: 03/06/19 00:46

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
<b>Cyclohexane</b>	<b>3.8</b>		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
<b>Isopropylbenzene</b>	<b>2.0</b>		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
<b>Methyl tert-butyl ether</b>	<b>7.5</b>		1.0	0.16	ug/L			03/09/19 17:50	1
<b>Methylcyclohexane</b>	<b>1.2</b>		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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Carbon dioxide</b>	<b>35000</b>		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
<b>Methane</b>	<b>1800</b>		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
<b>Iron</b>	<b>9.0</b>		0.050	0.019	mg/L		03/08/19 07:34	03/08/19 18:24	1
<b>Manganese</b>	<b>0.26</b>		0.0030	0.00040	mg/L		03/08/19 07:34	03/08/19 18:24	1
<b>Sodium</b>	<b>673</b> ^		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
<b>Chloride</b>	<b>1110</b>		10.0	5.6	mg/L			03/11/19 11:01	20
<b>Sulfate</b>	<b>14.3</b> J		20.0	3.5	mg/L			03/08/19 20:47	10
<b>Alkalinity, Total</b>	<b>97.9</b>		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
<b>Total Organic Carbon</b>	<b>3.2</b>		1.0	0.43	mg/L			03/10/19 22:11	1
<b>Ferric Iron</b>	<b>8.9</b>		0.10	0.075	mg/L			03/18/19 15:43	1
<b>Ferrous Iron</b>	<b>0.12</b> HF		0.10	0.075	mg/L			03/07/19 15:00	1
<b>Sulfide</b>	<b>1.2</b>		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
<b>Acetone</b>	<b>4.4</b>	<b>J</b>	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**

Date Collected: 03/06/19 02:10

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-10**

Matrix: Water

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
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
<b>Surrogate Legend</b>					
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	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	3
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	8
1,1,1-Trichloroethane	25.0	22.3		ug/L		89	73 - 126		9
1,1,2,2-Tetrachloroethane	25.0	24.1		ug/L		96	76 - 120		10
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	19.2		ug/L		77	61 - 148		11
1,1,2-Trichloroethane	25.0	24.3		ug/L		97	76 - 122		12
1,1-Dichloroethane	25.0	21.5		ug/L		86	77 - 120		13
1,1-Dichloroethene	25.0	19.8		ug/L		79	66 - 127		14
1,2,4-Trichlorobenzene	25.0	22.5		ug/L		90	79 - 122		15
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	%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		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
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		Unit	D	%Rec	Limits
		Result	Qualifier				
1,1,1-Trichloroethane	25.0	27.2		ug/L		109	73 - 126
1,1,2,2-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	
<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>LCS Qualifier</b>	<b>Limits</b>					
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.
Carbon dioxide	40000	40300		ug/L		101	Limits

**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.	RPD
Carbon dioxide	40000	43300		ug/L		108	Limits	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.
Ethane	14.5	14.3		ug/L		99	Limits
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.	RPD
Ethane	14.5	13.5		ug/L		93	79 - 120	6
Ethene	13.5	13.0		ug/L		96	85 - 120	6
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	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	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	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	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.	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**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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**

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

**Lab Sample ID: LCS 480-462657/62**

**Matrix: Water**

**Analysis Batch: 462657**

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

**Lab Sample ID: LCS 480-462657/73**

**Matrix: Water**

**Analysis Batch: 462657**

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

**Lab Sample ID: LCS 480-462657/85**

**Matrix: Water**

**Analysis Batch: 462657**

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

**Lab Sample ID: LCS 480-462657/94**

**Matrix: Water**

**Analysis Batch: 462657**

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

**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.
Total Organic Carbon	11.6		22.7	35.74		mg/L	106	54 - 131	Limits

**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.
Total Organic Carbon	60.0	64.71		mg/L	108	90 - 110	Limits

## 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.	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.	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.	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.	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	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	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.	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	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.	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	1
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	9060A	2
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	9060A	3
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	9060A	4
480-149865-6	MW-27D2-W-190305	Total/NA	Water	9060A	5
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	9060A	6
480-149865-8	AMW-7R-W-190306	Total/NA	Water	9060A	7
480-149865-9	MW-29D1-W-190306	Total/NA	Water	9060A	8
MB 480-462826/27	Method Blank	Total/NA	Water	9060A	9
MB 480-462826/51	Method Blank	Total/NA	Water	9060A	10
LCS 480-462826/28	Lab Control Sample	Total/NA	Water	9060A	11
LCS 480-462826/52	Lab Control Sample	Total/NA	Water	9060A	12
480-149865-8 MS	AMW-7R-W-190306	Total/NA	Water	9060A	13
480-149865-2 DU	MW-26D1-W-190305	Total/NA	Water	9060A	14
480-149865-9 DU	MW-29D1-W-190306	Total/NA	Water	9060A	15

## 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	12
MB 480-463298/8	Method Blank	Total/NA	Water	9060A	13
LCS 480-463298/9	Lab Control Sample	Total/NA	Water	9060A	14

## 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	15
480-149865-2	MW-26D1-W-190305	Total/NA	Water	SM 3500	1
480-149865-3	AMW-14D2-W-190305	Total/NA	Water	SM 3500	2
480-149865-4	AMW-14D1-W-190305	Total/NA	Water	SM 3500	3
480-149865-5	AMW-14VD-W-190305	Total/NA	Water	SM 3500	4
480-149865-6	MW-27D2-W-190305	Total/NA	Water	SM 3500	5
480-149865-7	MW-23D2R-W-190305	Total/NA	Water	SM 3500	6
480-149865-8	AMW-7R-W-190306	Total/NA	Water	SM 3500	7
480-149865-9	MW-29D1-W-190306	Total/NA	Water	SM 3500	8

# 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**

**Lab Sample ID: 480-149865-1**

**Date Collected: 03/05/19 20:07**

**Matrix: Ground 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 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**

**Lab Sample ID: 480-149865-2**

**Date Collected: 03/05/19 20:32**

**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 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

# 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**

**Date Collected: 03/05/19 21:08**

**Date Received: 03/07/19 09:00**

**Lab Sample ID: 480-149865-3**

**Matrix: Water**

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**

**Date Collected: 03/05/19 21:40**

**Date Received: 03/07/19 09:00**

**Lab Sample ID: 480-149865-4**

**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 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**

**Date Collected: 03/05/19 22:24**

**Date Received: 03/07/19 09:00**

**Lab Sample ID: 480-149865-5**

**Matrix: Water**

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**

Date Collected: 03/05/19 23:03

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-6**

Matrix: 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 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**

Date Collected: 03/05/19 23:40

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-7**

Matrix: Water

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**

Date Collected: 03/05/19 23:40

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-7**

Matrix: Water

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**

Date Collected: 03/06/19 00:12

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-8**

Matrix: Water

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**

Date Collected: 03/06/19 00:46

Date Received: 03/07/19 09:00

**Lab Sample ID: 480-149865-9**

Matrix: Water

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

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	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**

**Matrix: Water**

**Date Collected: 03/06/19 02:10**

**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

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## CHAIN OF CUSTODY / ANALYSIS REQUEST

480-149865 Chain of Custody

Name (for report and invoice) <i>K Wong, Lorretta</i>	Samplers Name (Printed) <i>Balek Sandago (Feb 7)</i>	Site/Project Identification C.U.W. - Oceanside #148016199	
Company <i>Arcadia</i>	P.O. # <i>ASPM00958040.00001</i>	State (Location of site): NJ: <input type="checkbox"/> NY: <input checked="" type="checkbox"/> Other: <input type="checkbox"/>	
Address City <i>Long Island City</i> Phone <i>415-744-4906</i>	Analysis Turnaround Time Standard <input checked="" type="checkbox"/> Rush Charges Authorized For: 2 Week <input type="checkbox"/> 1 Week <input type="checkbox"/> Other <input type="checkbox"/>	Regulatory Program: DKQP: <input type="checkbox"/>	
ANALYSIS REQUESTED (ENTER X BELOW TO INDICATE REQUEST)			
Sample Identification	Date	Time	Matrix
MW-26 D2-W-190305	3/5/19	2007	W
MW-26 D1-W-190305	3/5/19	2032	W
MW-14 D2-W-190305	3/5/19	2108	W
MW-14 D1-W-190305	3/5/19	2140	W
MW-4 VD-W-190305	3/5/19	2224	W
MW-27 D2-W-190305	3/5/19	2303	W
MW-27 D2R-W-190305	3/5/19	2303	W
MW-7R-W-190306	3/6/19	0012	W
MW-29 D1-W-190306	3/6/19	0046	W
TB-W-190306	3/6/19	0210	W
Preservation Used: 1 = ICE, 2 = HCl, 3 = H <sub>2</sub> SO <sub>4</sub> , 4 = HNO <sub>3</sub> , 5 = NaOH 6 = Other <i>M-Ac</i> , 7 = Other Zinc Acetate			
Soil: Water: 6 6 4 2 2 51 6 6 6			

### Special Instructions

Relinquished by <i>Balek Sandago</i>	Company <i>Arcaida</i>	Date / Time 3/6/19 1400	Received by <i>J. J. Givens</i>	Company <i>J. J. Givens</i>
Relinquished by <i>(Signature)</i>	Company <i>TAQ</i>	Date / Time 3/6/19 1900	Received by <i>Givens</i>	Company <i>TAQ 3/7/19 0900</i>
Relinquished by <i>(Signature)</i>	Company	Date / Time 	Received by <i> </i>	Company 
Relinquished by <i>(Signature)</i>	Company	Date / Time 	Received by <i> </i>	Company 

Water Metals Filtered (Yes/No)?

Company <i>J. J. Givens</i>	Date / Time 3/6/19 0900
Company <i>TAQ</i>	Date / Time 3/7/19 0900
Company	Date / Time 
Company	Date / Time 

Laboratory Certifications: New Jersey (12028), New York (11452), Pennsylvania (68-522), Connecticut (PH-0200), Rhode Island (132), Massachusetts (M-NJ312), North Carolina (No. 578) <i>31°C</i>	1
1	2
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9	10
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11	12
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14	15

# 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)

Address: 30 Community Drive, Suite 11,	Sampler: Phone:	Lab P#: Schoeve, John R
City: South Burlington	E-Mail: John.schoeve@testamericainc.com	
State/Zip: VT, 05403	Accreditations Required (See note): NELAP - New York	Pennsylvania
Phone: 802-660-1990(Tel) Email: 802-660-1919(Fax)	Due Date Requested: 3/19/2019	TAT Requested (days):
Project Name: CHEVRON - CVX#6518040 - Oceanside, NY	PO #:	RSK-175-CO2/Dissolved Gases - CO2
Site: Chevron Oceanside - CVX# 6518040	WO #:	RSK-175-CO2/Dissolved Gases - CO2
	Project #: 48016199	RSK-175-CO2/Dissolved Gases - CO2
	SSOW#:	RSK-175-CO2/Dissolved Gases - CO2
Sample Identification - Client ID (Lab ID)		
MW-26D2-W-190305 (480-149865-1)	Sample Date: 3/5/19	Sample Time: 20:07
MW-26D1-W-190305 (480-149865-2)	Eastern 3/5/19	Water X
AMW-14D2-W-190305 (480-149865-3)	Eastern 3/5/19	Water X
AMW-14D1-W-190305 (480-149865-4)	Eastern 3/5/19	Water X
AMW-4VD-W-190305 (480-149865-5)	Eastern 3/5/19	Water X
MW-27D2-W-190305 (480-149865-6)	Eastern 3/5/19	Water X
MW-23D2R-W-190305 (480-149865-7)	Eastern 3/5/19	Water X
AMW-7R-W-190306 (480-149865-8)	Eastern 3/6/19	Water X
MW-29D1-W-190306 (480-149865-9)	Eastern 3/6/19	Water X
Special Instructions/Note:		
Number of Contaminants		
Other:		

Note: Since laboratory accreditation is subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analytic & 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

### Unconfirmed

Deliverable Requested: I, II, III, IV, Other (Specify):	Primary Deliverable Rank: 2	Special Instructions/QC Requirements:
Empty Kit Relinquished by: 	Date: 3/7/19	Method of Shipment:
Relinquished by: 	Date/Time: 3/8/19	Received by:
Relinquished by: 	Date/Time:	Received by:
Custody Seals intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Seal No: 5951	Cooler Temperature(s) °C and Other Remarks: 15
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)		
<input type="checkbox"/> Return To Client	<input type="checkbox"/> Disposal By Lab	<input type="checkbox"/> Archive For Months

Ver: 01/16/2019

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

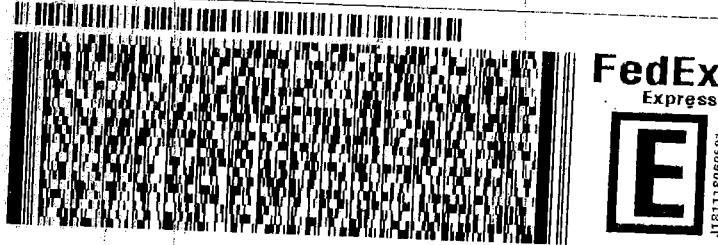
AMHERST, NY 14228  
UNITED STATES, US

SHIP DATE: 03/08  
ACTWGT: 18.35  
CAD: 846654/  
DIMS: 18x15

BILL RECIPI

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

(802) 660-1900  
DEPT: SAMPLE CONTROL  
REF: BURLINGTON



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 Source:** TestAmerica Buffalo

**List Number:** 1

**Creator:** Harper, Marcus D

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 Source:** TestAmerica Burlington

**List Number:** 2

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

**Creator:** Hall, Samuel C

Question	Answer	Comment	
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.	6
The cooler's custody seal, if present, is intact.	True	525951	7
Sample custody seals, if present, are intact.	True		8
The cooler or samples do not appear to have been compromised or tampered with.	True		9
Samples were received on ice.	True		10
Cooler Temperature is acceptable.	True		11
Cooler Temperature is recorded.	True	1.5°C	12
COC is present.	True		13
COC is filled out in ink and legible.	True		14
COC is filled out with all pertinent information.	True		15
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 <6mm (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

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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.

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# 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)

## 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-Dichloroethylene	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-Dichloroethylene	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
<b>Acetone</b>	<b>8.7</b>		5.0	5.0	ug/L			03/08/19 03:40	1
<b>Benzene</b>	<b>1.2</b>		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	1
Manganese	0.29		0.0030	0.00040	mg/L			03/09/19 08:47	1
Sodium	2930		5.0	1.6	mg/L			03/09/19 08:47	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
<b>2-Butanone (MEK)</b>	<b>11</b>		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**  
Date Collected: 03/04/19 22:18  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-2**  
Matrix: Water

## 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
<b>Carbon disulfide</b>	<b>1.9</b>		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
<b>cis-1,2-Dichloroethene</b>	<b>11</b>		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
<b>Cyclohexane</b>	<b>0.33 J</b>		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
<b>Ethylbenzene</b>	<b>0.79 J</b>		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
<b>Methyl tert-butyl ether</b>	<b>64</b>		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
<b>Methylene Chloride</b>	<b>0.43 J</b>		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
<b>Toluene</b>	<b>1.2</b>		1.0	0.38	ug/L			03/08/19 04:07	1
<b>trans-1,2-Dichloroethene</b>	<b>0.38 J</b>		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
<b>Trichloroethene</b>	<b>58</b>		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
<b>Vinyl chloride</b>	<b>6.9</b>		1.0	0.17	ug/L			03/08/19 04:07	1
<b>Xylenes, Total</b>	<b>1.7 J</b>		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
<b>Methane</b>	<b>2100</b>		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**  
**Date Collected: 03/04/19 22:35**  
**Date Received: 03/05/19 17:31**

**Lab Sample ID: 460-176527-3**  
**Matrix: Water**

## 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
<b>Methyl tert-butyl ether</b>	<b>0.99</b>	<b>J</b>	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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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
<b>Carbon dioxide</b>	<b>13000</b>		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
<b>Methane</b>	<b>29</b>		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
<b>Iron</b>	<b>2.6</b>		0.050	0.019	mg/L		03/09/19 08:47	03/11/19 11:37	1
<b>Manganese</b>	<b>0.15</b>		0.0030	0.00040	mg/L		03/09/19 08:47	03/11/19 11:37	1
<b>Sodium</b>	<b>5590</b>		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
<b>Chloride</b>	<b>15500</b>		100	56.4	mg/L			03/08/19 11:51	200
<b>Sulfate</b>	<b>1800</b>		400	69.8	mg/L			03/08/19 11:51	200
<b>Alkalinity, Total</b>	<b>393</b>		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
<b>Total Organic Carbon</b>	<b>2.6</b>		1.0	0.43	mg/L			03/10/19 04:20	1
<b>Ferric Iron</b>	<b>2.6</b>		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 Results

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

TestAmerica Job ID: 460-176527-1

**Client Sample ID: AMW-15D2-W-190304**  
**Date Collected: 03/04/19 23:01**  
**Date Received: 03/05/19 17:31**

**Lab Sample ID: 460-176527-4**  
**Matrix: Water**

## 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
<b>Methyl tert-butyl ether</b>	<b>33</b>		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**

Matrix: Water

Date Collected: 03/04/19 23:01  
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	1
Manganese	0.086		0.0030	0.00040	mg/L			03/09/19 08:47	1
Sodium	2230		5.0	1.6	mg/L			03/09/19 08:47	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**

Matrix: Water

Date Collected: 03/05/19 00:03  
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
1,1,2,2-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
<b>Methyl tert-butyl ether</b>	<b>4.8</b>		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
<b>Carbon dioxide</b>	<b>1800</b>	<b>J</b>	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**  
**Date Collected: 03/05/19 00:37**  
**Date Received: 03/05/19 17:31**

**Lab Sample ID: 460-176527-6**  
**Matrix: Water**

## 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
<b>Surrogate</b>		<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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	A	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

# 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**  
**Date Collected: 03/05/19 01:12**  
**Date Received: 03/05/19 17:31**

**Lab Sample ID: 460-176527-7**  
**Matrix: Water**

## 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
<b>1,1-Dichloroethane</b>	<b>0.61</b>	<b>J</b>	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
<b>Acetone</b>	<b>12</b>		5.0	5.0	ug/L			03/08/19 06:20	1
<b>Benzene</b>	<b>8.6</b>		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
<b>Carbon disulfide</b>	<b>4.0</b>		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
<b>Cyclohexane</b>	<b>0.81</b>	<b>J</b>	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
<b>Ethylbenzene</b>	<b>5.1</b>		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
<b>Isopropylbenzene</b>	<b>0.58</b>	<b>J</b>	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
<b>Methyl tert-butyl ether</b>	<b>160</b>		1.0	0.47	ug/L			03/08/19 06:20	1
<b>Methylcyclohexane</b>	<b>0.47</b>	<b>J</b>	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
<b>Toluene</b>	<b>15</b>		1.0	0.38	ug/L			03/08/19 06:20	1
<b>trans-1,2-Dichloroethene</b>	<b>13</b>		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
<b>Vinyl chloride</b>	<b>36</b>		1.0	0.17	ug/L			03/08/19 06:20	1
<b>Xylenes, Total</b>	<b>21</b>		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**

Matrix: Water

Date Collected: 03/05/19 01:12  
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	1
Manganese	0.16		0.0030	0.00040	mg/L			03/09/19 08:47	1
Sodium	998		5.0	1.6	mg/L			03/09/19 08:47	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**

Matrix: Water

Date Collected: 03/05/19 02:33  
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
<b>Methyl tert-butyl ether</b>	<b>1.1</b>		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
<b>Carbon dioxide</b>	<b>1900</b>	<b>J</b>	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
<b>Methane</b>	<b>1.6</b>	<b>J</b>	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
<b>1,1-Dichloroethane</b>	<b>0.48</b>	<b>J</b>	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
<b>Acetone</b>	<b>8.4</b>		5.0	5.0	ug/L			03/08/19 07:13	1
<b>Benzene</b>	<b>7.0</b>		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
<b>Carbon disulfide</b>	<b>3.2</b>		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
<b>Cyclohexane</b>	<b>0.62</b>	<b>J</b>	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**  
Date Collected: 03/05/19 00:00  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-9**  
Matrix: Water

## 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
<b>Ethylbenzene</b>	<b>3.8</b>		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
<b>Isopropylbenzene</b>	<b>0.43</b>	<b>J</b>	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
<b>Methyl tert-butyl ether</b>	<b>140</b>		1.0	0.47	ug/L			03/08/19 07:13	1
<b>Methylcyclohexane</b>	<b>0.35</b>	<b>J</b>	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
<b>Toluene</b>	<b>12</b>		1.0	0.38	ug/L			03/08/19 07:13	1
<b>trans-1,2-Dichloroethene</b>	<b>11</b>		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
<b>Vinyl chloride</b>	<b>30</b>		1.0	0.17	ug/L			03/08/19 07:13	1
<b>Xylenes, Total</b>	<b>16</b>		2.0	0.30	ug/L			03/08/19 07:13	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
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

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# Client Sample Results

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

TestAmerica Job ID: 460-176527-1

**Client Sample ID: TB-W-190304**  
**Date Collected: 03/04/19 20:05**  
**Date Received: 03/05/19 17:31**

**Lab Sample ID: 460-176527-10**  
**Matrix: Water**

## 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
<b>Acetone</b>	<b>5.0</b>		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
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>			<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>	
1,2-Dichloroethane-d4 (Surrogate)	95		74 - 132				03/08/19 03:14		1
4-Bromofluorobenzene	91		77 - 124				03/08/19 03:14		1
Dibromofluoromethane (Surrogate)	99		72 - 131				03/08/19 03:14		1
Toluene-d8 (Surrogate)	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

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	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	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac	1
1,2-Dichloroethane-d4 (Surr)			94		74 - 132				1
4-Bromofluorobenzene			91		77 - 124				1
Dibromofluoromethane (Surr)			99		72 - 131				1
Toluene-d8 (Surr)			101		80 - 120				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	8
1,1,1-Trichloroethane	20.0	21.0		ug/L		105	75 - 125		9
1,1,2,2-Tetrachloroethane	20.0	17.5		ug/L		87	74 - 120		10
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.8		ug/L		104	59 - 150		11
1,1,2-Trichloroethane	20.0	18.6		ug/L		93	78 - 120		12
1,1-Dichloroethane	20.0	21.2		ug/L		106	77 - 123		13
1,1-Dichloroethene	20.0	20.4		ug/L		102	74 - 123		14
1,2,4-Trichlorobenzene	20.0	19.3		ug/L		96	80 - 124		15
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	LCS	LCS	Unit	D	%Rec	%Rec.
	Added	Result	Qualifier				
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	LCS	Limits
	%Recovery	Qualifier	
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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
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	UF1	200	248		ug/L		124	69 - 133
Carbon tetrachloride	1.0	UF1	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	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
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	
<hr/>									
Surrogate	MS	MS	Limits	%Recovery	Qualifier	Unit	D	%Rec	%Rec.
	Result	Qualifier							
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	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
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**

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

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 593942**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
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

**MSD**    **MSD**

Surrogate	%Recovery	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**

**Client Sample ID: Method Blank**

**Matrix: Water**

**Prep Type: Total/NA**

**Analysis Batch: 594111**

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

Surrogate	MB	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	Result	Qualifier						
1,2-Dichloroethane-d4 (Surr)	92		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	MB	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
	102	80 - 120						
Toluene-d8 (Surr)								

**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	LCS	LCS	Unit	D	%Rec	%Rec.	Limits	
	Added	Result	Qualifier				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	LCS							
	%Recovery	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	LCSD	LCSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Added	Result	Qualifier				Limits		
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	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	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	Limits
Carbon dioxide	40000	40600		ug/L		102	70 - 130

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# 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		0.00040	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

**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.
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.
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.
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.	RPD
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.	RPD
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**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Analysis Batch: 462155**

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

**Lab Sample ID: LCS 480-462155/3**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Analysis Batch: 462155**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec.
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.
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.
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.
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.
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.	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.
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.	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.	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.	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.	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.
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.
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.
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.
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.
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	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	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	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	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
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	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
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	LCS	LCS	Unit	D	%Rec.	Limits
	Added	Result	Qualifier				
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	Sample	Spike	MS	MS	Unit	D	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier				
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	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
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	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
Ferrous Iron	2.1	HF	2.03		mg/L		5	20

# 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	5
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	3005A	6
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	3005A	7
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	3005A	8
460-176527-5	MW-24D2-W-190305	Total/NA	Water	3005A	9
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	3005A	10
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	3005A	11
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	3005A	12
460-176527-9	BD-W-190305	Total/NA	Water	3005A	13
MB 480-462133/1-A	Method Blank	Total/NA	Water	3005A	14
LCS 480-462133/2-A	Lab Control Sample	Total/NA	Water	3005A	15
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	5
460-176527-2	AMW-15D3-W-190304	Total/NA	Water	SM 3500	6
460-176527-3	AMW-15VD-W-190304	Total/NA	Water	SM 3500	7
460-176527-4	AMW-15D2-W-190304	Total/NA	Water	SM 3500	8
460-176527-5	MW-24D2-W-190305	Total/NA	Water	SM 3500	9
460-176527-6	MW-24VDR-W-190305	Total/NA	Water	SM 3500	10
460-176527-7	MW-24D1R-W-190305	Total/NA	Water	SM 3500	11
460-176527-8	MW-23D1R-W-190305	Total/NA	Water	SM 3500	12

# Lab Chronicle

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**

**Matrix: Water**

Date Collected: 03/04/19 20:55  
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 03:40	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**

**Lab Sample ID: 460-176527-2**

**Matrix: Water**

Date Collected: 03/04/19 22:18  
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 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**

**Lab Sample ID: 460-176527-3**

**Matrix: Water**

Date Collected: 03/04/19 22:35  
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 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**

Matrix: Water

Date Collected: 03/04/19 23:01

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**

Matrix: Water

Date Collected: 03/05/19 00:03

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**

Date Collected: 03/05/19 00:03  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-5**

Matrix: Water

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**

Date Collected: 03/05/19 00:37  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-6**

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 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**

Date Collected: 03/05/19 01:12  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-7**

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 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**

Date Collected: 03/05/19 01:12  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-7**

Matrix: Water

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**

Date Collected: 03/05/19 02:33  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-8**

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 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**

Date Collected: 03/05/19 00:00  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-9**

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 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**

Date Collected: 03/04/19 20:05  
Date Received: 03/05/19 17:31

**Lab Sample ID: 460-176527-10**

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 03:14	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.

# 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

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TestAmerica Edison

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## TestAmerica Buffalo

10 Hazelwood Drive  
Amherst, NY 14226-2298

## Chain of Custody Record

**TestAmerica**  
THE LEADER IN ENVIRONMENTAL TESTING

Ver. 01/16/2019

Phone (716) 691-2600 Fax (716) 691-7991

<b>Client Information</b>		Sample Ref:	Lab P/M:	Carrier Tracking No(s):
Client Contact:	Mr. Andrew Frasseltroff	Phone:	Schove, John R	COC No:
Company:	Laderach, Inc.	E-Mail:	john.schove@testamericainc.com	480-12652-26696.1
Address:	6310 Allentown Boulevard Long Island City, NY	PO#:		Page:
City:	Long Island City, NY	WQ#:		1 of 1
State/Zip:	NY 11104	Project #:		Job #:
Phone:	(646) 760-0500 ext 100	MINENV-00518040-0-08.02		176527
Email:	hassettmra@laderach.com	SSON#:		
Project Name:	Koretta, Kumi & Otsuka's MNA Analysis			
Site:	New York			

Analysis Requested												
Field Filtered Sample (Yes or No)												
Performed Methodology (Check all that apply)												
RSK_175_CO2 - Dissolved Gases - CO2												
300.0_28D - IC - Sulfate & Chloride												
6010C - Metals ICP - Fe, Mn & Na												
RSK_175 - Dissolved Gases - MEE												
8260C - TCL list VOCs												
9060A - Organic Carbon, Total (TOC)												
SM4590_S2_F - Sulfide, Total												
353.2, 353.2_Nitrite, Nitrate_Calc												
310.2 - Alkalinity												
3500_Fe+3_D_Cal, 3500_FE_D												
Total Number of containers												
Special Instructions/Note:												
MW-28D2R-W-190304	3/14/19	0855	G	Water	X	X	X	X	X	X	X	1
AMW-15D3-W-190304		2218	G	Water	X	X	X	X	X	X	X	2
AMW-15VD-W-190304		2355	G	Water	X	X	X	X	X	X	X	3
AMW-15D2-W-190304		2301	G	Water	X	X	X	X	X	X	X	4
MW-26D2-W-190305	3/15/19	0033	G	Water	X	X	X	X	X	X	X	5
MW-24D1R-W-190305		0037	G	Water	X	X	X	X	X	X	X	6
MW-24D1R-W-190305		0112	G	Water	X	X	X	X	X	X	X	7
BD-W-190305		0233	G	Water	X	X	X	X	X	X	X	8
BD-W-190304		—	G	Water	X	X	X	X	X	X	X	9
TB3-W-190304		2005	—	Water	X	X	X	X	X	X	X	10

Possible Hazard Identification

Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Radiological

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

Empty Kit Relinquished by:

Date:

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

Return To Client  Disposal By Lab  Archive For

Special Instructions/QC Requirements:

Method of Shipment:

Relinquished by: SELIX CONS

Date/Time:

Company:

Received by:

Date/Time:

Company:

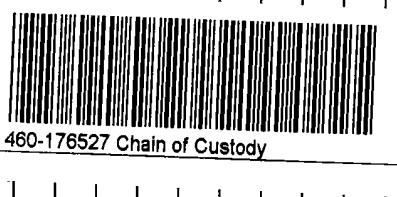
Received by:

Date/Time:

Company:

Custody Seals Intact:  Yes  No

Custody Seal No.:



**Job Number:**

TestAmerica Edison  
Receipt Temperature and pH Log

Page \_\_\_\_\_ of \_\_\_\_\_

Number of Closers	Colder Temperatures		
	Colder	Warmer	Very Warm
Greater 16	10	15	10
Greater 14	10	15	10
Greater 12	10	15	10
Greater 10	10	15	10
Greater 8	10	15	10
Greater 6	10	15	10
Greater 4	10	15	10
Greater 2	10	15	10
Greater 1	10	15	10

If pH adjustments are required record the information below:

**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.**

EDS-WI-038, Rev 4, 06/09/2014

Initials: GG

Date: 3/15/19

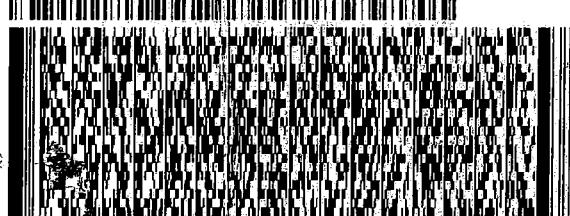


ORIGIN ID:LDJÄ (732) 549-3900  
KENNETH RIVERA/SAMPLE RECEIVING  
TESTAMERICA EDISON  
777 NEW DURHAM ROAD  
  
EDISON, NJ 08817  
UNITED STATES US

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

**BILL RECIPIENT**

**TO SAMPLE CUSTODY  
TEST AMERICA BURLINGTON  
30 COMMUNITY DRIVE  
SUITE 11  
SOUTH BURLINGTON VT 05403**



The FedEx Express logo consists of the word "FedEx" in its signature bold, italicized font, with "Express" written in a smaller, regular sans-serif font directly beneath it. A small square icon is positioned to the left of the text.

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**THU - 07 MAR 10:30A  
PRIORITY OVERNIGHT**

TRK# 413-2538 3167  
0201

**NC BTVA**

05403  
us BTV



# TestAmerica Edison

777 New Durham Road  
Edison, NJ 08817  
Phone (732) 549-3900 Fax (732) 549-3679

# Chain of Custody Record

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

<b>Client Information (Sub Contract Lab)</b>		Sampler:	Lab P.M. Schove, John R	Carrier Tracking No(s):	COC No: 460-54191.1																																																												
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericanainc.com	State of Origin: New York	Page:	Page 1 of 1																																																												
Company: TestAmerica Laboratories, Inc.	Address: 10 Hazelwood Drive, City: Amherst	Due Date Requested: 3/15/2019	Accreditations Required (See note): NELAP - New York	Job #: 460-176527-1	Preservation Codes:  A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Anchor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:																																																												
<b>Analysis Requested</b>																																																																	
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Total Number of Containers</td> <td colspan="5">Special Instructions/Note:</td> </tr> <tr> <td>3500</td> <td>Alkalinity</td> <td>3500</td> <td>FE<sup>+</sup>-D<sup>-</sup>Ca<sup>2+</sup>/Iron, Ferric</td> <td>3500</td> <td>M - Hexane</td> </tr> <tr> <td>RSK<sub>175</sub></td> <td>Dissolved Gases (GC)</td> <td>RSK<sub>175</sub></td> <td>N - None</td> <td>RSK<sub>175</sub></td> <td>O - AsNaO<sub>2</sub></td> </tr> <tr> <td>300.0-28D/IC</td> <td>Sulfate &amp; Chloride</td> <td>300.0-28D/IC</td> <td>P - Na2O4S</td> <td>300.0-28D/IC</td> <td>Q - Na2S03</td> </tr> <tr> <td>6010C/3005A-TOT Metals ICP - Fe, Mn &amp; Na</td> <td>Nitrate-Ca/C - 353.2 - Nitrate</td> <td>6010C/3005A-TOT Metals ICP - Fe, Mn &amp; Na</td> <td>R - Na2S03</td> <td>6010C/3005A-TOT Metals ICP - Fe, Mn &amp; Na</td> <td>S - H2SO4</td> </tr> <tr> <td>353.2-Nitrite/Nitrogen, Nitrite</td> <td>Nitrate-Ca/C - 353.2 - Nitrate</td> <td>353.2-Nitrite/Nitrogen, Nitrite</td> <td>T - TSP Dodecylate</td> <td>353.2-Nitrite/Nitrogen, Nitrite</td> <td>U - Acetone</td> </tr> <tr> <td>9060A/Organic Carbon, Total (TOC)</td> <td>9060A/Organic Carbon, Total (TOC)</td> <td>9060A/Organic Carbon, Total (TOC)</td> <td>V - MCAA</td> <td>9060A/Organic Carbon, Total (TOC)</td> <td>W - pH 4-5</td> </tr> <tr> <td>Perfomr M/S/MSD (yes or No)</td> <td>Perfomr M/S/MSD (yes or No)</td> <td>Perfomr M/S/MSD (yes or No)</td> <td>Z - other (specify)</td> <td>Perfomr M/S/MSD (yes or No)</td> <td>Other:</td> </tr> </table>						Total Number of Containers	Special Instructions/Note:					3500	Alkalinity	3500	FE <sup>+</sup> -D <sup>-</sup> Ca <sup>2+</sup> /Iron, Ferric	3500	M - Hexane	RSK <sub>175</sub>	Dissolved Gases (GC)	RSK <sub>175</sub>	N - None	RSK <sub>175</sub>	O - AsNaO <sub>2</sub>	300.0-28D/IC	Sulfate & Chloride	300.0-28D/IC	P - Na2O4S	300.0-28D/IC	Q - Na2S03	6010C/3005A-TOT Metals ICP - Fe, Mn & Na	Nitrate-Ca/C - 353.2 - Nitrate	6010C/3005A-TOT Metals ICP - Fe, Mn & Na	R - Na2S03	6010C/3005A-TOT Metals ICP - Fe, Mn & Na	S - H2SO4	353.2-Nitrite/Nitrogen, Nitrite	Nitrate-Ca/C - 353.2 - Nitrate	353.2-Nitrite/Nitrogen, Nitrite	T - TSP Dodecylate	353.2-Nitrite/Nitrogen, Nitrite	U - Acetone	9060A/Organic Carbon, Total (TOC)	9060A/Organic Carbon, Total (TOC)	9060A/Organic Carbon, Total (TOC)	V - MCAA	9060A/Organic Carbon, Total (TOC)	W - pH 4-5	Perfomr M/S/MSD (yes or No)	Perfomr M/S/MSD (yes or No)	Perfomr M/S/MSD (yes or No)	Z - other (specify)	Perfomr M/S/MSD (yes or No)	Other:												
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9060A/Organic Carbon, Total (TOC)	9060A/Organic Carbon, Total (TOC)	9060A/Organic Carbon, Total (TOC)	V - MCAA	9060A/Organic Carbon, Total (TOC)	W - pH 4-5																																																												
Perfomr M/S/MSD (yes or No)	Perfomr M/S/MSD (yes or No)	Perfomr M/S/MSD (yes or No)	Z - other (specify)	Perfomr M/S/MSD (yes or No)	Other:																																																												
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">Field Filtered Sample (Yes or No)</td> <td colspan="5">Preservation Code:</td> </tr> <tr> <td>Project #: 48016199</td> <td>SSOW#:</td> <td>Sample Date</td> <td>Sample Time</td> <td>Sample Type (C=comp, G=grab)</td> <td>Matrix (W=water, S=solid, O=water/oil, B=Brine, A=Air)</td> </tr> </table>						Field Filtered Sample (Yes or No)	Preservation Code:					Project #: 48016199	SSOW#:	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, B=Brine, A=Air)																																																
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Sample Identification - Client ID (Lab ID)	Preservation Code:																																																																
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AMW-15D3-W-190304 (460-176527-2)	3/4/19	22:18	Water	X	X																																																												
AMW-15VD-W-190304 (460-176527-3)	3/4/19	22:35	Water	X	X																																																												
AMW-15D2-W-190304 (460-176527-4)	3/4/19	23:01	Water	X	X																																																												
MW-24D2-W-190305 (460-176527-5)	3/5/19	00:03	Water	X	X																																																												
MW-24VDR-W-190305 (460-176527-6)	3/5/19	00:37	Water	X	X																																																												
MW-24D1R-W-190305 (460-176527-7)	3/5/19	01:12	Water	X	X																																																												
MW-23D1R-W-190305 (460-176527-8)	3/5/19	02:33	Water	X	X																																																												
BD-W-190305 (460-176527-9)	3/5/19	Eastern	Water	X	X																																																												
<p><b>Possible Hazard Identification</b></p> <p><b>Unconfirmed</b></p> <p>Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Primary Deliverable Rank: 2</p>																																																																	
<p><b>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</b></p> <p><input type="checkbox"/> Return To Client    <input type="checkbox"/> Disposal By Lab    <input type="checkbox"/> Archive For Months</p> <p>Special Instructions/QC Requirements:</p>																																																																	
<p>Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analysis &amp; accreditation compliance upon out subcontract laboratories. This sample is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/this 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.</p>																																																																	
<p><b>Empty Kit Relinquished by:</b></p> <p>Relinquished by: <i>[Signature]</i> Received by: <i>[Signature]</i> Date/Time: <i>3/6/19 1900</i> Company: <i>TestAmerica</i> Date/Time: <i>3/7/19 0900</i> Company: <i>TestAmerica</i></p> <p>Relinquished by: <i>[Signature]</i> Received by: <i>[Signature]</i> Date/Time: <i>[Signature]</i> Company: <i>TestAmerica</i> Date/Time: <i>[Signature]</i> Company: <i>TestAmerica</i></p> <p>Custody Seals Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>																																																																	
<p>Cooler Temperature(s) °C and Other Remarks: <i>71 74</i></p>																																																																	

Ver: 01/16/2019

## 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 </= 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 <6mm (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 Source:** TestAmerica Buffalo

**List Number:** 4

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

**Creator:** Hulbert, Michael J

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 </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.	6
The cooler's custody seal, if present, is intact.	True	Not present	7
Sample custody seals, if present, are intact.	True		8
The cooler or samples do not appear to have been compromised or tampered with.	True		9
Samples were received on ice.	True		10
Cooler Temperature is acceptable.	True		11
Cooler Temperature is recorded.	True	0.3°C	12
COC is present.	True		13
COC is filled out in ink and legible.	True		14
COC is filled out with all pertinent information.	True		15
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 <6mm (1/4").	N/A		
Multiphasic samples are not present.	True		
Samples do not require splitting or compositing.	True		
Residual Chlorine Checked.	N/A		