ARCADIS Design & Consultancy for natural and built assets

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

ENVIRONMENT

Date:
August 15, 2019

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Our ref:
30010967

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 May 9th through May 10th, 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**.

GROUNDWATER GAUGING

On May 9, 2019, 35 monitoring wells (AMW-3, AMW-7R, MW-18R, 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 extracting HydraSleeves. Monitoring wells were gauged with a water interface probe.

Measured depth-to-groundwater in the D1 horizon ranged from 4.20 feet below top of inner casing (btic) in MW-29-D1 to 9.58 feet btic in MW-26-D1. Measured depth-to-groundwater in the D2 horizon ranged from 4.22 feet btic in MW-29-D2

to 9.26 feet btic in MW-26-D2. Measured depth-to-groundwater in the VD horizon ranged from 3.90 feet btic in MW-29-VD to 9.94 feet btic in MW-26-VD. Groundwater elevation data were used to generate Groundwater Elevation Contour Maps for each horizon, D1, D2 and VD and are included as **Figure 3, 4, and 5**, respectively. The approximate groundwater flow direction for the D1, D2, and VD horizon is to the southwest. The groundwater flow direction during the second quarter 2019 are consistent with historical flow directions for each groundwater horizon. The well gauging data is summarized in **Table 1** and illustrated on **Figures 3, 4, and 5**.

GROUNDWATER SAMPLING

On May 9 through May 10, 2019, groundwater samples were collected from HydraSleeves that were previously deployed in 18 monitoring wells (AMW-7R, AMW-14-D1, AMW-14-D2, AMW-14-VD, AMW-15-D1, AMW-15-D2, AMW-15-D3, AMW-15-VD, MW-23-D2R, MW-24-D1R, MW-24-D2, MW-24-VDR, MW-26-D2, MW-27-D1R, MW-27-D2, MW-28-D1, MW-28-D2R and MW-29-D1) following the first quarter groundwater sampling event. HydraSleeves were redeployed in the 18 monitoring wells for the third quarter groundwater sampling event. Prior to collection, groundwater parameters (pH, temperature, specific conductivity, dissolved oxygen, oxidation-reduction potential, and turbidity) were collected. 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.

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 May 9 through May 10, 2019 sampling event:

- Benzene exceeded the TOGS Water Guidance value of (1 microgram per Liter [µg/L]) at monitoring wells AMW-14-D1 (7.0 µg/L), AMW-15-D1 (6.3 µg/L), MW-23-D2R (2.3 µg/L), MW-24-D1R (1.5 µg/L), MW-27-D1R (2.4 µg/L), MW-28-D1 (2.4 µg/L) and MW-29-D1 (9.8 µg/L).
- Ethylbenzene exceeded the TOGS Water Guidance value of 5 µg/L at monitoring well AMW-14-D1 (5.9 µg/L).

- Total xylenes exceeded the TOGS Water Guidance value of 5 µg/L at monitoring wells AMW-14-D1 (16 µg/L) and at AMW-15-D1 (6.3 µg/L).
- 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-14-D2 (33 µg/L), AMW-15-D1 (120 µg/L), AMW-15-D2 (61 µg/L), AMW-15-D3 (16 µg/L), MW-24-D1R (65 µg/L), MW-26-D2 (84 µg/L), MW-27-D1R (18 µg/L), and MW-29-D1 (51 µg/L).
- Vinyl chloride exceeds the TOGS Water Guidance value of 2 µg/L at monitoring wells AMW-14-D1 (2.1 µg/L) and MW-27-D1R (17 µg/L).
- Isopropylbenzene exceeds the TOGS Water Guidance value of 5 µg/L at monitoring well MW-29-D1 (18 µg/L).
- Trans-1,2-dichloroethene exceeds the TOGS Water Guidance Value of 5 µg/L at monitoring well AMW-14-D1 (11 µg/L) and AMW-15-D1 (7.4 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 and the higher of the two results were used for reporting and discussion purposes. The analytical results are summarized in **Table 2** and are illustrated on **Figure 6.** 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 September 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.

Sincerely,

Arcadis of New York, Inc.

Loretta Kwong
Project Manager

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Enclosures:

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2 Laboratory Analytical Report

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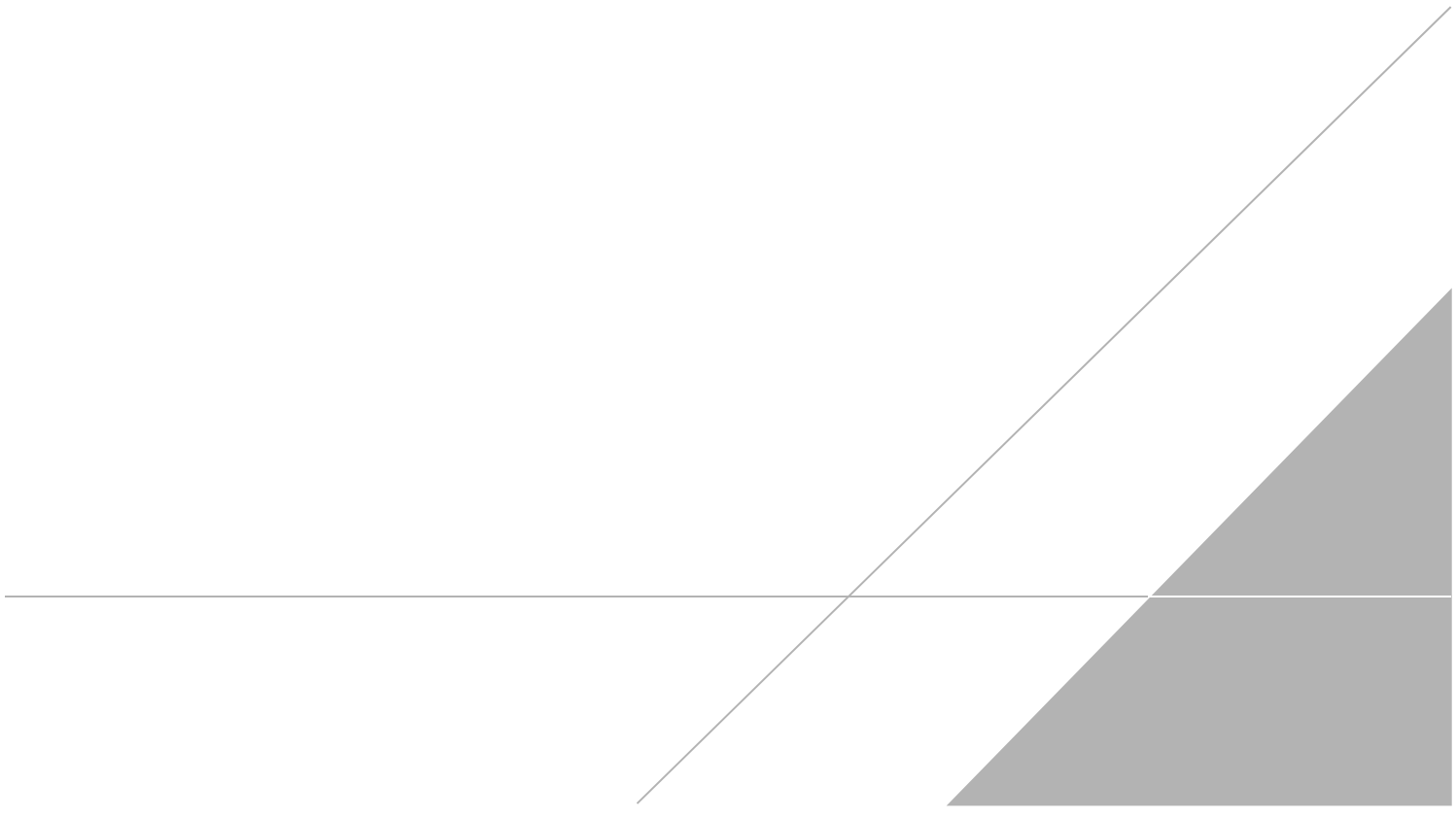

Table 1
Groundwater Elevation Data
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

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Monitoring Well ID	Date	Well Diameter (in)	Well Depth (feet below TOC)	TOC Elevation (feet NAVD 88)*	Depth to LNAPL (feet below TOC)	Depth to Groundwater (feet below TOC)	Groundwater Table Elevation (feet NAVD 88)
Shallow Fill Unit Monitoring Wells							
AMW-3	05/09/19	2	12.40	9.05	NG	5.90	3.15
AMW-7R	05/09/19	2	13.64	9.95	NG	8.42	1.53
MW-18R	05/09/19	2	9.90	7.98	NG	4.85	3.13
D1 Horizon Monitoring Wells							
AMW-13-D1	05/09/19	2	32.98	9.87	NG	8.52	1.35
AMW-14-D1	05/09/19	2	33.15	9.38	NG	7.10	2.28
AMW-15-D1	05/09/19	2	35.80	9.74	NG	7.48	2.26
MW-23-D1R	05/09/19	2	23.95	9.84	NG	7.80	2.04
MW-24-D1R	05/09/19	2	31.60	9.82	NG	8.32	1.50
MW-26-D1	05/09/19	2	15.90	9.95	NG	9.58	0.37
MW-27-D1R	05/09/19	2	32.10	9.01	NG	8.38	0.63
MW-28-D1	05/09/19	2	30.26	8.25	NG	7.43	0.82
MW-29-D1	05/09/19	2	23.40	5.21	NG	4.20	1.01
MW-30-D1	05/09/19	2	29.86	8.74	NG	7.78	0.96
MW-31-D1R	05/09/19	2	30.05	8.39	NG	7.41	0.98
MW-32D	05/09/19	2	36.45	8.85	NG	8.20	0.65
OW-2-D1	05/09/19	2	33.70	9.94	NG	8.50	1.44
D2 Horizon Monitoring Wells							
AMW-13-D2	05/09/19	2	42.88	9.76	NG	8.44	1.32
AMW-14-D2	05/09/19	2	42.72	9.37	NG	7.12	2.25
AMW-15-D2	05/09/19	2	41.10	9.71	NG	7.32	2.39
MW-23-D2R	05/09/19	2	45.80	10.52	NG	8.53	1.99
MW-24-D2	05/09/19	2	14.30	10.00	NG	8.03	1.97
MW-26-D2	05/09/19	2	45.25	9.40	NG	9.26	0.14
MW-27-D2	05/09/19	2	46.60	9.09	NG	8.76	0.33
MW-28-D2R	05/09/19	2	46.35	8.40	NG	7.50	0.90
MW-29-D2	05/09/19	2	37.60	5.38	NG	4.22	1.16
MW-30-D2	05/09/19	2	40.18	8.72	NG	7.60	1.12
MW-31-D2R	05/09/19	2	46.89	8.35	NG	7.19	1.16
D3 Horizon Monitoring Wells							
AMW-15-D3	05/09/19	2	48.04	9.81	NG	7.29	2.52
VD Horizon Monitoring Wells							
AMW-13-VD	05/09/19	2	70.30	9.77	NG	8.22	1.55
AMW-14-VD	05/09/19	2	75.70	9.25	NG	7.10	2.15
AMW-15-VD	05/09/19	2	71.30	9.82	NG	7.20	2.62
MW-24-VDR	05/09/19	2	71.80	9.72	NG	7.78	1.94
MW-26-VD	05/09/19	2	45.20	9.99	NG	9.94	0.05
MW-29-VD	05/09/19	2	69.70	5.27	NG	3.90	1.37
MW-30-VD	05/09/19	2	82.40	8.70	NG	7.90	0.80

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
LNAPL = Light Non Aqueous Phase Liquid
NAVD 88 = North American Vertical Datum of 1988
TOC = Top of Casing

Table 2
Summary of Analytical Groundwater Results - May 9 and 10, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, NY

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Parameter Name Date Sampled	NYSDEC TOGS 1.1.1	Units	AMW-7R 5/10/2019	AMW-14-D1 5/10/2019	AMW-14-D2 5/10/2019	AMW-14-VD 5/10/2019	AMW-15-D1 5/9/2019	AMW-15-D2 5/10/2019	AMW-15-D3 5/10/2019	AMW-15-VD 5/10/2019	MW-23-D2R 5/9/2019
Volatile Organics											
1,1,1-Trichloroethane	5	ug/L	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	**0.62 J**	1.0 U	1.0 U	**0.89 J**	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	50	ug/L	5.0 U	5.0 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	5.0 U	5.0 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	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	1	ug/L	**0.69 J**	**7.0**	1.0 U	1.0 U	**6.3**	1.0 U	1.0 U	1.0 U	**2.3**
Bromodichloromethane	50	ug/L	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	**0.79 J**	**0.32 J**	1.0 U	**1.3**	1.0 U	**0.29 J**	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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U*	1.0 U*	1.0 U*	1.0 U
cis-1,2-Dichloroethene	5	ug/L	1.0 U	1.0 U	**0.35 J**	1.0 U	1.0 U	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	NE	ug/L	**19**	**2.1**	1.0 U	1.0 U	**0.79 J**	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	50	ug/L	1.0 U	1.0 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	1.0 U	1.0 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	**0.39 J**	**5.9**	1.0 U	1.0 U	**2.6**	1.0 U	1.0 U	1.0 U	1.0 U
Isopropylbenzene	5	ug/L	**4.2**	**1.0**	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	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl-t-butyl ether	10	ug/L	1.0 U	**250**	**33**	1.0 U	**120**	**61**	**16**	**1.0**	**8.8**
Methylcyclohexane	NE	ug/L	**31**	**3.0**	1.0 U	1.0 U	**0.50 J**	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	ug/L	1.0 U	**0.84 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	ug/L	1.0 U	**11**	**0.85 J**	1.0 U	**7.4**	1.0 U	1.0 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	1.0 U	1.0 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	1.0 U	**0.39 J**	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*	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	1.0 U	**2.1**	**0.32 J**	1.0 U	**1.1**	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	5	ug/L	**1.3 J**	**16**	2.0 U	2.0 U	**6.3**	2.0 U	2.0 U	2.0 U	2.0 U

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - May 9 and 10, 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 5/10/2019	AMW-14-D1 5/10/2019	AMW-14-D2 5/10/2019	AMW-14-VD 5/10/2019	AMW-15-D1 5/9/2019	AMW-15-D2 5/10/2019	AMW-15-D3 5/10/2019	AMW-15-VD 5/10/2019	MW-23-D2R 5/9/2019
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**94**	**73**	**150**	**130**	**52**	**130**	**140**	**17**	**32**
Ethane	NE	ug/L	330 U	**150 J**	330 U	7.5 UH	830 U	170 U	330 U	7.5 UH	170 U
Ethene	NE	ug/L	310 U	**440**	310 U	7.0 UH	770 U	150 U	310 U	7.0 UH	150 U
Methane	NE	ug/L	**3,100 H**	**1,900**	**1,900**	**12 H**	**3,200**	**520**	**1,600**	**25 H**	**290**
Inorganics											
Iron	300	ug/L	**8,080**	**5,780**	**548**	**14,700**	**3,340**	**328**	**301**	**3,600**	**1,660**
Manganese	300	ug/L	**2,770**	**94.9**	**80.1**	**387**	**335**	**72**	**222**	**287**	**279**
Sodium	20,000	ug/L	**105,000**	**1,740,000**	**2,080,000**	**7,150,000 B**	**1,170,000**	**2,030,000**	**2,730,000**	**8,560,000**	**1,930,000**
General Chemistry											
Alkalinity, Total as CaCO3	NE	ug/L	**558,000**	**805,000**	**822,000**	**493,000**	**422,000**	**672,000**	**616,000**	**432,000**	**587,000**
Chloride	250	mg/L	**120 F1**	**3,700**	**4,200**	**110,000**	**2,500**	**4,200**	**8,800**	**18,000**	**3,800**
Ferric Iron	NE	mg/L	**8.1**	**5.8**	0.10 U	**14.4**	**3.3**	**0.24**	**0.3**	**3.6**	**1.4**
Ferrous Iron	NE	ug/L	100 U HF	100 U HF	**1,100 HF**	**300 HF**	100 U HF	**85 J HF**	100 U HF	100 U*	**240 HF**
Nitrate as Nitrogen	10	ug/L	100 U	**80 J**	**49 J**	**94 J**	**430 J**	**47 J**	**42 J**	100 U	**38 J**
Nitrite as Nitrogen	1	mg/L	**0.023 J**	0.10 U	0.10 U	**0.076 J**	**0.38 J**	**0.0070 J**	**0.056 J**	**0.035 J**	**0.0045 J**
Sulfide	NE	ug/L	1,000 U	**52,700**	**71,600**	1,000 U	**41,400**	**50,800**	**41,400**	1,000 U	**10,900**
Total Organic Carbon	NE	ug/L	**19,800**	**45,400 B**	**18,500 B**	**18,300 B**	**36,800 B**	**14,200 B**	**14,400 B**	**6,800 B**	**20,700 B**
Sulfate	NE	ug/L	**82,000 F1**	**98,000**	**84,000**	**2,000,000**	**200,000**	**220,000**	**980,000**	**2,000,000**	**290,000**

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - May 9 and 10, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, NY

ARCADIS Design & Consultancy for natural and built assets

Parameter Name Date Sampled	NYSDEC TOGS 1.1.1	Units	MW-24-D1R 5/9/2019	MW-24-D2 5/9/2019	MW-24-VDR 5/9/2019	MW-26-D2 5/9/2019	MW-27-D1R 5/10/2019	MW-27-D2 5/10/2019	MW-28-D1 5/9/2019	MW-28-D2R 5/9/2019	MW-29-D1 5/10/2019
Volatile Organics											
1,1,1-Trichloroethane	5	ug/L	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U* [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U **[0.32 J]**	1.0 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	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	**0.28 J**	**0.69 J**	**0.67 J**	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	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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	50	ug/L	5.0 U [5.0 U]	5.0 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	5.0 U [5.0 U]	5.0 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	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Benzene	1	ug/L	**1.5** [1.0 U]	1.0 U	1.0 U	**0.79 J**	**2.4**	1.0 U	**2.4**	**0.50 J**	**9.8**
Bromodichloromethane	50	ug/L	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	**0.62 J [0.22 J]**	1.0 U	**0.30 J**	**0.25 J**	**1.0**	1.0 U	**0.34 J**	**0.27 J**	1.0 U
Carbon Tetrachloride	5	ug/L	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	**0.57 J**	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Cyclohexane	NE	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**24**
Dibromochloromethane	50	ug/L	1.0 U [1.0 U]	1.0 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	1.0 U [1.0 U]	1.0 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	**1.0** [1.0 U]	1.0 U	1.0 U	**0.44 J**	1.0 U	1.0 U	**0.49 J**	1.0 U	**0.34 J**
Isopropylbenzene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**18**
Methyl acetate	NE	ug/L	5.0 U [5.0 U]	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Methyl-t-butyl ether	10	ug/L	**65 [7.4]**	1.0 U	**1.6**	**84**	**18**	**7.9**	**7.0**	1.0 U	**51**
Methylcyclohexane	NE	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**8.6**
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	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	1.0 U	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Toluene	5	ug/L	**1.5** [1.0 U]	1.0 U	1.0 U	1.0 U	**0.44 J**	1.0 U	1.0 U	1.0 U	**2.3**
trans-1,2-Dichloroethene	5	ug/L	**2.0** [1.0 U]	1.0 U	1.0 U	**0.90 J**	**0.96 J**	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene (Trichloroethylene)	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	**0.50 J**	1.0 U	1.0 U	1.0 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	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	**1.5** [1.0 U]	1.0 U	**0.40 J**	**1.5**	**17**	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	5	ug/L	**3.6** [2.0 U]	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	**0.47 J**	2.0 U	**3.3**

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - May 9 and 10, 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 5/9/2019	MW-24-D2 5/9/2019	MW-24-VDR 5/9/2019	MW-26-D2 5/9/2019	MW-27-D1R 5/10/2019	MW-27-D2 5/10/2019	MW-28-D1 5/9/2019	MW-28-D2R 5/9/2019	MW-29-D1 5/10/2019
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**98**	**5**	**92**	**130**	**97**	**66**	**120**	**42**	**190**
Ethane	NE	ug/L	330 U	7.5 U	83 U	660 U	83 U	170 U	660 U	330 U	83 U
Ethene	NE	ug/L	310 U	7.0 U	77 U	620 U	77 U	150 U	620 U	310 U	77 U
Methane	NE	ug/L	**1,600**	4.0 U	**13 J**	**750**	**1,600**	**310**	**1,300**	**730**	**9,300 E**
Inorganics											
Iron	300	ug/L	**4,120 [7980]**	**391**	**25,200**	**466**	**51,600**	**902**	**2,480**	**569**	**1,450**
Manganese	300	ug/L	**79.6 [279]**	**7.7 J**	**597**	**75.2**	**456**	**197**	**89**	**224**	**470**
Sodium	20,000	ug/L	**1,720,000 [1,670,000]**	**100,000**	**6,100,000**	**2,420,000**	**1,900,000**	**505,000**	**1,940,000**	**2,850,000**	**839,000**
General Chemistry											
Alkalinity, Total as CaCO3	NE	ug/L	**572000**	**112,000**	**461,000**	**684,000**	**579,000**	**599,000**	**667,000**	**385,000**	**469,000**
Chloride	250	mg/L	**3900**	**89**	**16,000**	**5,000**	**3,500**	**4,100**	**3,300**	**7,600**	**1,700**
Ferric Iron	NE	mg/L	**3.3**	**0.39**	**25.2**	**0.47**	**50.7**	**0.14**	**1.9**	**0.37**	**1.4**
Ferrous Iron	NE	ug/L	**860 HF**	100 U HF	100 U HF	100 U HF	**910 HF**	**760 HF**	**600 HF**	**200 HF**	**63 J HF**
Nitrate as Nitrogen	10	ug/L	**63 J**	**18 J**	**10 J**	**21 J**	**19 J**	**29 J**	100 U	100 U	100 U
Nitrite as Nitrogen	1	mg/L	**0.014 J**	**0.038 J**	**0.063 J**	0.10 U	**0.010 J**	0.10 U	**0.016 J**	**0.036 J**	**0.026 J**
Sulfide	NE	ug/L	**41,400**	1,000 U	1,000 U	**54,600**	**37,600**	**24,400**	**45,200**	**10,900**	**1,100**
Total Organic Carbon	NE	ug/L	**15,400 B**	**6,300 B**	**7,700 B**	**14,600 B**	**17,600**	**15,200**	**12,900 B**	**9,400 B**	**14,200**
Sulfate	NE	ug/L	**250,000**	**9,100**	**1,700,000**	**350,000**	**260,000**	**250,000**	**170,000**	**870,000**	**13,000**

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - May 9 and 10, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, NY

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
Bold = detected concentration
Shade = concentration was above the TOGS
Shade = reporting limit was above the TOGS
B = Compound was found in the blank and sample.
F1 = Matrix spike and/or matrix spike duplicate recovery was 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 was detected at a level less than the Reporting Limit (RL) and greater than or equal to the Method Detection Limit (MDL). Concentration was within this range are estimated
NE = Not established
U = Less than indicated reporting limit
[ ] = Duplicate analysis results
* = LCS or LCSD was above the control limits.
^ = Instrument related quality control was outside the acceptance limits.
D = Sample was diluted due to high concentration of target analytes.

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

ARCADIS Design & Consultancy for natural and built assets

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	AMW-14-D1 480-103718-1 07/26/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 5.0	< 1.0	< 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	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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	< 1.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.91 J**
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.46 J**
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	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 1.0	< 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	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 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	**3.2 J**	**5.8 J**	< 10	< 10
2-Hexanone	50	ug/L	< 25	< 5.0	< 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	**3.3 J**	< 5.0	< 5.0	**2.4 J**	< 5.0	< 5.0
Acetone	50	ug/L	**25 J**	**6.5 J**	**3.4 J**	**3.2 J**	**4.8 J**	**18**	**46**	**4.6 J**	**3.9 J**
Benzene	1	ug/L	**80**	< 1.0	**4.5**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**4.3**
Bromodichloromethane	50	ug/L	< 5.0	**0.99 J**	< 1.0	**0.97 J**	< 1.0	< 1.0	< 1.0	**0.85 J**	< 1.0
Bromoform	50	ug/L	< 5.0	**3.4**	**1.1**	**4.2**	**0.62 J**	**3.1**	< 1.0	**2.5**	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 5.0	**2.7**	**2.8**	**0.66 J**	**12**	**1.5**	**7.9**	**2.6**	**2.8**
Carbon Tetrachloride	5	ug/L	< 5.0	< 1.0	< 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	< 1.0
Chloroethane	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 5.0	**0.37 J**	< 1.0	**0.36 J**	< 1.0	< 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	< 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	**1**
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	**12**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**1.9**
Dibromochloromethane	50	ug/L	< 5.0	**2.4**	**0.82 J**	**2.6**	**0.41 J**	**2.1**	< 1.0	**2**	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 5.0	< 1.0	**1.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**3.6**
Isopropylbenzene	5	ug/L	**24**	< 1.0	< 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	< 2.5
Methyl-t-butyl ether	10	ug/L	**32**	**10**	**63 F1**	**3.5**	**41**	**5**	**3.4**	**12**	**140 E**
Methylcyclohexane	NE	ug/L	**5.4**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.97 J**
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 1.0	< 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	< 1.0
Tetrachloroethene	5	ug/L	< 5.0	**0.38 J**	< 1.0	**0.57 J**	< 1.0	**1.5**	**1**	< 1.0	< 1.0
Toluene	5	ug/L	< 5.0	< 1.0	< 1.0	**1.3**	< 1.0	**1.6**	**1.3**	< 1.0	**7.1**

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	AMW-14-D1 480-103718-1 07/26/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**7.8**
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 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	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 5.0	**1.3**	**9.9**	< 1.0	< 1.0	< 1.0	< 1.0	**1.4**	**1600 E**
Xylene (total)	5	ug/L	< 10	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	**11**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics											
Iron	300	ug/L	NA	**3,500**	NA	**2,700**	NA	**26,100**	NA	**410**	NA
Manganese	300	ug/L	NA	**510 B**	NA	**740 B**	NA	**1100 B**	NA	**370 B**	NA
Sodium	20,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	**569 B**	NA	**732 B**	NA	**732 B**	NA	**886 B**	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	**569,000 B**	NA	**732,000 B**	NA	**732,000 B**	NA	**886,000 B**	NA
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	**170,000**	NA	**250,000**	NA	**1,860,000**	NA	**103,000**	NA
Sulfide	NE	ug/L	NA	**11,900**	NA	**2,600**	NA	< 100	NA	**48,000**	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	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 480-120664-3 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-D1 460-181653-13 05/10/2019	AMW-14-D2 06/23/2016	AMW-14-D2 07/26/2016	AMW-14-D2 07/27/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	**0.62 J**	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 40	< 20	< 80	< 50	<5.0	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 20	< 20	< 10	< 40	< 10	<5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 20	< 10	< 40	< 10	<5.0	**3.2 J**	< 5.0	< 5.0
Acetone	50	ug/L	< 40	< 40	< 20	< 80	< 25	<5.0	**3.3 J**	**3.1 J**	**9.6 J**
Benzene	1	ug/L	**2.0 J**	< 4.0	**4.7**	**5.3 J**	**0.98 J**	**7.0**	< 1.0	**0.88 J**	< 1.0
Bromodichloromethane	50	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	**0.99 J**	< 1.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	**4.6**	**1.3**	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 4.0	< 4.0	**1.3 J**	< 8.0	< 1.0	**0.79 J**	**5.5**	**12**	**8.4**
Carbon Tetrachloride	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 4.0	**3**	< 8.0	< 5.0	**2.1**	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	**2.6**	**0.79 J**	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 4.0	< 4.0	**7.2**	**7.5 J**	**1**	**5.9**	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	**1.0**	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 10	< 5.0	< 20	< 10	<5.0	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**170**	**170**	**170**	**160**	**120**	**250**	**3.1**	**24**	**0.58 J**
Methylcyclohexane	NE	ug/L	< 4.0	< 4.0	**2.4**	**1.7 J**	**0.40 J**	**3.0**	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 4.0	**0.95 J**	< 8.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	**0.38 J**
Toluene	5	ug/L	< 4.0	< 4.0	**1.0 J**	< 8.0	**0.27 J**	**0.84 J**	**0.81 J**	**0.64 J**	**7.7**

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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	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-D1 460-181653-13 05/10/2019	AMW-14-D2 06/23/2016	AMW-14-D2 07/26/2016	AMW-14-D2 07/27/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	**13**	**8.6**	< 1.0	**11**	< 1.0	**0.90 J**	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**78**	**7.6**	**3.2**	< 8.0	**32**	**2.1**	< 1.0	**3.6**	< 1.0
Xylene (total)	5	ug/L	**3.2 J**	< 8.0	**20**	**16**	**1.6 J**	**16**	< 2.0	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**130**	**79**	**23**	**42**	**120 B**	**73**	NA	NA	NA
Ethane	NE	ug/L	< 150	< 330	< 170	< 660	< 330	**150 J**	NA	NA	NA
Ethene	NE	ug/L	< 140	**200 J**	**190**	**260 J**	< 310	**440**	NA	NA	NA
Methane	NE	ug/L	**1,100**	**550**	**580**	**2,000**	**1,600**	**1,900**	NA	NA	NA
Inorganics											
Iron	300	ug/L	**4,700**	**5,200**	**4,400**	**1,600**	**5,000**	**5,780**	**6,600**	NA	NA
Manganese	300	ug/L	**48**	**49 B**	**48 B**	**14 B**	**55 B**	**94.9**	**510 B**	NA	NA
Sodium	20,000	ug/L	**1,690,000 ^**	**1,730,000**	**1,590,000**	**975,000**	**1,560,000**	**1,740,000**	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA		**740 B**	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**716,000 B**	**563,000 B**	**563,000**	**623,000 B**	**673,000**	**805,000**	**740,000 B**	NA	NA
Chloride	250	mg/L	**3,060**	**3,130**	**1,860**	**2,970**	**3,620**	**3,700**	NA	NA	NA
Ferric Iron	NE	mg/L	**4.5**	**5.2**	**4.4**	**1.5**	**4.7**	**5.8**	NA	NA	NA
Ferrous Iron	NE	ug/L	**170 HF**	< 100	< 100	**120 HF**	**260 HF**	< 100 HF	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	< 50	**80 J**	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.10	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**140,000**	**251,000**	**124,000 B**	**172,000**	**198,000 B**	**98,000**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA		**263,000**	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA		**22,500**	NA	NA
Sulfide	NE	ug/L	**38,000**	**56,400**	**50,400**	**50,800**	**48,400**	**52,700**	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	**13,100 B**	**10,600 B**	**23,600 B**	NA	NA	**45,400 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	AMW-14-D2 08/27/2017	AMW-14-D2 10/11/2017	AMW-14-D2 07/12/2018	AMW-14-D2 10/17/2018	AMW-14-D2 460-181653-6 05/10/2019	AMW-14-VD 06/23/2016	AMW-14-VD 07/27/2016	AMW-14-VD 07/05/2017	AMW-14-VD 08/27/2017
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 20	< 50	<5.0	**3.9 J**	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 10	< 10	<5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 10	< 10	<5.0	**2.1 J**	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 10	< 10	< 20	< 25	<5.0	**22**	**8.9 J**	**3.7 J**	< 10
Benzene	1	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	**0.87 J**	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	**3**	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**2.7**	**0.94 J**	< 2.0	< 1.0	**0.32 J**	**0.63 J**	**9.9**	**0.25 J**	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	**0.37 J**	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	**0.35 J**	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 2.0	< 5.0	< 1.0	**0.32 J**	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	**2**	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 5.0	< 10	<5.0	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**14**	**48**	**62**	**44**	**33**	**0.91 J**	**0.59 J**	**0.51 J**	**0.42 J**
Methylcyclohexane	NE	ug/L	**0.27 J**	< 1.0	< 2.0	< 5.0	< 1.0	**0.36 J**	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	**0.59 J**	**0.41 J**	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	**10**	**8.2**	< 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-14-D2 08/27/2017	AMW-14-D2 10/11/2017	AMW-14-D2 07/12/2018	AMW-14-D2 10/17/2018	AMW-14-D2 460-181653-6 05/10/2019	AMW-14-VD 06/23/2016	AMW-14-VD 07/27/2016	AMW-14-VD 07/05/2017	AMW-14-VD 08/27/2017
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	**0.85 J**	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 2.0	< 1.0	**0.32 J**	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 4.0	< 3.0	<2.0	**0.79 J**	< 2.0	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**18**	**100**	**120**	**150 B**	**150**	NA	NA	**120**	**100**
Ethane	NE	ug/L	< 83	< 170	< 330	< 330	< 330	NA	NA	< 7.5	< 7.5
Ethene	NE	ug/L	< 77	< 150	< 310	< 310	< 310	NA	NA	< 7.0	< 7.0
Methane	NE	ug/L	**210**	**1,200**	**970**	**2,200**	**1,900**	NA	NA	**20**	**18**
Inorganics											
Iron	300	ug/L	**34 J**	**17,300**	**2,500**	**2,700**	**548**	**37,800**	NA	**11,300**	**17,000**
Manganese	300	ug/L	**16 B**	**760 B**	**78 B**	**100 B**	**80.1**	**720 B**	NA	**300**	**420 B**
Sodium	20,000	ug/L	**13,500**	**3,260,000**	**2,210,000**	**2,230,000**	**2,080,000**	NA	NA	**4,800,000 ^**	**9,160,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA		**427**	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**439,000 B**	**830,000**	**785,000 B**	**485,000 B**	**822,000**	**427,000**	NA	**440,000 B**	**415,000 B**
Chloride	250	mg/L	**4,930**	**4,070**	**4,380**	**4,510**	**4,200**	NA	NA	**15,200**	**15,400**
Ferric Iron	NE	mg/L	< 0.10	**17.3**	**2.5**	**2.7**	<0.10	NA	NA	**11.3**	**12.3**
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	< 100	**1,100 HF**	NA	NA	< 100	**4,700 HF**
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	**49 J**	NA	NA	< 50	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	<0.10	NA	NA	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**507,000**	**210,000 B**	**315,000**	**327,000 B**	**84,000**	NA	NA	**1,830,000**	**2,000,000**
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA		**1,780,000**	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	**71,600**	< 100	NA	NA	NA
Sulfide	NE	ug/L	**4,200**	**27,200**	**56,000**	**58,800**		NA	NA	**800 J**	< 1,000
Total Organic Carbon (TOC)	NE	ug/L	**7,800 B**	**11,600 B**	NA	NA	**18,500 B**	NA	NA	**3,400 B**	**4,000 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	AMW-14-VD 10/11/2017	AMW-14-VD 07/12/2018	AMW-14-VD 10/17/2018	AMW-14-VD 460-181653-5 05/10/2019	AMW-15-D1 06/23/2016	AMW-15-D1 07/27/2016	AMW-15-D1 10/26/2016	AMW-15-D1 10/26/2016	AMW-15-D1 07/05/2017
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 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	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 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	< 4.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 10	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 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	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 50	<5.0	< 10	< 50	< 100	< 40	< 40
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 10	<5.0	< 5.0	< 25	< 50	< 20	< 20
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 10	<5.0	**2.1 J**	< 25	< 50	< 20	< 20
Acetone	50	ug/L	< 10	< 10	< 25	<5.0	**4.2 J**	< 50	< 100	< 40	< 40
Benzene	1	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**0.48 J**	**3.9 J**	**11**	**5.1**	< 4.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**2.2**	< 5.0	< 10	< 4.0	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Carbon disulfide	60	ug/L	**1.6**	< 1.0	< 1.0	<1.0	**0.46 J**	< 5.0	< 10	**1.7 J**	< 4.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**0.51 J**	< 5.0	< 10	< 4.0	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0*	< 1.0	< 5.0	< 10	< 4.0	< 4.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**20**	**220**	**81**	**38**	< 4.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 5.0	<1.0	< 1.0	< 5.0	< 10	**2.0 J**	< 4.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**1.1**	< 5.0	< 10	< 4.0	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0*	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 10	<5.0	< 2.5	< 13	< 25	< 10	< 10
Methyl-t-butyl ether	10	ug/L	**0.65 J**	**0.49 J**	< 1.0	<1.0	**29**	**51**	**110**	**180**	**170**
Methylcyclohexane	NE	ug/L	**0.58 J**	< 1.0	< 5.0	<1.0	< 1.0	< 5.0	**3.3 J**	**0.87 J**	< 4.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 5.0	<1.0	**9.9**	**140**	**8.9 J**	**4.1**	< 4.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**0.43 J**	< 5.0	< 10	< 4.0	< 4.0
Toluene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**3**	**7.5**	**18**	**6.6**	< 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	AMW-14-VD 10/11/2017	AMW-14-VD 07/12/2018	AMW-14-VD 10/17/2018	AMW-14-VD 460-181653-5 05/10/2019	AMW-15-D1 06/23/2016	AMW-15-D1 07/27/2016	AMW-15-D1 10/26/2016	AMW-15-D1 10/26/2016	AMW-15-D1 07/05/2017
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 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	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**5.5**	**73**	**48**	**18**	< 4.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	<1.0	< 1.0	< 5.0	< 10	< 4.0	< 4.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 1.0	<1.0	**70**	**410**	**600 F1**	**240**	**10**
Xylene (total)	5	ug/L	**3.2**	< 2.0	< 3.0	<2.0	< 2.0	**6.5 J**	**15 J**	**5.5 J**	< 8.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**82**	**120**	**110 B**	**130**	NA	NA	NA	NA	**110**
Ethane	NE	ug/L	< 7.5	< 7.5	< 7.5	<7.5 H	NA	NA	NA	NA	< 150
Ethene	NE	ug/L	< 7.0	< 7.0	< 7.0	<7.0 H	NA	NA	NA	NA	< 140
Methane	NE	ug/L	**48**	**27**	**24**	**12 H**	NA	NA	NA	NA	**400**
Inorganics											
Iron	300	ug/L	**16,400**	**18,400**	**18,500**	**14,700**	**2,200**	NA	**1,900 B**	**95 B**	**2,100**
Manganese	300	ug/L	**390 B**	**410 B**	**390 B**	**387**	**500 B**	NA	**70 B**	**110 B**	**84**
Sodium	20,000	ug/L	**8,680,000**	**8,660,000**	**9,100,000**	**7,150,000 B**	NA	NA	NA	NA	**1,750,000 ^**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA		**602**	NA	**130**	**528**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**454,000**	**472,000 B**	**409,000 B**	**493,000**	**602,000**	NA	**130,000**	**528,000**	**597,000**
Chloride	250	mg/L	**16,200**	**19,400**	**16,300**	**110,000**	NA	NA	NA	NA	**73.2**
Ferric Iron	NE	mg/L	**14.8**	**18.4**	**18.5**	**14.4**	NA	NA	NA	NA	**2.1**
Ferrous Iron	NE	ug/L	**1,600 HF**	< 100	< 100	**300 HF**	NA	NA	NA	NA	< 100
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	**94 J**	NA	NA	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	**0.076 J**	NA	NA	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	**1,890,000**	**1,870,000**	**1,920,000 B**	**2,000,000**	NA	NA	NA	NA	**1,640,000**
Sulfate (SO4)	NE	ug/L	NA	NA	NA		**166,000**	NA	**63,100**	**164,000**	NA
Sulfide	NE	ug/L	NA	NA	NA	<1,000	**20,500**	NA	NA	NA	NA
Sulfide	NE	ug/L	**800 J**	**5,200 F1**	< 1,000		NA	NA	**8,000**	**36,000**	**42,000**
Total Organic Carbon (TOC)	NE	ug/L	**4,500 B**	NA	NA	**18,300 B**	NA	NA	NA	NA	**9400 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:			AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2
Lab Sample ID:	NYSDEC					460-181653-12					
Date Sampled:	TOGS 1.1.1	Units	08/27/2017	10/11/2017	10/17/2018	05/09/2019	06/23/2016	06/23/2016	07/27/2016	10/26/2016	10/26/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 2.0	**1.5 J**	**0.89 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 2.0	< 50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 20	< 250	<5.0	< 10	**1.3 J**	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 20	< 10	< 50	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 10	< 50	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 40	< 20	< 130	<5.0	**9.3 J**	**11**	**3.8 J**	**13**	**5.1 J**
Benzene	1	ug/L	**12**	**11**	**12**	**6.3**	< 1.0	< 1.0	< 1.0	< 1.0	**0.47 J**
Bromodichloromethane	50	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**2.7 J**	**2**	**1.7 J**	**1.3**	**1.8**	**1.6**	**0.42 J**	**0.75 J**	**0.42 J**
Carbon Tetrachloride	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	**5.1**	**1.6 J**	< 5.0	< 1.0	**3.3**	**3**	**1.7**	**0.86 J**	**1.6**
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 2.0	**2.8 J**	**0.79 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	**4.1**	**4.3**	**5**	**2.6**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 5.0	< 50	<5.0	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**200**	**300 E**	**170**	**120**	**68**	**66**	**43**	**42**	**110 E**
Methylcyclohexane	NE	ug/L	< 4.0	< 2.0	**1.2 J**	**0.50 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	**2.2 J**	< 2.0	< 25	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	**17**	**5.9**	**1.5 J**	< 1.0	< 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-15-D1 08/27/2017	AMW-15-D1 10/11/2017	AMW-15-D1 10/17/2018	AMW-15-D1 460-181653-12 05/09/2019	AMW-15-D2 06/23/2016	AMW-15-D2 06/23/2016	AMW-15-D2 07/27/2016	AMW-15-D2 10/26/2016	AMW-15-D2 10/26/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**28**	**13**	**21**	**7.4**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 2.0	< 5.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**76**	**24**	< 5.0	**1.1**	**1.8**	**1.7**	**3.5**	**4.7**	**30**
Xylene (total)	5	ug/L	**17**	**12**	**19**	**6.3**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**27**	**34**	**40**	**52**	NA	NA	NA	NA	NA
Ethane	NE	ug/L	**92 J**	< 330	< 660	<830	NA	NA	NA	NA	NA
Ethene	NE	ug/L	**830**	**470**	< 620	<770	NA	NA	NA	NA	NA
Methane	NE	ug/L	**4,000**	**2,400**	**5,100**	**3,200**	NA	NA	NA	NA	NA
Inorganics											
Iron	300	ug/L	**12,400**	**6,900**	**3,900**	**3,340**	**110**	**120**	NA	**50 B**	< 50
Manganese	300	ug/L	**170 B**	**100 B**	**320**	**335**	**5.8 B**	**6.3 B**	NA	**85 B**	**98 B**
Sodium	20,000	ug/L	**1,520,000**	**1,710,000 ^**	**989,000**	**1,170,000**	NA	NA	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA		**181 B**	**185**	NA	**99.9**	**600**
Alkalinity, Total as CaCO3	NE	ug/L	**471,000 B**	**641,000**	**442,000**	**422,000**	**181,000 B**	**185,000**	NA	**99,900**	**600,000**
Chloride	250	mg/L	**2,480**	**2,760**	**1,910**	**2,500**	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	**12.4**	**6.9**	**3.8**	**3.3**	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	< 500	< 200	**120 HF**	<100 HF	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	**79**	**430 J**	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	**0.38 J**	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**156,000**	**189,000 B**	**188,000**	**200,000**	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA		**166,000**	**165,000**	NA	**243,000**	**216,000**
Sulfide	NE	ug/L	NA	NA	NA	**41,400**	**1,800**	**1,900 F1**	NA	NA	NA
Sulfide	NE	ug/L	**53,200**	**41,600**	**56,000**		NA	NA	NA	**12,800**	**36,000**
Total Organic Carbon (TOC)	NE	ug/L	**53,400 B**	**36,200 B**	NA	**36,800 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:	NYSDEC		AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D3	AMW-15-D3	AMW-15-D3	AMW-15-D3
Lab Sample ID:							460-181653-10				
Date Sampled:	TOGS 1.1.1	Units	07/05/2017	08/27/2017	10/11/2017	10/17/2018	05/10/2019	06/23/2016	06/23/2016	07/27/2016	08/27/2017
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 4.0	< 4.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 40	< 40	< 50	< 5.0	< 10	< 10	< 10	< 40
2-Hexanone	50	ug/L	< 20	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 20
4-Methyl-2-pentanone	NE	ug/L	< 20	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0	< 5.0	< 20
Acetone	50	ug/L	< 40	< 40	< 40	< 25	< 5.0	**6.9 J**	**7.3 J**	**3.6 J**	**36 J**
Benzene	1	ug/L	< 4.0	**9.8**	**2.7 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**3.7 J**
Bromodichloromethane	50	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Bromoform	50	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Carbon disulfide	60	ug/L	< 4.0	< 4.0	< 4.0	**0.34 J**	< 1.0	**4.4**	**4.6**	**1.4**	**1.8 J**
Carbon Tetrachloride	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chlorobenzene	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chloroethane	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chloroform	7	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 4.0
cis-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	< 4.0	**0.26 J**	< 1.0	< 1.0	< 1.0	< 1.0	**19**
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Cyclohexane	NE	ug/L	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Dibromochloromethane	50	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 4.0
Ethylbenzene	5	ug/L	< 4.0	**5.1**	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**3.4 J**
Isopropylbenzene	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Methyl acetate	NE	ug/L	< 10	< 10	< 10	< 10	< 5.0	< 2.5	< 2.5	< 2.5	< 10
Methyl-t-butyl ether	10	ug/L	**120**	**350**	**160**	**120**	**61**	**2.4**	**2.6**	**23**	**64**
Methylcyclohexane	NE	ug/L	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	**2.4 J**
Styrene	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Tetrachloroethene	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Toluene	5	ug/L	< 4.0	**7.8**	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 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	AMW-15-D2 07/05/2017	AMW-15-D2 08/27/2017	AMW-15-D2 10/11/2017	AMW-15-D2 10/17/2018	AMW-15-D2 460-181653-10 05/10/2019	AMW-15-D3 06/23/2016	AMW-15-D3 06/23/2016	AMW-15-D3 07/27/2016	AMW-15-D3 08/27/2017
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 4.0	**5.5**	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**140**
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Vinyl chloride (Chloroethene)	2	ug/L	< 4.0	**300**	**25**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	**16**
Xylene (total)	5	ug/L	< 8.0	**12**	< 8.0	< 3.0	<2.0	< 2.0	< 2.0	< 2.0	**17**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**98**	**94**	**68**	**110**	**130**	NA	NA	NA	**5.1**
Ethane	NE	ug/L	< 150	< 170	< 170	< 330	<170	NA	NA	NA	< 330
Ethene	NE	ug/L	< 140	**37 J**	< 150	< 310	<150	NA	NA	NA	< 310
Methane	NE	ug/L	**430**	**880**	**280**	**560**	**520**	NA	NA	NA	**2,400**
Inorganics											
Iron	300	ug/L	**700**	**3,500**	**4,500**	**750**	**328**	**98**	**120**	NA	**2,300**
Manganese	300	ug/L	**110**	**140 B**	**130 B**	**55**	**72**	**250 B**	**240 B**	NA	**450 B**
Sodium	20,000	ug/L	**2,090,000 ^**	**2,200,000**	**2,150,000 ^**	**2,130,000**	**2,030,000**	NA	NA	NA	**2,980,000 ^**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA		**617 B**	**12.2 B**	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**687,000**	**673,000 B**	**811,000**	**461,000**	**672,000**	**617,000 B**	**12,200 B**	NA	**408,000 B**
Chloride	250	mg/L	**3,700**	**3,650**	**3,710 F1**	**3,790**	**4,200**	NA	NA	NA	**4,230**
Ferric Iron	NE	mg/L	**0.53**	**3.5**	**4.5**	**0.75**	**0.24**	NA	NA	NA	**2.3**
Ferrous Iron	NE	ug/L	**170 HF**	< 100	< 100	< 100	**85 J HF**	NA	NA	NA	< 500
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	**47 J**	NA	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.0070 J**	NA	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	**269,000**	**237,000**	**254,000 B**	**262,000 B**	**220,000**	NA	NA	NA	**495,000**
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA		**1,790,000**	**784,000**	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	**50,800**	< 100	< 100	NA	NA
Sulfide	NE	ug/L	**34,000**	**58,000**	**45,200**	**48,000**		NA	NA	NA	**16,400**
Total Organic Carbon (TOC)	NE	ug/L	**10,300 B**	**10,900 B**	**9,800 B**	NA	**14,200 B**	NA	NA	NA	**34,300 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:			AMW-15-D3	AMW-15-D3	AMW-15-D3	AMW-15-D3	AMW-15-VD	AMW-15-VD	AMW-15-VD	AMW-15-VD	AMW-15-VD
Lab Sample ID:	NYSDEC					460-181653-11					
Date Sampled:	TOGS 1.1.1	Units	10/11/2017	07/13/2018	10/17/2018	05/10/2019	06/23/2016	07/27/2016	08/27/2017	10/11/2017	07/13/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 2.0	< 2.0	< 10	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 20	< 20	< 50	<5.0	< 10	< 10	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 10	< 10	< 10	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 10	< 10	< 10	<5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 20	**16 J**	< 25	<5.0	**3.2 J**	**8.3 J**	< 10	**5.0 J**	< 10
Benzene	1	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	**2.4**	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 2.0	**0.70 J**	**0.42 J**	**0.29 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	**0.74 J**	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 2.0	**3.1**	**0.44 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	**1**	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 5.0	< 5.0	< 10	<5.0	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	< 2.0	**22**	**10**	**16**	**1.1**	< 1.0	**1.2**	**0.94 J**	**0.44 J**
Methylcyclohexane	NE	ug/L	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	**0.52 J**	**15**	< 1.0	< 1.0	< 1.0

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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	AMW-15-D3 10/11/2017	AMW-15-D3 07/13/2018	AMW-15-D3 10/17/2018	AMW-15-D3 460-181653-11 05/10/2019	AMW-15-VD 06/23/2016	AMW-15-VD 07/27/2016	AMW-15-VD 08/27/2017	AMW-15-VD 10/11/2017	AMW-15-VD 07/13/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 2.0	**20**	**3.5**	**0.39 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 4.0	< 4.0	< 3.0	<2.0	< 2.0	< 2.0	< 2.0	**3**	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	< 5	**7.6**	**100**	**140**	NA	NA	**31**	**40**	**41**
Ethane	NE	ug/L	< 170	< 330	< 170	<330	NA	NA	< 7.5	< 7.5	< 7.5
Ethene	NE	ug/L	< 150	< 310	< 150	<310	NA	NA	< 7.0	< 7.0	< 7.0
Methane	NE	ug/L	**610**	**1,500**	**2,800**	**1,600**	NA	NA	**24**	**8**	**37**
Inorganics											
Iron	300	ug/L	**450**	**3,100**	**260**	**301**	**4,200**	NA	**11,800**	**11,700**	**10,600**
Manganese	300	ug/L	**99 B**	**1,100 B**	**200**	**222**	**200 B**	NA	**350 B**	**340 B**	**320 B**
Sodium	20,000	ug/L	**2,500,000 ^**	**3,870,000**	**2,610,000**	**2,730,000**	NA	NA	**8,910,000**	**9,180,000 ^**	**8,290,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA		**303**	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**508,000**	**518,000 B**	**108,000**	**616,000**	**303,000**	NA	**135,000 B**	**329,000**	**357,000 B**
Chloride	250	mg/L	**7,530**	**4,670**	**7,380**	**8,800**	NA	NA	**16,100**	**16,000**	**19,200**
Ferric Iron	NE	mg/L	**0.45**	**3.1**	**0.26**	**0.30**	NA	NA	**11.5**	**11.7**	**10.6**
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	<100 U HF	NA	NA	**280 HF**	< 100	< 100
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	**42 J**	NA	NA	< 50	< 50	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	**0.056 J**	NA	NA	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**897,000 B**	**482,000**	**916,000**	**980,000**	NA	NA	**2,140,000**	**2070,000 B**	**1,890,000**
Sulfate (SO4)	NE	ug/L	NA	NA	NA		**1,810,000**	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	**41,400**	< 100	NA	NA	NA	NA
Sulfide	NE	ug/L	**39,200**	**22,800**	**35,600**		NA	NA	< 1,000	< 1,000	**800 J**
Total Organic Carbon (TOC)	NE	ug/L	**7,200 B**	NA	NA	**14,400 B**	NA	NA	**3,500 B**	**3,400 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	AMW-15-VD 10/17/2018	AMW-15-VD 460-181653-4 05/10/2019	AMW-3 01/13/2016	AMW-3 06/21/2016	AMW-7 01/12/2016	AMW-7 06/21/2016	AMW-7 07/11/2018	AMW-7 10/17/2018	AMW-7R 460-181703-6 05/10/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 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	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	**4.8 J**	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 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	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 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	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 10	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 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	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 5.0	< 50	**3.4 J**	< 50	< 10	< 20	< 50	<5.0
2-Hexanone	50	ug/L	< 10	< 5.0	< 25	< 5.0	< 25	< 5.0	< 10	< 10	<5.0
4-Methyl-2-pentanone	NE	ug/L	< 10	< 5.0	< 25	< 5.0	< 25	< 5.0	< 10	< 10	<5.0
Acetone	50	ug/L	< 25	< 5.0	< 50	**21**	**30 J**	**6.2 J**	< 20	**8.1 J**	<5.0
Benzene	1	ug/L	< 1.0	< 1.0	**280**	< 1.0	**5.7**	**1.1**	**0.82 J**	**0.78 J**	**0.69 J**
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 1.0	< 5.0	**0.51 J**	< 5.0	**0.43 J**	< 2.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0*	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 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	< 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	< 1.0
Cyclohexane	NE	ug/L	< 5.0	< 1.0	**57**	< 1.0	< 5.0	**18**	**16**	**29**	**19**
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0*	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	**29**	< 1.0	< 5.0	< 1.0	< 2.0	**0.19 J**	**0.39 J**
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	**65**	< 1.0	< 5.0	**2.8**	**7.1**	**4.9**	**4.2**
Methyl acetate	NE	ug/L	< 10	< 5.0	< 13	< 2.5	< 13	< 2.5	< 5.0	< 10	<5.0
Methyl-t-butyl ether	10	ug/L	**1.3**	**1.0**	< 5.0	**0.40 J**	**1.4 J**	**0.23 J**	< 2.0	< 1.0	< 1.0
Methylcyclohexane	NE	ug/L	< 5.0	< 1.0	**27**	< 1.0	**1.5 J**	**9.4**	**29**	**50**	**31**
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 1.0	**15**	< 1.0	< 5.0	< 1.0	**1.1 J**	< 5.0	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0	**6.9**	< 1.0	< 5.0	< 1.0	**1.0 J**	**0.60 J**	< 1.0

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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	AMW-15-VD 10/17/2018	AMW-15-VD 460-181653-4 05/10/2019	AMW-3 01/13/2016	AMW-3 06/21/2016	AMW-7 01/12/2016	AMW-7 06/21/2016	AMW-7 07/11/2018	AMW-7 10/17/2018	AMW-7R 460-181703-6 05/10/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 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	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 3.0	<2.0	**20**	< 2.0	< 10	**0.79 J**	< 4.0	**0.61 J**	**1.3 J**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**37**	**17**	NA	NA	NA	NA	**82**	**94 B**	**94**
Ethane	NE	ug/L	< 7.5	<7.5 H	NA	NA	NA	NA	< 330	< 330	< 330 UH
Ethene	NE	ug/L	< 7.0	<7.0 H	NA	NA	NA	NA	< 310	< 310	< 310 UH
Methane	NE	ug/L	**27**	**25 H**	NA	NA	NA	NA	**3,500**	**5,800**	**3,100 H**
Inorganics											
Iron	300	ug/L	**10,700**	**3,600**	NA	**16,200**	NA	**170**	**20,000**	**12,500**	**8,080**
Manganese	300	ug/L	**310**	**287**	NA	**1,400 B**	NA	**74 B**	**2,500 B**	**2,900 B**	**2,770**
Sodium	20,000	ug/L	**8,770,000**	**8,560,000**	NA	NA	NA	NA	**199,000**	**168,000**	**105,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA		NA	**351**	NA	**199 B**	NA	NA	
Alkalinity, Total as CaCO3	NE	ug/L	**271,000**	**432,000**	NA	**351,000**	NA	**199,000 B**	**881,000 B**	**997,000**	**558,000**
Chloride	250	mg/L	**13,200**	**18,000**	NA	NA	NA	NA	**253**	**192**	**120 F1**
Ferric Iron	NE	mg/L	**10.7**	**3.6**	NA	NA	NA	NA	**19.7**	**12.5**	**8.1**
Ferrous Iron	NE	ug/L	< 100	< 100*	NA	NA	NA	NA	**320 HF**	< 100	< 100 HF
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 100	NA	NA	NA	NA	< 50	< 50	< 100
Nitrogen, Nitrite	1	mg/L	< 0.050	**0.035 J**	NA	NA	NA	NA	< 0.050	< 0.050	**0.023 J**
Sulfate (SO4)	NE	ug/L	**1,530,000 B**	**2,000,000**	NA	NA	NA	NA	**41,900**	**22,600 B**	**82,000 F1**
Sulfate (SO4)	NE	ug/L	NA		NA	**970,000**	NA	**82,300**	NA	NA	
Sulfide	NE	ug/L	NA	<1000	NA	**5,300**	NA	**5,200**	NA	NA	<1000
Sulfide	NE	ug/L	< 1,000		NA	NA	NA	NA	**3,800**	**1,600**	
Total Organic Carbon (TOC)	NE	ug/L	NA	**6,800 B**	NA	NA	NA	NA	NA	NA	**19,800**

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 06/06/2016	ASB-3 06/08/2016	ASB-4 06/07/2016	ASB-5 06/02/2016	ASB-7 06/02/2016	MW-18R 06/22/2016	MW-18R 07/11/2018	MW-18R 10/17/2018	MW-23-D1 10/26/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	**4.2 J**	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 50	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 50	**1.4 J**	< 20	< 100	**74 J**	**70 J**	< 20
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 25	< 5.0	< 10	< 50	< 100	< 50	< 10
4-Methyl-2-pentanone	NE	ug/L	**6**	< 5.0	< 25	**5**	**5.3 J**	< 50	< 100	< 50	< 10
Acetone	50	ug/L	**20**	**5.5 J**	< 50	**12**	< 20	< 100	**330**	**230**	< 20
Benzene	1	ug/L	**1.8**	< 1.0	**3.0 J**	< 1.0	< 2.0	**310**	**48**	**69**	< 2.0
Bromodichloromethane	50	ug/L	**1.9**	**0.75 J**	< 5.0	**1.5**	**3.3**	< 10	< 20	< 5.0	< 2.0
Bromoform	50	ug/L	< 1.0	**2.4**	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Carbon disulfide	60	ug/L	**1.1**	**0.27 J**	**0.95 J**	**0.53 J**	**1.1 J**	< 10	**6.2 J**	**2.4 J**	**0.53 J**
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Chloroform	7	ug/L	**14**	**0.92 J**	< 5.0	**19**	**21**	< 10	< 20	< 5.0	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
cis-1,2-Dichloroethene	5	ug/L	**5.6**	**2.8**	**1600 E**	**2.2**	**67**	**14**	< 20	< 5.0	< 2.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	**5**	< 1.0	< 2.0	**20**	< 20	**8.3 J**	**0.40 J**
Dibromochloromethane	50	ug/L	**0.35 J**	**1.5**	< 5.0	< 1.0	**0.65 J**	< 10	< 20	< 5.0	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	**6.7**	< 1.0	< 2.0	< 10	< 20	**1.2 J**	< 2.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	**14**	< 20	**6.8**	< 2.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 13	< 2.5	< 5.0	< 25	< 50	< 50	< 5.0
Methyl-t-butyl ether	10	ug/L	**55**	**8.5**	**13**	**4.6**	**5.5**	**65**	**11 J**	**28**	**140**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	**4.5 J**	< 1.0	< 2.0	**4.4 J**	**5.1 J**	**6.2 J**	< 2.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	**0.60 J**	**330**	< 1.0	< 2.0	< 10	< 20	< 25	< 2.0
Styrene	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Tetrachloroethene	5	ug/L	**1.4**	**1.3**	**6.7**	**1.2**	**1.2 J**	< 10	< 20	< 5.0	< 2.0
Toluene	5	ug/L	**0.87 J**	< 1.0	**9**	< 1.0	< 2.0	< 10	< 20	**4.1 J**	< 2.0

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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	ASB-2 06/06/2016	ASB-3 06/08/2016	ASB-4 06/07/2016	ASB-5 06/02/2016	ASB-7 06/02/2016	MW-18R 06/22/2016	MW-18R 07/11/2018	MW-18R 10/17/2018	MW-23-D1 10/26/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	**13**	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	**4.4**	**1.2**	**1500 E**	**4.8**	**1.7 J**	< 10	< 20	< 5.0	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 2.0
Vinyl chloride (Chloroethene)	2	ug/L	**6**	**81**	**400**	**11**	**31**	< 10	< 20	< 5.0	< 2.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	**36**	**0.89 J**	< 4.0	< 20	< 40	**5.2 J**	< 4.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	**2.2 J**	**11 B**	NA
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	< 660	< 660	NA
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	< 620	< 620	NA
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	**3,800**	**9,700**	NA
Inorganics											
Iron	300	ug/L	NA	NA	NA	NA	NA	**11,500 B**	**1,400**	**450**	< 50
Manganese	300	ug/L	NA	NA	NA	NA	NA	**470 B**	**17 B**	**26 B**	**21 B**
Sodium	20,000	ug/L	NA	NA	NA	NA	NA	NA	**161,000**	**193,000**	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	**515 B**	NA	NA	**555**
Alkalinity, Total as CaCO3	NE	ug/L	NA	NA	NA	NA	NA	**515,000 B**	**184,000 B**	**365,000**	**555,000**
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	**367**	**259**	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	**1.3**	**0.45**	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	**110 HF**	< 100	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	NA	NA	NA	< 50	< 50	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	< 0.050	< 0.050	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	**120,000**	**20,000 B**	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	**27,800**	NA	NA	**148,000**
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	< 100	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	**12,200**	**11,600**	**6,400**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	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:	NYSDEC		MW-23-D1	MW-23D-1R	MW-23D-1R	MW-23D-1R	MW-23D-1R	MW-23D-1R	MW-23D-1R	MW-23D-1R	MW-23D-2R
Lab Sample ID:											
Date Sampled:	TOGS 1.1.1	Units	10/26/2016	01/12/2016	06/20/2016	07/05/2017	08/27/2017	10/12/2017	07/12/2018	10/17/2018	01/12/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,1,1-Trichloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 10	< 5.0
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,3-Dichlorobenzene	3	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 50	< 10	< 40	< 40	< 40	< 40	< 50	< 50
2-Hexanone	50	ug/L	< 25	< 25	< 5.0	< 20	< 20	< 20	< 20	< 10	< 25
4-Methyl-2-pentanone	NE	ug/L	< 25	< 25	< 5.0	< 20	< 20	< 20	< 20	< 10	< 25
Acetone	50	ug/L	< 50	< 50	**6.4 J**	< 40	< 40	< 40	< 40	< 25	< 50
Benzene	1	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	**2.7 J**	**3.8**	< 5.0
Bromodichloromethane	50	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Bromoform	50	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Carbon disulfide	60	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**0.29 J**	< 5.0
Carbon Tetrachloride	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Chlorobenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Chloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Chloroform	7	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
cis-1,2-Dichloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**1.7**	< 5.0
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Cyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 5.0	< 5.0
Dibromochloromethane	50	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Ethylbenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Isopropylbenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**0.56 J**	< 5.0
Methyl acetate	NE	ug/L	< 13	< 13	< 2.5	< 10	< 10	< 10	< 10	< 10	< 13
Methyl-t-butyl ether	10	ug/L	**180**	**210**	**30**	**140**	**130**	**150**	**91**	**94**	**130**
Methylcyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 5.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 5.0	< 5.0
Styrene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Tetrachloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Toluene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0

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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-23-D1 10/26/2016	MW-23D-1R 01/12/2016	MW-23D-1R 06/20/2016	MW-23D-1R 07/05/2017	MW-23D-1R 08/27/2017	MW-23D-1R 10/12/2017	MW-23D-1R 07/12/2018	MW-23D-1R 10/17/2018	MW-23D-2R 01/12/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 5.0
Vinyl chloride (Chloroethene)	2	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**1**	< 5.0
Xylene (total)	5	ug/L	< 10	< 10	< 2.0	< 8.0	< 8.0	< 8.0	< 8.0	< 3.0	< 10
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	**82**	**75**	**55**	**64**	**63**	NA
Ethane	NE	ug/L	NA	NA	NA	< 150	< 83	< 170	< 330	< 660	NA
Ethene	NE	ug/L	NA	NA	NA	< 140	< 77	< 150	< 310	< 620	NA
Methane	NE	ug/L	NA	NA	NA	**150**	**1,500**	**1,300**	**4,800**	**3,600**	NA
Inorganics											
Iron	300	ug/L	**240 B**	NA	**660**	**17,100**	**33,900**	**3,800**	**4,300**	**1,900**	NA
Manganese	300	ug/L	**670 B**	NA	**690 B**	**3,100**	**2200 B**	**1000 B**	**810 B**	**930**	NA
Sodium	20,000	ug/L	NA	NA	NA	**1,190,000 ^**	**1,190,000 ^**	**1,230,000 ^**	**1,360,000**	**1,220,000**	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**525**	NA	**485**	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**525,000**	NA	**485,000**	**500,000**	**512,000 B**	**562,000**	**495,000 B**	**360,000**	NA
Chloride	250	mg/L	NA	NA	NA	**1,970**	**2,190**	**2,270**	**2,250**	**2,260**	NA
Ferric Iron	NE	mg/L	NA	NA	NA	**17.1**	**31.9**	**3.8**	**4**	**1.9**	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	< 100	**2,000 HF**	< 100	**260 HF**	< 100	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	< 50	**23 J H**	< 50	< 50	< 50	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	**259,000**	**173,000**	**178,000 B**	**149,000**	**177,000**	NA
Sulfate (SO4)	NE	ug/L	**156,000**	NA	**180,000**	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	**16,900 F1**	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	**13,600**	NA	NA	**8,400**	**15,400**	**26,800**	**28,800**	**25,200**	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	**16,100 B**	**17,300 B**	**15,400 B**	NA	NA	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-2R 06/20/2016	MW-23D-2R 07/05/2017	MW-23D-2R 08/27/2017	MW-23D-2R 10/12/2017	MW-23D-2R 07/12/2018	MW-23-D2R 460-181653-9 05/09/2019	MW-24-D1 01/13/2016	MW-24-D1 06/21/2016	MW-24-D1 10/26/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	**0.56 J**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 40	< 10	<5.0	< 5.0	< 50	< 40	< 10
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 20	< 5.0	<5.0	< 5.0	< 25	< 20	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 20	< 5.0	<5.0	< 5.0	< 25	< 20	< 5.0
Acetone	50	ug/L	**23**	**4.0 J**	< 40	< 10	<5.0	< 5.0	< 50	< 40	< 10
Benzene	1	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	**2.3**	**2.3**	< 5.0	**5.4**	**4.1**
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 1.0	< 4.0	**0.44 J**	<1.0	< 1.0	< 5.0	**1.6 J**	**1.7**
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0*	< 5.0	< 4.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	**10**	**4.9**	**4**
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	**1.9 J**	**1.6**
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0*	< 5.0	< 4.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	**3.1 J**	**2.3**
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 10	< 2.5	<5.0	< 5.0	< 13	< 10	< 2.5
Methyl-t-butyl ether	10	ug/L	**26**	**8**	**72**	**150 E**	**8.8**	**8.8**	**220**	**160**	**140 E**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	**1.3 J**	**0.64 J**
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	**0.68 J**

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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-2R 06/20/2016	MW-23D-2R 07/05/2017	MW-23D-2R 08/27/2017	MW-23D-2R 10/12/2017	MW-23D-2R 07/12/2018	MW-23-D2R 460-181653-9 05/09/2019	MW-24-D1 01/13/2016	MW-24-D1 06/21/2016	MW-24-D1 10/26/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	**11**	**6.5**
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 5.0	< 4.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 4.0	**1.2**	<1.0	< 1.0	**99**	**35**	**33**
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 8.0	< 2.0	<2.0	< 2.0	< 10	**9.3**	**7.2**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	**130**	**110**	**100**	**32**	**32**	NA	NA	NA
Ethane	NE	ug/L	NA	< 38	< 83	< 170	< 170	< 170	NA	NA	NA
Ethene	NE	ug/L	NA	< 35	< 77	< 150	< 150	< 150	NA	NA	NA
Methane	NE	ug/L	NA	**73**	**360**	**200**	**290**	**290**	NA	NA	NA
Inorganics											
Iron	300	ug/L	**40 J**	**4,400**	**1,800**	**2,800**	**1,660**	**1,660**	NA	**32 J**	< 50
Manganese	300	ug/L	**110 B**	**210**	**170 B**	**140 B**	**279**	**279**	NA	**60 B**	**49 B**
Sodium	20,000	ug/L	NA	**2,190,000 ^**	**1,930,000 ^**	**2,570,000 ^**	**1,930,000**	**1,930,000**	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**543**	NA	NA	NA			NA	**642 B**	**526**
Alkalinity, Total as CaCO3	NE	ug/L	**543,000**	**520,000**	**434,000 B**	**654,000**	**587,000**	**587,000**	NA	**642,000 B**	**526,000**
Chloride	250	mg/L	NA	**5,260**	**5,420**	**4,460**	**3,800**	**3,800**	NA	NA	NA
Ferric Iron	NE	mg/L	NA	**4.2**	**1.8**	**2.8**	**1.4**	**1.4**	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	**170 HF**	< 100	< 100	**240 HF**	**240 HF**	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	< 50	**37 J H**	< 50	**38 J**	**38 J**	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	**0.0045 J**	**0.0045 J**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	**861,000**	**665,000**	**478,000 B**	**290,000**	**290,000**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**317,000**	NA	NA	NA			NA	**189,000**	**217,000**
Sulfide	NE	ug/L	**700**	NA	NA	NA	**10,900**	**10,900**	NA	**79,300**	NA
Sulfide	NE	ug/L	NA	**29,600**	**36,200**	**20,000**			NA	NA	**64,000 F1**
Total Organic Carbon (TOC)	NE	ug/L	NA	**5,200 B**	**6,100 B**	**9,700 B**	**20,700 B**	**20,700 B**	NA	NA	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:			MW-24-D1	MW-24-D1	MW-24-D1	MW-24-D1	MW-24-D1R	MW-24-D2	MW-24-D2	MW-24-D2	MW-24-D2
Lab Sample ID:	NYSDEC						460-181653-14				
Date Sampled:	TOGS 1.1.1	Units	10/26/2016	10/26/2016	07/12/2018	10/16/2018	05/09/2019	01/13/2016	01/13/2016	06/21/2016	10/25/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0*	< 5.0	< 5.0	< 1.0	< 4.0
1,1-Dichloroethane	5	ug/L	**0.74 J**	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 4.0	< 8.0	< 50	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 40	< 80	< 250	< 5.0	< 50	< 50	< 10	< 40
2-Hexanone	50	ug/L	< 5.0	< 20	< 40	< 50	< 5.0	< 25	< 25	< 5.0	< 20
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 20	< 40	< 50	< 5.0	< 25	< 25	< 5.0	< 20
Acetone	50	ug/L	< 10	< 40	< 80	< 130	< 5.0	< 50	< 50	< 10	**62**
Benzene	1	ug/L	**4.9**	< 4.0	**11**	**8.3**	**1.5**	**3.3 J**	**3.1 J**	**0.97 J**	< 4.0
Bromodichloromethane	50	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Bromoform	50	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Carbon disulfide	60	ug/L	**1.3**	< 4.0	**2.1 J**	**1.4 J**	**0.62 J**	< 5.0	< 5.0	**0.31 J**	< 4.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Chlorobenzene	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Chloroethane	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Chloroform	7	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
cis-1,2-Dichloroethene	5	ug/L	**6.1**	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	**1.6**	< 4.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Cyclohexane	NE	ug/L	**1.4**	< 4.0	< 8.0	< 25	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Dibromochloromethane	50	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Ethylbenzene	5	ug/L	**2.2**	< 4.0	**7.1 J**	**6.1**	**1.0**	< 5.0	< 5.0	**0.84 J**	< 4.0
Isopropylbenzene	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Methyl acetate	NE	ug/L	< 2.5	< 10	< 20	< 50	< 5.0	< 13	< 13	< 2.5	< 10
Methyl-t-butyl ether	10	ug/L	**120 E**	**81**	**290**	**270**	**65**	**260**	**250**	**140 E**	**120**
Methylcyclohexane	NE	ug/L	**0.66 J**	< 4.0	< 8.0	< 25	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 4.0	< 8.0	< 25	< 1.0	< 5.0	< 5.0	< 1.0	**120**
Styrene	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Tetrachloroethene	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Toluene	5	ug/L	**0.64 J**	< 4.0	**23**	**17**	**1.5**	< 5.0	< 5.0	< 1.0	< 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-24-D1 10/26/2016	MW-24-D1 10/26/2016	MW-24-D1 07/12/2018	MW-24-D1 10/16/2018	MW-24-D1R 460-181653-14 05/09/2019	MW-24-D2 01/13/2016	MW-24-D2 01/13/2016	MW-24-D2 06/21/2016	MW-24-D2 10/25/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**6.8**	< 4.0	**22**	**12**	**2.0**	< 5.0	< 5.0	**0.98 J**	< 4.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0	< 5.0	< 5.0	< 1.0	< 4.0
Vinyl chloride (Chloroethene)	2	ug/L	**15**	< 4.0	**160**	**22**	**1.5**	**180**	**170**	**38**	**20**
Xylene (total)	5	ug/L	**6.6**	< 8.0	**29**	**25**	**3.6**	< 10	< 10	< 2.0	< 8.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	**67**	**59**	**98**	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	**130 J**	< 660	< 330	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	**1,100**	**550 J**	< 310	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	**5,900**	**6,000**	**1,600**	NA	NA	NA	NA
Inorganics											
Iron	300	ug/L	**58 B**	**24 J B**	**10,100**	**2,900**	**4,120**	NA	NA	**40 J**	**49 J**
Manganese	300	ug/L	**8.9 B**	**59 B**	**120 B**	**91**	**79.6**	NA	NA	**55 B**	**62**
Sodium	20,000	ug/L	NA	NA	**2,140,000**	**1,070,000**	**1,720,000**	NA	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**324**	**577**	NA	NA		NA	NA	**741 B**	**512**
Alkalinity, Total as CaCO3	NE	ug/L	**324,000**	**577,000**	**875,000 B**	**583,000**	**572,000**	NA	NA	**741,000 B**	**512,000**
Chloride	250	mg/L	NA	NA	**4,220**	**2,370**	**3,900**	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	**10.1**	**2.9**	**3.3**	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	< 100	< 100	**860 HF**	NA	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	< 50	< 50	**63 J**	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	< 0.050	< 0.050	**0.014 J**	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	**200,000**	**75,300**	**250,000**	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**248,000**	**219,000**	NA	NA		NA	NA	**270,000**	**374,000**
Sulfide	NE	ug/L	NA	NA	NA	NA	**41,400**	NA	NA	**92,200**	NA
Sulfide	NE	ug/L	**60,000**	**56,000**	**66,400**	**56,400**		NA	NA	NA	**48,000**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	**15,400 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	MW-24-D2 10/25/2016	MW-24-D2 07/05/2017	MW-24-D2 08/27/2017	MW-24-D2 10/11/2017	MW-24-D2 07/12/2018	MW-24-D2 10/17/2018	MW-24-D2 460-181653-2 05/09/2019	MW-24-VD 07/12/2018	MW-24-VD 10/17/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 10	< 1.0	< 4.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 80	< 80	< 20	< 20	< 50	< 5.0	< 40	< 50
2-Hexanone	50	ug/L	< 25	< 40	< 40	< 10	< 10	< 10	< 5.0	< 20	< 10
4-Methyl-2-pentanone	NE	ug/L	< 25	< 40	< 40	< 10	< 10	< 10	< 5.0	< 20	< 10
Acetone	50	ug/L	**56**	< 80	< 80	< 20	< 20	**2.8 J**	< 5.0	< 40	< 25
Benzene	1	ug/L	**3.0 J**	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Bromodichloromethane	50	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Bromoform	50	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Carbon disulfide	60	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	**0.24 J**	< 1.0	< 4.0	**0.64 J**
Carbon Tetrachloride	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Chlorobenzene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Chloroethane	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Chloroform	7	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0*	< 4.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	**0.52 J**	< 1.0	< 4.0	**0.28 J**
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Cyclohexane	NE	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0	< 1.0	< 4.0	< 5.0
Dibromochloromethane	50	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0*	< 4.0	< 1.0
Ethylbenzene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Isopropylbenzene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Methyl acetate	NE	ug/L	< 13	< 20	< 20	< 5.0	< 5.0	< 10	< 5.0	< 10	< 10
Methyl-t-butyl ether	10	ug/L	**270**	**220**	**87**	**60**	**2.5**	**2**	< 1.0	**4.2**	**2.9**
Methylcyclohexane	NE	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0	< 1.0	< 4.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	**84 F1**	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0	< 1.0	< 4.0	< 5.0
Styrene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Tetrachloroethene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Toluene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 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-D2 10/25/2016	MW-24-D2 07/05/2017	MW-24-D2 08/27/2017	MW-24-D2 10/11/2017	MW-24-D2 07/12/2018	MW-24-D2 10/17/2018	MW-24-D2 460-181653-2 05/09/2019	MW-24-VD 07/12/2018	MW-24-VD 10/17/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 4.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**280 F1**	**250 F1**	**72**	**18**	< 2.0	**0.23 J**	< 1.0	< 4.0	**0.55 J**
Xylene (total)	5	ug/L	< 10	< 16	< 16	< 4.0	< 4.0	< 3.0	< 2.0	< 8.0	< 3.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	**130**	**110**	**54**	**15**	**5.7**	**5.0**	**89**	**79**
Ethane	NE	ug/L	NA	< 150	< 170	< 170	< 7.5	< 170	< 7.5	**2.1 J**	< 7.5
Ethene	NE	ug/L	NA	< 140	< 150	< 150	< 7.0	< 150	< 7.0	**2.3 J**	< 7.0
Methane	NE	ug/L	NA	**130**	**980**	**410**	**44**	**370**	< 4.0	**160**	**120**
Inorganics											
Iron	300	ug/L	< 50	**1,800**	**6,600**	**5,500**	**1,100**	**610**	**391**	**37,900**	**26,100**
Manganese	300	ug/L	**56**	**88**	**160 B**	**140 B**	**33 B**	**32**	**7.7 J**	**910 B**	**740**
Sodium	20,000	ug/L	NA	**2,520,000 ^**	**2,260,000**	**2,380,000 ^**	**94,900**	**108,000 ^**	**100,000**	**8,960,000**	**8,730,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**759**	NA	NA	NA	NA	NA		NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**759,000**	**667,000**	**774,000 B**	**804,000**	**114,000 B**	**102,000**	**112,000**	**454,000 B**	**416,000**
Chloride	250	mg/L	NA	**4,060**	**4,100**	**3,720**	**182**	**201**	**89**	**16,000**	**13,100**
Ferric Iron	NE	mg/L	NA	**1.8**	**6.6**	**5.5**	**1.1**	**0.61**	**0.39**	**37.8**	**26.1**
Ferrous Iron	NE	ug/L	NA	< 100	< 100	< 100	< 100	< 100	< 100 HF	**100 HF**	< 100
Nitrogen, Nitrate as N	10,000	ug/L	NA	< 50	< 50	< 50	**51 H**	< 50	**18 J**	< 50	< 50
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	**0.020 J H**	< 0.050	**0.038 J**	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	NA	**541,000**	**346,000**	**298,000 B**	**28,000**	**29,900**	**9,100**	**1,640,000**	**1,300,000**
Sulfate (SO4)	NE	ug/L	**270,000**	NA	NA	NA	NA	NA		NA	NA
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	< 1,000	NA	NA
Sulfide	NE	ug/L	**64,000**	**84,000**	**61,800**	**56,400**	**800 J**	**800 J**		< 1,000	< 1,000
Total Organic Carbon (TOC)	NE	ug/L	NA	**12,500 B**	**11,600 B**	**10,800 B**	NA	NA	**6,300 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:			MW-24-VDR	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1
Lab Sample ID:	NYSDEC		460-181653-3								
Date Sampled:	TOGS 1.1.1	Units	05/09/2019	01/12/2016	06/22/2016	10/25/2016	10/25/2016	07/05/2017	08/27/2017	10/11/2017	07/13/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 5.0	< 50	< 40	< 100	< 40	< 100	< 100	< 20	< 20
2-Hexanone	50	ug/L	< 5.0	< 25	< 20	< 50	< 20	< 50	< 50	< 10	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 25	< 20	< 50	< 20	< 50	< 50	< 10	< 10
Acetone	50	ug/L	< 5.0	< 50	< 40	< 100	< 40	< 100	< 100	**6.5 J**	< 20
Benzene	1	ug/L	< 1.0	**9.1**	**9.3**	**8.6 J**	**12**	**8.7 J**	**9.5 J**	< 2.0	**17**
Bromodichloromethane	50	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Bromoform	50	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Carbon disulfide	60	ug/L	**0.30 J**	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Chlorobenzene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Chloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Chloroform	7	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0*	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Cyclohexane	NE	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Dibromochloromethane	50	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0*	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Ethylbenzene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	**3.0 J**	< 10	< 10	< 2.0	**3.5**
Isopropylbenzene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Methyl acetate	NE	ug/L	< 5.0	< 13	< 10	< 25	< 10	< 25	< 25	< 5.0	< 5.0
Methyl-t-butyl ether	10	ug/L	**1.6**	**380**	**340**	**310**	**390**	**290**	**240**	< 2.0	**220 E**
Methylcyclohexane	NE	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	**3.6 J**	< 10	< 10	< 2.0	< 2.0
Styrene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Tetrachloroethene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Toluene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0

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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-24-VDR 460-181653-3 05/09/2019	MW-26-D1 01/12/2016	MW-26-D1 06/22/2016	MW-26-D1 10/25/2016	MW-26-D1 10/25/2016	MW-26-D1 07/05/2017	MW-26-D1 08/27/2017	MW-26-D1 10/11/2017	MW-26-D1 07/13/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 5.0	< 4.0	< 10	< 4.0	< 10	< 10	< 2.0	< 2.0
Vinyl chloride (Chloroethene)	2	ug/L	**0.40 J**	**16**	**20**	**18**	**51**	**28**	< 10	< 2.0	**13**
Xylene (total)	5	ug/L	< 2.0	< 10	< 8.0	< 20	< 8.0	< 20	< 20	< 4.0	< 4.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**92**	NA	NA	NA	NA	**120**	**95**	**10**	**110**
Ethane	NE	ug/L	< 83	NA	NA	NA	NA	< 150	< 170	< 7.5	< 330
Ethene	NE	ug/L	< 77	NA	NA	NA	NA	< 140	< 150	< 7.0	< 310
Methane	NE	ug/L	**13 J**	NA	NA	NA	NA	**250**	**1,200**	**10**	**2,900**
Inorganics											
Iron	300	ug/L	**25,200**	NA	< 50	< 50	< 50	**230**	**640**	**190**	**320**
Manganese	300	ug/L	**597**	NA	**35 B**	**25**	**37**	**41**	**48 B**	**75 B**	**35 B**
Sodium	20,000	ug/L	**6,100,000**	NA	NA	NA	NA	**1,570,000 ^**	**1,500,000**	**304,000**	**1,640,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L		NA	**569 B**	**479**	**591**	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**461,000**	NA	**569,000 B**	**479,000**	**591,000**	**542,000**	**532,000 B**	**177,000**	**558,000**
Chloride	250	mg/L	**16,000**	NA	NA	NA	NA	**2,520**	**2,530**	**483**	**2,810**
Ferric Iron	NE	mg/L	**25.2**	NA	NA	NA	NA	**0.23**	**0.64**	**0.19**	**0.32**
Ferrous Iron	NE	ug/L	< 100 HF	NA	NA	NA	NA	< 100	< 100	< 100	< 100
Nitrogen, Nitrate as N	10,000	ug/L	**10 J**	NA	NA	NA	NA	< 50	< 50	**600**	< 50
Nitrogen, Nitrite	1	mg/L	**0.063 J**	NA	NA	NA	NA	< 0.050	< 0.050	**5.1**	< 0.050
Sulfate (SO4)	NE	ug/L	**1,700,000**	NA	NA	NA	NA	**313,000**	**203,000**	**69,200**	**237,000**
Sulfate (SO4)	NE	ug/L		NA	**139,000**	**252,000**	**131,000**	NA	NA	NA	NA
Sulfide	NE	ug/L	<1,000	NA	**70,600 F1**	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L		NA	NA	**48,000**	**56,000**	**44,000**	**43,200**	< 1,000	**44,800**
Total Organic Carbon (TOC)	NE	ug/L	**7,700 B**	NA	NA	NA	NA	**9,100 B**	**10,800 B**	**22,900 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

ARCADIS Design & Consultancy for natural and built assets

Location ID:	NYSDEC		MW-26-D1	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2
Lab Sample ID:											
Date Sampled:	TOGS 1.1.1	Units	10/17/2018	01/12/2016	06/22/2016	10/25/2016	10/25/2016	07/05/2017	08/27/2017	10/11/2017	10/17/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 10	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 50	< 10	< 20	< 20	< 10	< 80	< 10	< 50
2-Hexanone	50	ug/L	< 10	< 25	< 5.0	< 10	< 10	< 5.0	< 40	< 5.0	< 10
4-Methyl-2-pentanone	NE	ug/L	< 10	< 25	< 5.0	< 10	< 10	< 5.0	< 40	< 5.0	< 10
Acetone	50	ug/L	< 25	< 50	< 10	**9.4 J**	**37**	< 10	< 80	< 10	< 25
Benzene	1	ug/L	**4.9**	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	**0.69 J**
Bromodichloromethane	50	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**0.45 J**	< 5.0	**1.4**	**0.60 J**	< 2.0	**0.37 J**	< 8.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	**0.42 J**	< 5.0	**0.86 J**	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 5.0
Dibromochloromethane	50	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	**0.95 J**	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	**0.39 J**
Isopropylbenzene	5	ug/L	**0.43 J**	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 13	< 2.5	< 5.0	< 5.0	< 2.5	< 20	< 2.5	< 10
Methyl-t-butyl ether	10	ug/L	**110**	< 5.0	**59**	**85**	**43**	< 1.0	< 8.0	**14**	**76**
Methylcyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 5.0	< 1.0	**15**	**81**	< 1.0	< 8.0	< 1.0	< 5.0
Styrene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Toluene	5	ug/L	**0.23 J**	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0

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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:			MW-26-D1	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2	MW-26-D2
Lab Sample ID:	NYSDEC										
Date Sampled:	TOGS 1.1.1	Units	10/17/2018	01/12/2016	06/22/2016	10/25/2016	10/25/2016	07/05/2017	08/27/2017	10/11/2017	10/17/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 5.0	**1.2**	< 2.0	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 3.0	< 10	< 2.0	< 4.0	< 4.0	< 2.0	< 16	< 2.0	< 3.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**65 B**	NA	NA	NA	NA	**130**	**110**	**55**	**110 B**
Ethane	NE	ug/L	< 170	NA	NA	NA	NA	< 7.5	< 83	< 170	< 170
Ethene	NE	ug/L	< 150	NA	NA	NA	NA	< 7.0	< 77	< 150	< 150
Methane	NE	ug/L	**1,800**	NA	NA	NA	NA	**76**	**92**	**670**	**1,100**
Inorganics											
Iron	300	ug/L	**280**	NA	**490 B**	**55**	< 50	**970**	**970**	**1,100**	**150**
Manganese	300	ug/L	**24 B**	NA	**700 B**	**63**	**140**	**420**	**310 B**	**160 B**	**52 B**
Sodium	20,000	ug/L	**1,510,000**	NA	NA	NA	NA	**3,930,000 ^**	**3,370,000**	**2,770,000**	**2,190,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	**344**	NA	**653**	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**416,000**	NA	**344,000**	NA	**653,000**	**348,000**	**379,000**	**435,000**	**509,000**
Chloride	250	mg/L	**2,540**	NA	NA	NA	NA	**9,010**	**7,980**	**8,600**	**3,820**
Ferric Iron	NE	mg/L	**0.28**	NA	NA	NA	NA	**0.97**	**0.97**	**1.1**	**0.15**
Ferrous Iron	NE	ug/L	< 100	NA	NA	NA	NA	< 100	< 100	< 100	< 100
Nitrogen, Nitrate as N	10,000	ug/L	< 50	NA	NA	NA	NA	< 50	< 50	**28 J**	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**264,000 B**	NA	NA	NA	NA	**1,580,000**	**1,100,000**	**1,100,000**	**361,000 B**
Sulfate (SO4)	NE	ug/L	NA	NA	**1,200,000**	NA	**382,000**	NA	NA	NA	NA
Sulfide	NE	ug/L	NA	NA	**1,700**	NA	NA	NA	NA	NA	NA
Sulfide	NE	ug/L	**28,400**	NA	NA	**40,000**	**36,000**	**24,400**	**16,000**	**26,800**	**25,600**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	**4,300 B**	**4,800 B**	**8,800 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:	NYSDEC		MW-26-D2	MW-26-VD	MW-26-VD	MW-27-D1	MW-27-D1	MW-27-D1	MW-27-D1	MW-27-D1	MW-27-D1
Lab Sample ID:			460-181653-8								
Date Sampled:	TOGS 1.1.1	Units	05/09/2019	01/13/2016	06/22/2016	01/13/2016	06/21/2016	07/05/2017	08/27/2017	07/13/2018	10/18/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 5.0	< 10	< 10	< 50	**1.7 J**	< 20	< 20	< 20	< 50
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 10	< 10	< 10	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 25	< 5.0	< 10	< 10	< 10	< 10
Acetone	50	ug/L	< 5.0	< 10	**170**	**53**	**5.0 J**	< 20	< 20	< 20	< 25
Benzene	1	ug/L	**0.79 J**	< 1.0	< 1.0	< 5.0	< 1.0	**1.1 J**	**1.6 J**	**7.8**	**3.6**
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Carbon disulfide	60	ug/L	**0.25 J**	< 1.0	**0.19 J**	< 5.0	**0.66 J**	< 2.0	< 2.0	**0.64 J**	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0*	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	**1**	**2.2**	**3.2**	**2**	**1**
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 5.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0*	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Ethylbenzene	5	ug/L	**0.44 J**	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Methyl acetate	NE	ug/L	< 5.0	< 2.5	< 2.5	< 13	< 2.5	< 5.0	< 5.0	< 5.0	< 10
Methyl-t-butyl ether	10	ug/L	**84**	< 1.0	**0.96 J**	< 5.0	**10**	**84**	**100**	**62**	**38**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	**0.94 J**	< 2.0	< 5.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	**1.6 J**	**1**

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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:	NYSDEC		MW-26-D2	MW-26-VD	MW-26-VD	MW-27-D1	MW-27-D1	MW-27-D1	MW-27-D1	MW-27-D1	MW-27-D1
Lab Sample ID:			460-181653-8								
Date Sampled:	TOGS 1.1.1	Units	05/09/2019	01/13/2016	06/22/2016	01/13/2016	06/21/2016	07/05/2017	08/27/2017	07/13/2018	10/18/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**0.90 J**	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	**5**	**4.1**	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	**0.50 J**	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	**0.26 J**
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**1.5**	< 1.0	< 1.0	< 5.0	**0.97 J**	**28**	**110**	**88**	**70**
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 2.0	< 10	< 2.0	< 4.0	< 4.0	< 4.0	< 3.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**130**	NA	NA	NA	NA	**26**	**100**	**140**	**150 B**
Ethane	NE	ug/L	< 660	NA	NA	NA	NA	< 380	< 170	< 660	< 170
Ethene	NE	ug/L	< 620	NA	NA	NA	NA	< 350	< 150	< 620	< 150
Methane	NE	ug/L	**750**	NA	NA	NA	NA	**550**	**1,100**	**3,700**	**3,900**
Inorganics											
Iron	300	ug/L	**466**	NA	**74,000 B**	NA	**430**	**2,800**	**1,300**	**8,200**	**2,100**
Manganese	300	ug/L	**75.2**	NA	**2,600 B**	NA	**200 B**	**56**	**330 B**	**170 B**	**61 B**
Sodium	20,000	ug/L	**2,420,000**	NA	NA	NA	NA	**1,130,000 ^**	**960,000**	**1,690,000**	**1,770,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L		NA	**176 B**	NA	**795 B**	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**684,000**	NA	**176,000 B**	NA	**795,000 B**	**394,000 B**	**884,000**	**526,000 B**	**725,000**
Chloride	250	mg/L	**5,000**	NA	NA	NA	NA	**2,860**	**5,640**	**2,770**	**3,890**
Ferric Iron	NE	mg/L	**0.47**	NA	NA	NA	NA	**2.8**	**1.3**	**8**	**2**
Ferrous Iron	NE	ug/L	< 100 HF	NA	NA	NA	NA	< 100	< 100	**170 HF**	**91 J HF**
Nitrogen, Nitrate as N	10,000	ug/L	**21 J**	NA	NA	NA	NA	< 50	< 50	< 50	< 50
Nitrogen, Nitrite	1	mg/L	< 0.10	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**350,000**	NA	NA	NA	NA	**308,000**	**699,000**	**157,000**	**183,000**
Sulfate (SO4)	NE	ug/L		NA	**497,000**	NA	**290,000**	NA	NA	NA	NA
Sulfide	NE	ug/L	**54,600**	NA	**6,000**	NA	**97,300**	NA	NA	NA	NA
Sulfide	NE	ug/L		NA	NA	NA	NA	**14,400**	**1,400**	**63,200**	**63,200**
Total Organic Carbon (TOC)	NE	ug/L	**14,600 B**	NA	NA	NA	NA	**13,700 B**	**14,400 B**	NA	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:	NYSDEC		MW-27-D1R	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2
Lab Sample ID:			460-181703-1								460-181703-5
Date Sampled:	TOGS 1.1.1	Units	05/10/2019	01/13/2016	06/21/2016	07/05/2017	08/27/2017	10/12/2017	07/13/2018	10/18/2018	05/10/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	**0.28 J**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 10	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 5.0	< 50	**8.2 J**	< 10	< 10	< 10	< 40	< 50	< 5.0
2-Hexanone	50	ug/L	< 5.0	< 25	< 20	< 5.0	< 5.0	< 5.0	< 20	< 10	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 25	< 20	< 5.0	< 5.0	< 5.0	< 20	< 10	< 5.0
Acetone	50	ug/L	< 5.0	< 50	**38 J**	< 10	< 10	< 10	< 40	< 25	< 5.0
Benzene	1	ug/L	**2.4**	< 5.0	**160**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**1.0**	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0*
cis-1,2-Dichloroethene	5	ug/L	**0.57 J**	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 5.0	**22**	< 1.0	< 1.0	< 1.0	< 4.0	< 5.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0*
Ethylbenzene	5	ug/L	< 1.0	< 5.0	**92**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 5.0	**38**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 5.0	< 13	< 10	< 2.5	< 2.5	< 2.5	< 10	< 10	< 5.0
Methyl-t-butyl ether	10	ug/L	**18**	< 5.0	**8.1**	< 1.0	< 1.0	< 1.0	**3.4 J**	< 1.0	**7.9**
Methylcyclohexane	NE	ug/L	< 1.0	< 5.0	**26**	< 1.0	< 1.0	< 1.0	< 4.0	< 5.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 5.0	**5.7**	< 1.0	< 1.0	< 1.0	< 4.0	< 5.0	< 1.0
Styrene	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Toluene	5	ug/L	**0.44 J**	< 5.0	**17**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0

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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:	NYSDEC		MW-27-D1R	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2	MW-27-D2
Lab Sample ID:			460-181703-1								460-181703-5
Date Sampled:	TOGS 1.1.1	Units	05/10/2019	01/13/2016	06/21/2016	07/05/2017	08/27/2017	10/12/2017	07/13/2018	10/18/2018	05/10/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**0.96 J**	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**17**	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 10	**68**	< 2.0	< 2.0	< 2.0	< 8.0	< 3.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**97**	NA	NA	**130**	**100**	**81**	**140**	**130 B**	**66**
Ethane	NE	ug/L	< 83	NA	NA	< 75	< 83	< 170	< 330	< 170	< 170
Ethene	NE	ug/L	< 77	NA	NA	< 70	< 77	< 150	< 310	< 150	< 150
Methane	NE	ug/L	**1,600**	NA	NA	**53**	**180**	**350**	**1,500**	**1,200**	**310**
Inorganics											
Iron	300	ug/L	**51,600**	NA	**1,300**	**12,400**	**11,600**	**9,500**	**4,600**	**2,800**	**902**
Manganese	300	ug/L	**456**	NA	**38 B**	**550**	**1,200 B**	**1,700 B**	**340 B**	**940 B**	**197**
Sodium	20,000	ug/L	**1,900,000**	NA	NA	**2,690,000 ^**	**3,140,000 ^**	**4,460,000 ^**	**2,530,000**	**3,580,000**	**505,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L		NA	**279 B**	NA	NA	NA	NA	NA	
Alkalinity, Total as CaCO3	NE	ug/L	**579,000**	NA	**279,000 B**	**408,000 B**	**303,000**	**374,000**	**363,000 B**	**195,000**	**599,000**
Chloride	250	mg/L	**3,500**	NA	NA	**6,330**	**9,140**	**8,290**	**7,510**	**8,300**	**4,100**
Ferric Iron	NE	mg/L	**50.7**	NA	NA	**12.4**	**11.6**	**9.1**	**4.6**	**2.8**	**0.14**
Ferrous Iron	NE	ug/L	**910 HF**	NA	NA	< 100	< 100	**450 HF**	< 100	< 100	**760 HF**
Nitrogen, Nitrate as N	10,000	ug/L	**19 J**	NA	NA	< 50	< 50	**40 J**	< 50	< 50	**29 J**
Nitrogen, Nitrite	1	mg/L	**0.010 J**	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10
Sulfate (SO4)	NE	ug/L	**260,000**	NA	NA	**808,000**	**1,300,000**	**1,120,000 B**	**844,000**	**1,250,000**	**250,000**
Sulfate (SO4)	NE	ug/L		NA	**49,200**	NA	NA	NA	NA	NA	
Sulfide	NE	ug/L	**37,600**	NA	**160**	NA	NA	NA	NA	NA	**24,400**
Sulfide	NE	ug/L		NA	NA	**12,800**	**16,600**	**8,800**	**10,800**	**7,200**	
Total Organic Carbon (TOC)	NE	ug/L	**17,600**	NA	NA	**6,300 B**	**4,800 B**	**4,700 B**	NA	NA	**15,200**

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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:			MW-28-D1	MW-28-D1	MW-28-D1	MW-28-D1	MW-28-D1	MW-28-D1	MW-28-D1	MW-28-D2R	MW-28-D2R
Lab Sample ID:	NYSDEC								460-181653-7		
Date Sampled:	TOGS 1.1.1	Units	06/24/2016	07/28/2016	07/05/2017	08/27/2017	10/11/2017	10/17/2018	05/09/2019	06/24/2016	07/28/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	**0.76 J**	< 10	**0.58 J**	< 4.0	< 4.0	< 1.0	**0.69 J**	**0.48 J**	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 10	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	**0.21 J**	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	**2.3 J**	< 100	< 10	< 40	< 40	< 50	< 5.0	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 50	< 5.0	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 50	< 5.0	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	**45**	**280**	< 10	< 40	< 40	**9.3 J**	< 5.0	**3.3 J**	**4.4 J**
Benzene	1	ug/L	**2.1**	< 10	**8.9**	**2.7 J**	**3.7 J**	**5.6**	**2.4**	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	**1.2**
Bromoform	50	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	**5.6**
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**1**	< 10	**0.40 J**	< 4.0	**4.9**	**0.47 J**	**0.34 J**	< 1.0	**0.52 J**
Carbon Tetrachloride	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	**0.51 J**
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	**3.2**
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 10	**1.2**	< 4.0	< 4.0	**1.4**	**0.49 J**	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	**0.33 J**	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 25	< 2.5	< 10	< 10	< 10	< 5.0	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**6.2**	**4.7 J**	**19**	**6.6**	**4.8**	**9.5**	**7**	< 1.0	**0.25 J**
Methylcyclohexane	NE	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	**0.39 J**	< 1.0	< 1.0	< 1.0

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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-28-D1 06/24/2016	MW-28-D1 07/28/2016	MW-28-D1 07/05/2017	MW-28-D1 08/27/2017	MW-28-D1 10/11/2017	MW-28-D1 10/17/2018	MW-28-D1 460-181653-7 05/09/2019	MW-28-D2R 06/24/2016	MW-28-D2R 07/28/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 20	< 2.0	< 8.0	< 8.0	**2.6 J**	**0.47 J**	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	**51**	**15**	**3.8 J**	**8.9 B**	**120**	NA	NA
Ethane	NE	ug/L	NA	NA	< 150	< 170	< 170	< 330	< 660	NA	NA
Ethene	NE	ug/L	NA	NA	< 140	< 150	< 150	< 310	< 620	NA	NA
Methane	NE	ug/L	NA	NA	**290**	**1,000**	**520**	**1,500**	**1,300**	NA	NA
Inorganics											
Iron	300	ug/L	**79**	NA	**3,600**	**740**	**950**	**980**	**2,480**	**52,800**	NA
Manganese	300	ug/L	**68 B**	NA	**67**	**19 B**	**27 B**	**22 B**	**89**	**1,100 B**	NA
Sodium	20,000	ug/L	NA	NA	**418,000 ^**	**1,040,000 ^**	**998,000**	**386,000**	**1,940,000**	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**745 B**	NA	NA	NA	NA	NA		**182**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**745,000 B**	NA	**457,000**	**393,000**	**196,000**	**102,000**	**667,000**	**182,000**	NA
Chloride	250	mg/L	NA	NA	**3,120**	**3,310**	**1,530**	**945**	**3,300**	NA	NA
Ferric Iron	NE	mg/L	NA	NA	**3.6**	**0.74**	**0.95**	**0.98**	**1.9**	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	< 100	< 100	< 100	< 100	**600 HF**	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	< 50	< 50	< 50	**76**	< 100	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	< 0.050	< 0.050	< 0.050	**0.044 J**	**0.016 J**	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	**340,000**	**349,000**	**196,000**	**231,000**	**170,000**	NA	NA
Sulfate (SO4)	NE	ug/L	**155,000**	NA	NA	NA	NA	NA		**1,080,000**	NA
Sulfide	NE	ug/L	**54,400**	NA	NA	NA	NA	NA	**45,200**	< 100	NA
Sulfide	NE	ug/L	NA	NA	**4,000**	**18,200**	**32,800**	**7,200**		NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	**13,000 B**	**14,400 B**	**23,900 B**	NA	**12,900 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-28-D2R 07/05/2017	MW-28-D2R 08/27/2017	MW-28-D2R 10/11/2017	MW-28-D2R 07/13/2018	MW-28-D2R 10/17/2018	MW-28-D2R 460-181653-1 05/09/2019	MW-29-D1 01/14/2016	MW-29-D1 06/21/2016	MW-29-D1 10/26/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 4.0	**1.3**	< 4.0	< 1.0	**0.67 J**	< 5.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 10	< 1.0	< 5.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 40	< 10	< 40	< 50	< 5.0	< 50	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 20	< 5.0	< 20	< 10	< 5.0	< 25	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 20	< 5.0	< 20	< 10	< 5.0	< 25	< 5.0	< 5.0
Acetone	50	ug/L	< 10	< 40	< 10	< 40	< 25	< 5.0	**25 J**	**9.5 J**	< 10
Benzene	1	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	**0.50 J**	**81**	**6.3**	**32**
Bromodichloromethane	50	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**0.38 J**	< 4.0	**0.95 J**	**1.0 J**	< 1.0	**0.27 J**	< 5.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0*	< 5.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0	< 1.0	**13**	**8**	**21**
Dibromochloromethane	50	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0*	< 5.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	**24**	**5.4**	**16**
Methyl acetate	NE	ug/L	< 2.5	< 10	< 2.5	< 10	< 10	< 5.0	< 13	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	**34**	**23**	**44**
Methylcyclohexane	NE	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0	< 1.0	**5.5**	**3.8**	**10**
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0	< 1.0	< 5.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	**1**	**3.1**

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 07/05/2017	MW-28-D2R 08/27/2017	MW-28-D2R 10/11/2017	MW-28-D2R 07/13/2018	MW-28-D2R 10/17/2018	MW-28-D2R 460-181653-1 05/09/2019	MW-29-D1 01/14/2016	MW-29-D1 06/21/2016	MW-29-D1 10/26/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 8.0	< 2.0	< 8.0	< 3.0	< 2.0	< 10	**2**	**9.7**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**120**	**120**	**91**	**91**	**140 B**	**42**	NA	NA	NA
Ethane	NE	ug/L	< 7.5	< 83	< 170	< 330	< 170	< 330	NA	NA	NA
Ethene	NE	ug/L	< 7.0	< 77	< 150	< 310	< 150	< 310	NA	NA	NA
Methane	NE	ug/L	**67**	**62**	**370**	**880**	**240**	**730**	NA	NA	NA
Inorganics											
Iron	300	ug/L	**6,800**	**6,000**	**9,300**	**5,200**	**2,200**	**569**	NA	**520**	**220 B**
Manganese	300	ug/L	**340**	**500 B**	**470 F1 B**	**190 B**	**710 B**	**224**	NA	**270 B**	**250 B**
Sodium	20,000	ug/L	**3,810,000 ^**	**5,340,000**	**4,750,000**	**3,000,000**	**4,670,000**	**2,850,000**	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA		NA	**567 B**	**540**
Alkalinity, Total as CaCO3	NE	ug/L	**334,000**	**337,000 B**	**412,000**	**468,000 B**	**333,000**	**385,000**	NA	**567,000 B**	**540,000**
Chloride	250	mg/L	**9,090**	**11,300 B**	**6,670**	**4,010**	**9,820**	**7,600**	NA	NA	NA
Ferric Iron	NE	mg/L	**6.7**	**5.6**	**9.1**	**5.2**	**2.2**	**0.37**	NA	NA	NA
Ferrous Iron	NE	ug/L	**92 J HF**	**420 HF**	**160 HF**	< 100	< 100	**200 HF**	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	**260**	< 100	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.036 J**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**1,620,000**	**1,370,000**	**938,000**	**432,000**	**1,330,000**	**870,000**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA		NA	< 5000	< 5000
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	**10,900**	NA	**230**	NA
Sulfide	NE	ug/L	**2,400**	**4,000**	**3,600**	**11,200**	**3,200**		NA	NA	**1,200**
Total Organic Carbon (TOC)	NE	ug/L	**4,000 B**	**4,800 B**	**4,500 B**	NA	NA	**9,400 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 10/26/2016	MW-29-D1 07/05/2017	MW-29-D1 08/27/2017	MW-29-D1 10/12/2017	MW-29-D1 07/13/2018	MW-29-D1 10/18/2018	MW-29-D1 460-181703-2 05/10/2019	MW-29-D2 480-93983-6 01/14/2016	MW-29-D2 480-102059-3 06/21/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	**7.3**	**4.8**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 10	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 20	< 20	< 40	< 40	< 50	< 5.0	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 10	< 10	< 20	**9.1 J**	< 10	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 10	< 10	< 20	< 20	< 10	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 10	< 20	< 20	< 40	< 40	< 25	< 5.0	< 10	< 10
Benzene	1	ug/L	**5.5**	**9.7**	**19**	**4.3**	**5.2**	**3.7**	**9.8**	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**0.21 J**	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	**0.62 J**
Carbon Tetrachloride	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	**11**	**7.6**	**12**	**5.4**	**24**	**20**	**24**	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	**0.31 J**	**0.34 J**	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	**6.4**	**7.7**	**9.3**	**5.8**	**19**	**16**	**18**	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 5.0	< 5.0	< 10	< 10	< 10	< 5.0	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**23**	**71**	**28**	**20**	**39**	**33**	**51**	**66**	**51**
Methylcyclohexane	NE	ug/L	**2.5**	**1.8 J**	**5.8**	**1.5 J**	**11**	**11**	**8.6**	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	**1.6**	**2.3**	**1.7 J**	< 4.0	**3.0 J**	**2.8**	**2.3**	< 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-29-D1 10/26/2016	MW-29-D1 07/05/2017	MW-29-D1 08/27/2017	MW-29-D1 10/12/2017	MW-29-D1 07/13/2018	MW-29-D1 10/18/2018	MW-29-D1 460-181703-2 05/10/2019	MW-29-D2 480-93983-6 01/14/2016	MW-29-D2 480-102059-3 06/21/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 2.0	< 2.0	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	**4**	**3.7 J**	**4.3**	**4.3 J**	**5.5 J**	**8.1**	**3.3**	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	**180**	**150**	**140**	**180**	**210 B**	**190**	NA	NA
Ethane	NE	ug/L	NA	< 300	< 660	< 170	< 660	< 1700	< 83	NA	NA
Ethene	NE	ug/L	NA	< 280	< 620	< 150	< 620	< 1500	< 77	NA	NA
Methane	NE	ug/L	NA	**680**	**11,000**	**5,200**	**15,000**	**19,000**	**9,300 E**	NA	NA
Inorganics											
Iron	300	ug/L	< 50	**460**	**2,400**	**3,400**	**1,300**	**1,500**	**1,450**	NA	**64**
Manganese	300	ug/L	**5.2 B**	**350**	**150 B**	**300 B**	**340 B**	**270 B**	**470**	NA	**150 B**
Sodium	20,000	ug/L	NA	**951,000 ^**	**2,470,000 ^**	**893,000 ^**	**988,000**	**960,000**	**839,000**	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**547**	NA	NA	NA	NA	NA		NA	**453 B**
Alkalinity, Total as CaCO3	NE	ug/L	**547,000**	**556,000**	**560,000 B**	**619,000**	**563,000 B**	**535,000**	**469,000**	NA	**453,000 B**
Chloride	250	mg/L	NA	**1,610**	**1,580**	**1,530**	**1,680**	**1,550**	**1,700**	NA	NA
Ferric Iron	NE	mg/L	NA	**0**	**2.4**	**3.4**	**1.3**	**1.5**	**1.4**	NA	NA
Ferrous Iron	NE	ug/L	NA	< 100	< 100	< 100	< 100	< 100	**63 J HF**	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	< 50	< 50	< 50	< 50	< 50	< 100	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.026 J**	NA	NA
Sulfate (SO4)	NE	ug/L	NA	< 100,000	< 100,000	< 40,000	< 40,000	**13,600 J**	**13,000**	NA	NA
Sulfate (SO4)	NE	ug/L	**1,800 J**	NA	NA	NA	NA	NA		NA	**939,000**
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	**1,100**	NA	**17,000**
Sulfide	NE	ug/L	< 2,000	**800 J**	**101,000**	**1,200**	**1,200**	**800 J**		NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	**13,500 B**	**12,900 B**	**11,300 B**	NA	NA	**14,200**	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-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	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
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,1-Dichloroethane	5	ug/L	< 10	< 1.0	**1.9**	**2.1**	**3.2 J**	**2.9**	**0.87 J**	< 10	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,2-Dichloropropane	1	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 100	< 10	< 10	< 10	< 50	< 20	< 10	< 100	< 10
2-Hexanone	50	ug/L	< 50	< 5.0	< 5.0	< 5.0	< 25	< 10	< 5.0	< 50	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 50	< 5.0	< 5.0	< 5.0	< 25	< 10	< 5.0	< 50	< 5.0
Acetone	50	ug/L	< 100	< 10	< 10	< 10	< 50	< 20	< 10	< 100	**5.9 J**
Benzene	1	ug/L	< 10	< 1.0	**1.1**	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Bromodichloromethane	50	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Bromoform	50	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Carbon disulfide	60	ug/L	< 10	< 1.0	< 1.0	**0.19 J**	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Carbon Tetrachloride	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Chlorobenzene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Chloroethane	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Chloroform	7	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Cyclohexane	NE	ug/L	< 10	< 1.0	**0.39 J**	**0.27 J**	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Dibromochloromethane	50	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Ethylbenzene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Isopropylbenzene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Methyl acetate	NE	ug/L	< 25	< 2.5	< 2.5	< 2.5	< 13	< 5.0	< 2.5	< 25	< 2.5
Methyl-t-butyl ether	10	ug/L	< 10	**0.42 J**	**100 E**	**53**	**7.3**	**8.1**	**3**	< 10	**0.47 J**
Methylcyclohexane	NE	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Styrene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Tetrachloroethene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Toluene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 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-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	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
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 10	< 1.0	< 1.0	< 1.0	< 5.0	< 2.0	< 1.0	< 10	< 1.0
Xylene (total)	5	ug/L	< 20	< 2.0	< 2.0	< 2.0	< 10	< 4.0	< 2.0	< 20	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Inorganics											
Iron	300	ug/L	NA	**390**	NA	**360 B**	NA	NA	< 50	NA	**4,900 B**
Manganese	300	ug/L	NA	**62 B**	NA	**93 B**	NA	NA	**110 B**	NA	**260 B**
Sodium	20,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	**229 B**	NA	**841 B**	NA	NA	**755 B**	NA	**713 B**
Alkalinity, Total as CaCO3	NE	ug/L	NA	**229,000 B**	NA	**841,000 B**	NA	NA	**755,000 B**	NA	**713,000 B**
Chloride	250	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	**1,890,000**	NA	**90,000**	NA	NA	**241,000**	NA	**1,770,000**
Sulfide	NE	ug/L	NA	< 100	NA	**92,700**	NA	NA	**64,100 F1**	NA	< 100
Sulfide	NE	ug/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	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-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
Volatile Organics						
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	**0.94 J**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 10	**11**	< 10	< 10
Benzene	1	ug/L	< 1.0	**1.1**	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	**0.32 J**	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	< 1.0	**3.3**	< 1.0	**0.32 J**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 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

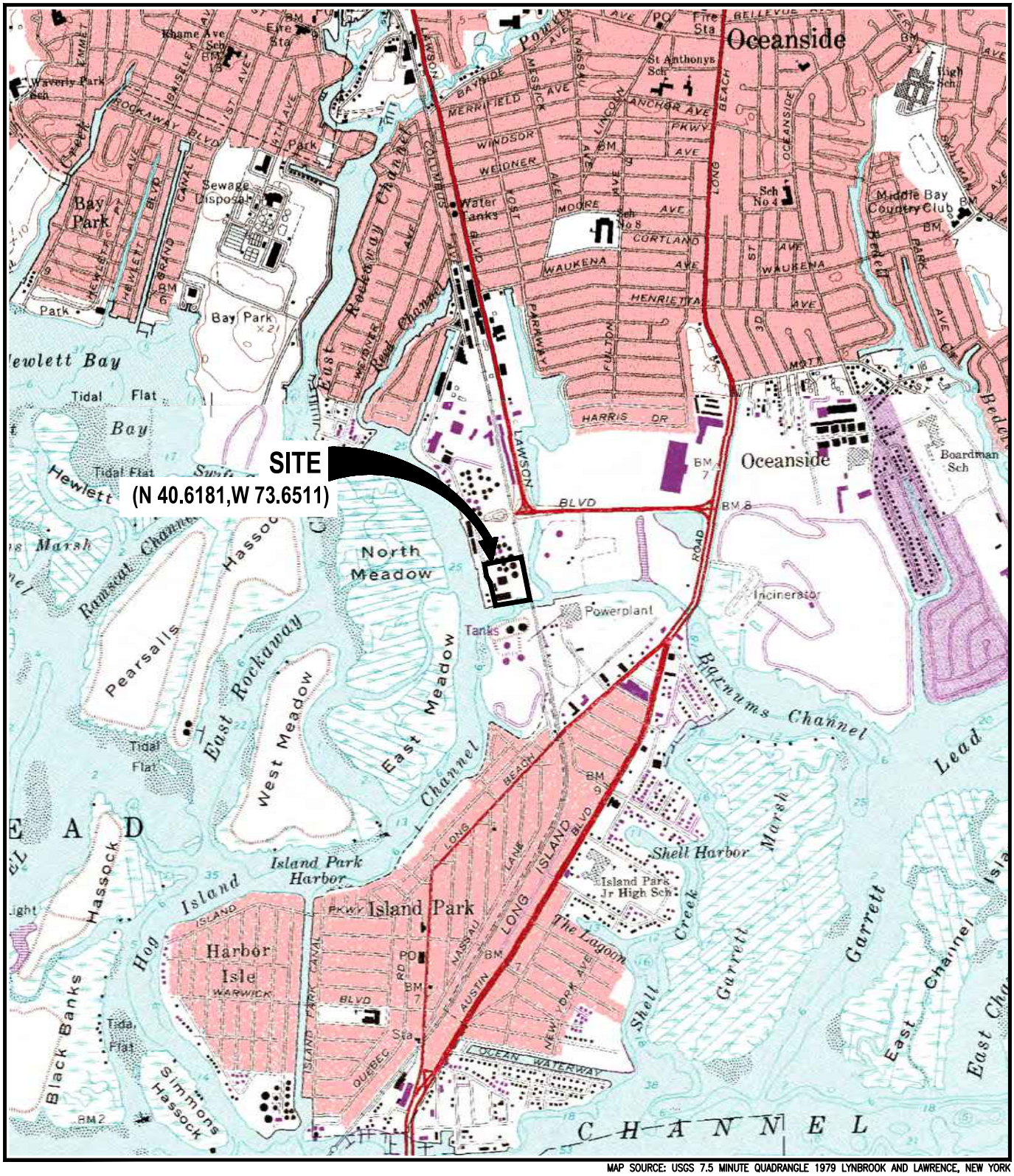
Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-31D-1R 480-93983-9 01/14/2016	MW-31D-1R 480-102224-8 06/22/2016	MW-31D-2R 480-93983-8 01/14/2016	MW-31D-2R 480-102224-9 06/22/2016
Volatile Organics (cont.)						
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 2.0	< 2.0
GC Volatiles - RSK-175						
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA
Ethane	NE	ug/L	NA	NA	NA	NA
Ethene	NE	ug/L	NA	NA	NA	NA
Methane	NE	ug/L	NA	NA	NA	NA
Inorganics						
Iron	300	ug/L	NA	**230 B**	NA	**2,200 B**
Manganese	300	ug/L	NA	**25 B**	NA	**430 B**
Sodium	20,000	ug/L	NA	NA	NA	NA
General Chemistry						
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	**221 B**	NA	**508 B**
Alkalinity, Total as CaCO3	NE	ug/L	NA	**221,000 B**	NA	**508,000 B**
Chloride	250	mg/L	NA	NA	NA	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	NA	**47,200**	NA	**750,000**
Sulfide	NE	ug/L	NA	**600**	NA	**2,800**
Sulfide	NE	ug/L	NA	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA

See Notes on Page 45.

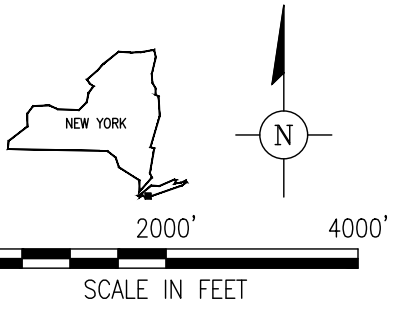
Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2018
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

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 was 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.
HF = Field parameter with a holding time of 15 minutes. Test performed by laboratory at client's request.
B = Compound was found in the blank and sample.
E = Result exceeded calibration range
[ ] = Duplicate analysis results
D = Sample was diluted due to high concentration of target analytes.
* = LCS or LCSD was above the control limits.
^ = Instrument related QC was outside acceptance limits.

FIGURES



MAP SOURCE: USGS 7.5 MINUTE QUADRANGLE 1979 LYNBROOK AND LAWRENCE, NEW YORK



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

SITE LOCATION MAP

ARCADIS Design & Consultancy for natural and built assets

FIGURE
1

CITY: SYRACUSE, NY DIV/GROUP: EBC-IM/DV DB:G.STEINBERGER PIC: A.HEBERT PM: W.MCCUNE LYR:ON=*;OFF=*REF*
C:\Users\lposenauer\OneDrive - ARCADIS\BIM 360 Docs\CHEVRON CORPORATION6518040 - MTBE SOURCE AREA INV2018\B0047517.0023\01-DWG\6518040_SITE LOC MAP_FIG 1.dwg LAYOUT: 1 SAVED: 11/20/2018 10:46 AM ACADVER: 21.0S (LMS TECH) PAGESETUP: C-PA-PDF
PLOTSTYLETABLE: PLTFULL.CTB PLOTTED: 11/20/2018 1:04 PM BY: POSENAUER, LISA
IMAGES:
NY_Lawrence.TIF
NY_Lynbrook.TIF

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.

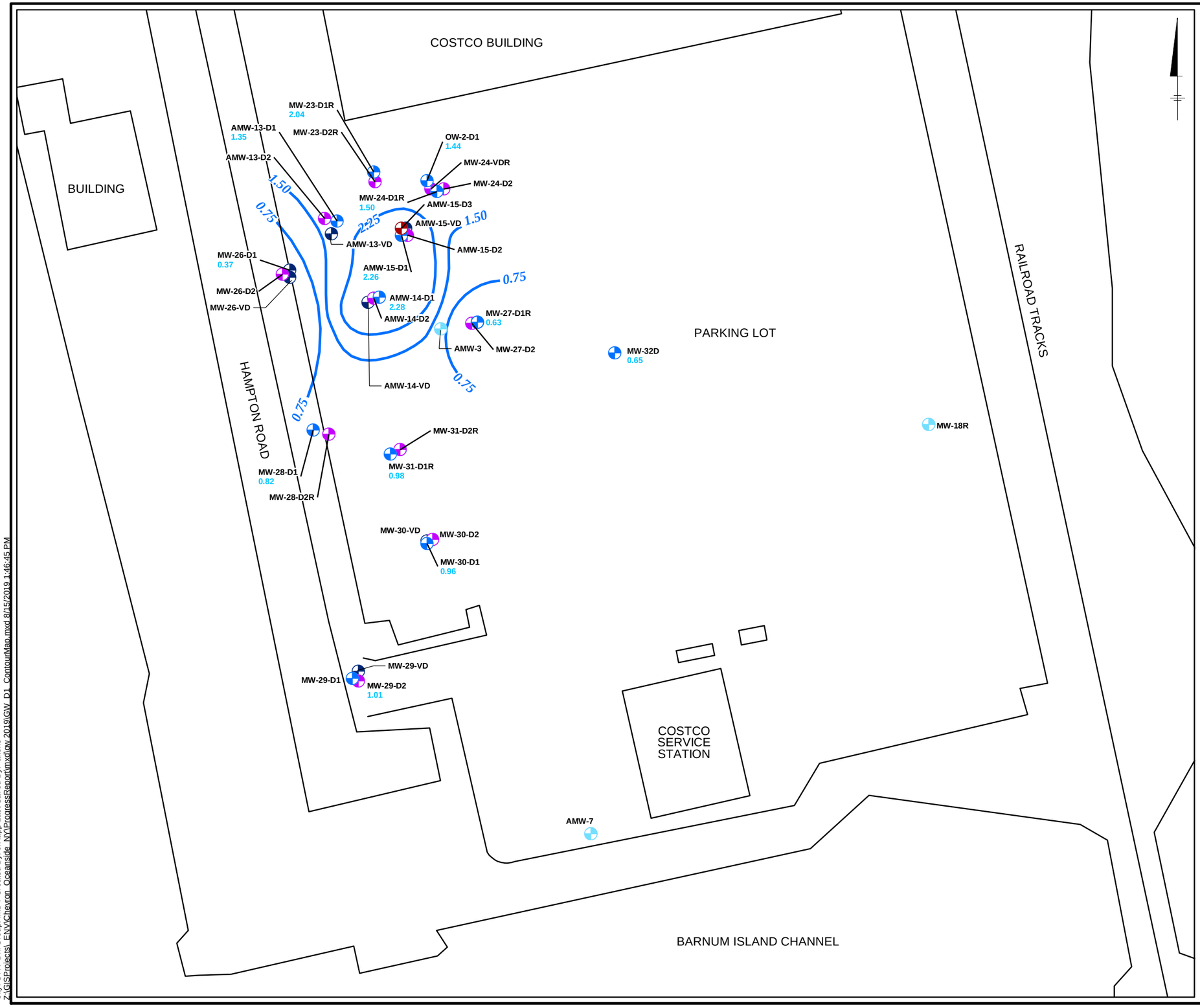
CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

SITE PLAN

ARCADIS Design & Consultancy for natural and built assets

FIGURE 2

City: SYR Div/Group: IMDV Created By: J.Rapp Last Saved By: jrapp
Z:\GISProjects_ENV\Chevron_Oceanside_NY\ProgressReport\mxd\SitePlan.mxd 5/17/2019 11:19:29 AM



NOTES:

1. 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.
2. NAVD 88 = NORTH AMERICA VERTICAL DATUM OF 1988.

CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

D1 HORIZON GROUNDWATER CONTOUR MAP MAY 10, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3

City: SYR Div/Group: IMDV Created By: J.Rapp Last Saved By: akens
Z:\GISProjects_ENV\Chevron_Oceanside_NY\ProgressReport\mxd\dtw 2019\GW_D1_ContourMap.mxd 8/15/2019 1:46:45 PM

COSTCO BUILDING

BUILDING

HAMPTON ROAD

RAILROAD TRACKS

PARKING LOT

BARNUM ISLAND CHANNEL

COSTCO SERVICE STATION

MW-23-D1R

MW-23-D2R
1.99

AMW-13-D1

AMW-13-D2
1.32

AMW-13-VD

MW-26-D1
0.14

MW-26-D2

MW-26-VD

MW-24-D1R

OW-2-D1

MW-24-VDR

MW-24-D2
1.97

AMW-15-D3

AMW-15-VD

AMW-15-D2
2.39

AMW-15-D1

AMW-14-D1
2.25

AMW-14-D2

AMW-14-VD

AMW-3

MW-27-D1R

MW-27-D2
0.33

MW-32D

MW-18R

MW-28-D1

MW-28-D2R
0.90

MW-31-D2R
1.16

MW-31-D1R

MW-30-D2

MW-30-VD

MW-30-D2
1.12

MW-30-D1

MW-29-VD

MW-29-D1

MW-29-D2
1.16

AMW-7

1.50

1.00

0.50

2.00

SITE LOCATION

New York

LEGEND:

- SHALLOW FILL UNIT MONITORING WELLS
- D1 HORIZON MONITORING WELLS
- D2 HORIZON MONITORING WELLS
- D3 HORIZON MONITORING WELLS
- VD HORIZON MONITORING WELLS
- 0.66 GROUNDWATER ELEVATION IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
- GROUNDWATER ELEVATION CONTOUR (NAVD 88)
- * NOT USED TO GENERATE CONTOURS

0 70 140 Feet

GRAPHIC SCALE

NOTES:

1. 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.
2. NAVD 88 = NORTH AMERICA VERTICAL DATUM OF 1988.

CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

D2 HORIZON GROUNDWATER CONTOUR MAP MAY 10, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

City: SYR Div/Group: IMDV Created By: J.Rapp Last Saved By: akens
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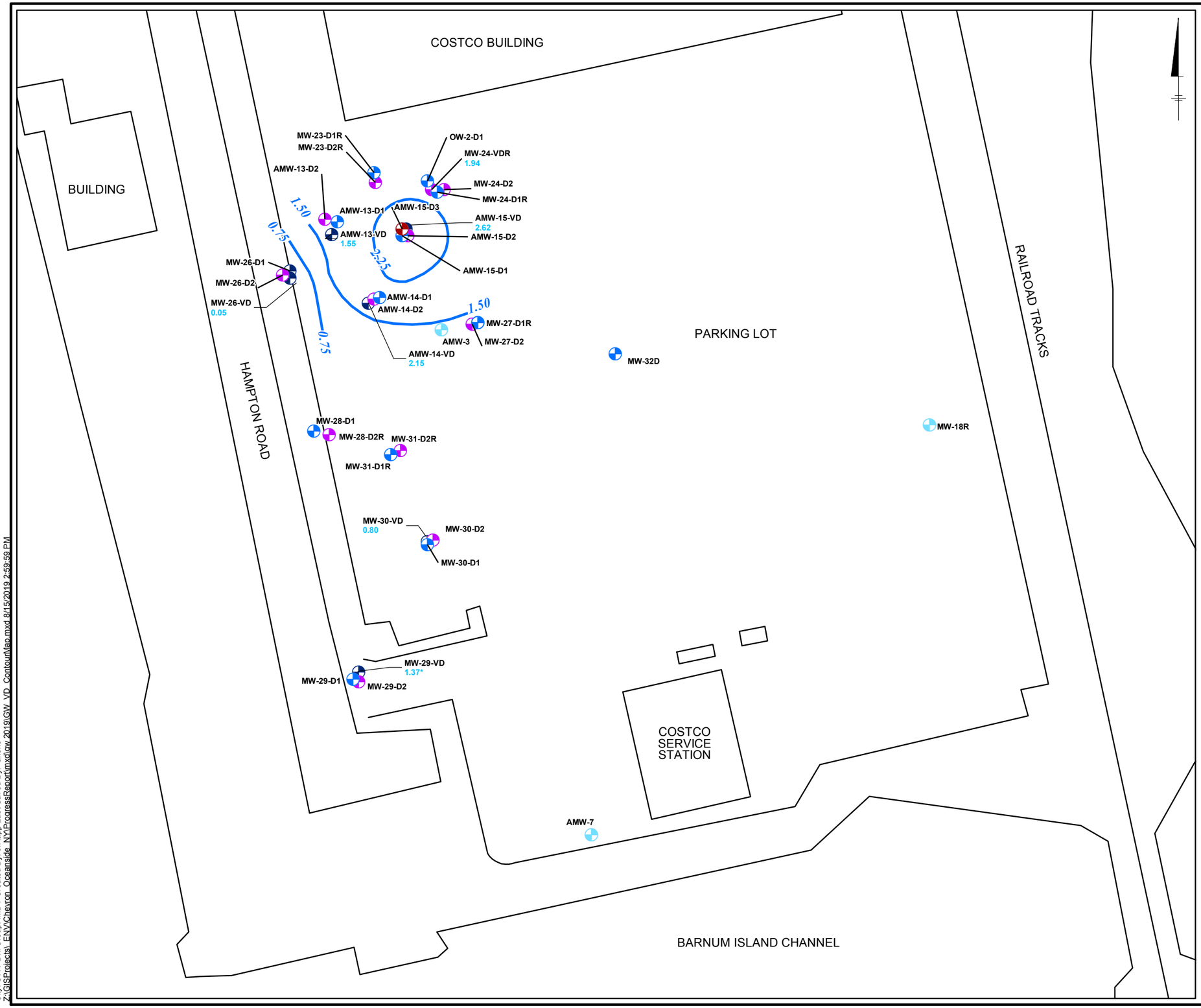


LEGEND:

- SHALLOW FILL UNIT MONITORING WELLS
- D1 HORIZON MONITORING WELLS
- D2 HORIZON MONITORING WELLS
- D3 HORIZON MONITORING WELLS
- VD HORIZON MONITORING WELLS
- 0.66 GROUNDWATER ELEVATION IN FEET ABOVE MEAN SEA LEVEL (NAVD 88)
- GROUNDWATER ELEVATION IN NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88)
- * NOT USED TO GENERATE CONTOURS

0 70 140 Feet

GRAPHIC SCALE

NOTES:

1. 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.
2. NAVD 88 = NORTH AMERICA VERTICAL DATUM OF 1988

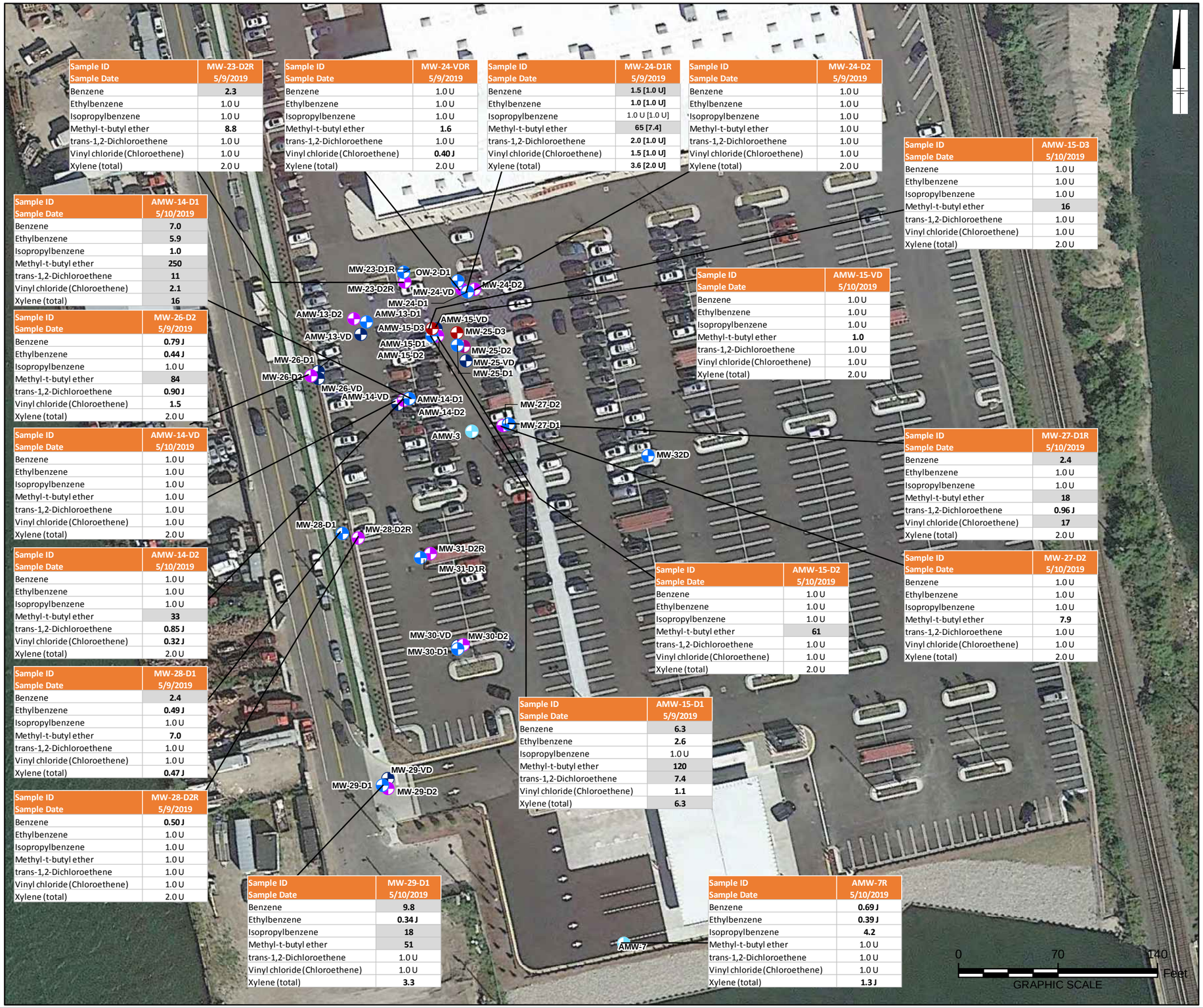
CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

VD HORIZON GROUNDWATER CONTOUR MAP MAY 10, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 5

City: SYR Div/Group: IMDV Created By: J.Rapp Last Saved By: akens
Z:\GISProjects_ENV\Chevron_Oceanside_NY\ProgressReport\mxd\gw_2019\GW_VD_ContourMap.mxd 8/15/2019 2:59:59 PM



Sample ID Sample Date	MW-23-D2R 5/9/2019
Benzene	**2.3**
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**8.8**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	MW-24-VDR 5/9/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**1.6**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	**0.40 J**
Xylene (total)	2.0 U

Sample ID Sample Date	MW-24-D1R 5/9/2019
Benzene	**1.5 [1.0 U]**
Ethylbenzene	**1.0 [1.0 U]**
Isopropylbenzene	1.0 U [1.0 U]
Methyl-t-butyl ether	**65 [7.4]**
trans-1,2-Dichloroethene	**2.0 [1.0 U]**
Vinyl chloride (Chloroethene)	**1.5 [1.0 U]**
Xylene (total)	**3.6 [2.0 U]**

Sample ID Sample Date	MW-24-D2 5/9/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	1.0 U
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	AMW-15-D3 5/10/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**16**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	AMW-14-D1 5/10/2019
Benzene	**7.0**
Ethylbenzene	**5.9**
Isopropylbenzene	**1.0**
Methyl-t-butyl ether	**250**
trans-1,2-Dichloroethene	**11**
Vinyl chloride (Chloroethene)	**2.1**
Xylene (total)	**16**

Sample ID Sample Date	AMW-15-VD 5/10/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**1.0**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	MW-26-D2 5/9/2019
Benzene	**0.79 J**
Ethylbenzene	**0.44 J**
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**84**
trans-1,2-Dichloroethene	**0.90 J**
Vinyl chloride (Chloroethene)	**1.5**
Xylene (total)	2.0 U

Sample ID Sample Date	MW-27-D1R 5/10/2019
Benzene	**2.4**
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**18**
trans-1,2-Dichloroethene	**0.96 J**
Vinyl chloride (Chloroethene)	**17**
Xylene (total)	2.0 U

Sample ID Sample Date	AMW-14-VD 5/10/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	1.0 U
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	AMW-15-D2 5/10/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**61**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	MW-27-D2 5/10/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**7.9**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	AMW-14-D2 5/10/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**33**
trans-1,2-Dichloroethene	**0.85 J**
Vinyl chloride (Chloroethene)	**0.32 J**
Xylene (total)	2.0 U

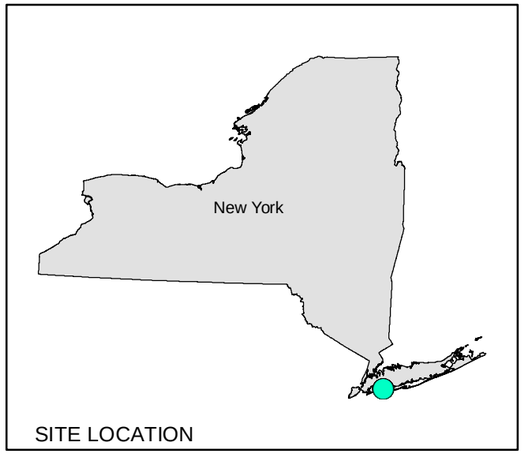
Sample ID Sample Date	MW-28-D1 5/9/2019
Benzene	**2.4**
Ethylbenzene	**0.49 J**
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**7.0**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	**0.47 J**

Sample ID Sample Date	AMW-15-D1 5/9/2019
Benzene	**6.3**
Ethylbenzene	**2.6**
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	**120**
trans-1,2-Dichloroethene	**7.4**
Vinyl chloride (Chloroethene)	**1.1**
Xylene (total)	**6.3**

Sample ID Sample Date	MW-28-D2R 5/9/2019
Benzene	**0.50 J**
Ethylbenzene	1.0 U
Isopropylbenzene	1.0 U
Methyl-t-butyl ether	1.0 U
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID Sample Date	MW-29-D1 5/10/2019
Benzene	**9.8**
Ethylbenzene	**0.34 J**
Isopropylbenzene	**18**
Methyl-t-butyl ether	**51**
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	**3.3**

Sample ID Sample Date	AMW-7R 5/10/2019
Benzene	**0.69 J**
Ethylbenzene	**0.39 J**
Isopropylbenzene	**4.2**
Methyl-t-butyl ether	1.0 U
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	**1.3 J**



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	NYDEC TOGS 1.1.1
Benzene	1 ug/L
Ethylbenzene	5 ug/L
Isopropylbenzene	5 ug/L
Methyl-t-butyl ether	10 ug/L
trans-1,2-Dichloroethene	5 ug/L
Vinyl chloride (Chloroethene)	2 ug/L
Xylene (total)	5 ug/L

NOTES/ABBREVIATIONS:

1. 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
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 sample results

CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

GROUNDWATER ANALYTICAL RESULTS MAY 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

City: SYR Div/Group: IMDV Created By: J.Rapp Last Saved By: akens
Z:\GISProjects_ENV\Chevron_Oceanside_NY\ProgressReport\mxd\Analytical 2019\Site_Analytical Data_2019.mxd 8/13/2019 1:59:26 PM

ATTACHMENT 1

Groundwater Gauging and Sampling Logs

ARCADIS Design & Consultancy for natural and built assets

cvx 6518040

Date 5/9/19

Technician/ BALELE SANDAOGO

Date	Well ID	Sampling time	pH	Temp (deg C)	Cond (Ms/cm3)	DO (mg/L)	ORP (mV)	Notes
5/9/19	~~[illegible]~~	—	—	—	—	—	—	
	MW-26D2	20:00	6.78	12.80	10.50	4.07	6.3	
	~~MW-26D1~~	~~20:45~~						
	~~MW-26D3~~	~~21:00~~						
	~~MW-27D2~~							
	MW-28D2R	21:00	8.01	12.63	3.129	5.87	-125.5	
	MW-28D1	21:20	7.24	12.11	3.540	12.0	-5.5	water
	MW-24VDR	21:47	8.73	13.34	0.406	1.15	21.5	
	MW-24D2R	21:55	10.05	13.28	5.171	1.36	-231.4	
	MW-24D2	22:15	9.40	13.24	0.449	0.50	-5.8	
	MW-23D1R	22:44	—	—	—	—	—	H2S lost in well
	MW-23D2R	23:00	8.12	13.05	6.373	5.77	-104.6	
	AMW-15-D1	23:51	7.35	13.99	5.536	0.97	-145.6	
5/10/19	AMW-15-D2	24:04	8.53	14.24	6.411	0.79	-21.5	
	AMW-15-D3	24:20	12.71	14.02	5.070	0.54	-342.4	
	AMW-15-VD	24:40	10.08	14.20	2.547	3.04	-164	
	AMW-14D1	01:00	8.15	12.67	4.185	0.26	-320.3	
	AMW-14-D2	01:25	8.42	12.88	5.771	0.97	-196.4	
	AMW-14VD	01:55	7.95	13.20	6.102	1.61	-179.4	
	MW-27D2	20:30	7.54	12.19	0.320	2.13	17.6	Blind Duplicate
	AMW-7R	21:00	7.25	11.51	1.132	0.51	-221.7	
	MW-2 D1	21:53	6.88	13.59	0.647	0.81	-153.8	
	MW-27-1R	20:40	7.78	13.36	0.455	3.37	-28.2	

TB-W-20190509 ⇒ 1940
TB-W-20190510 ⇒ 2015

BD-W-20190510 ⇒ MW-27D2

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	5/9/19	2	12.40	9.05	5.90	
AMW-13-D1		2	32.98	9.87	8.52	
AMW-13-D2		2	47.85	9.76	8.44	
AMW-13-VD		2	70.35	9.77	8.22	
OW-2-D1		2	33.70	9.94	8.50	
MW-26-VD	#5/9/19	2	45.20	9.99	9.44	
MW-29-D2		2	37.6	5.38	4.22	
MW-29-VD		2	69.70	5.27	3.90	
MW-30-D1		2	24.86	8.74	7.75	
MW-30-D2		2	40.18	8.72	7.60	
MW-30-VD		4	82.40	8.70	7.90	
MW-31-D1R		2	30.25	8.39	7.41	
MW-31-D2R		2	46.89	8.35	7.19	
MW-32D		2	30.45	8.85	8.20	
MW-27-D2		2	46.60	9.09	8.76	
MW-28-D2R*		2	46.55	8.40	7.53	
MW-24-D2		2	14.30	10.00	8.10	
MW-24-VDR		2	71.80	9.72	7.78	
AMW-15-VD		2	71.30	9.82	7.29	
AMW-7R		2	13.64	9.95	8.12	
AMW-14-VD		2	15.7	9.25	7.10	
AMW-14-D2		2	42.72	9.37	7.12	
MW-28-D1		2	30.20	8.25	7.43	
MW-26-D2		2	45.25	9.40	9.20	
MW-23-D2R		2	45.50	10.52	8.53	
AMW-15-D2		2	41.50	9.71	7.32	
AMW-15-D3		2	48.04	9.81	7.29	
MW-23-D1R		2	23.95	9.84	7.50	
AMW-15-D1		2	35.50	9.74	7.48	
MW-27-D1R		2	32.1	9.01	8.38	
MW-26-D1		2	12.50	9.95	9.58	
MW-29-D1		2	23.40	5.21	4.30	
MW-18R	5/10/19	2	9.70	7.98	4.85	
AMW-14-D1		2	33.15	9.38	7.10	
MW-24-D1R		2	31.60	9.82	8.32	

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**

ATTACHMENT 2

Laboratory Analytical Reports

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-181653-1
Client Project/Site: 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:
7/9/2019 3:38:16 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

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

Table of Contents

Definitions/Glossary

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

Job ID: 460-181653-1

Qualifiers

GC/MS VOA

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

GC VOA

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

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

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.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

General Chemistry

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

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)

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-181653-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative
460-181653-1

Revision
This report has been revised to correct a client ID.

Receipt
The samples were received on 5/10/2019 5:20 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 3 coolers at receipt time were 2.1º C, 2.4º C and 2.5º C.

Receipt Exceptions

One or more containers for the following sample was received empty: MW-24-D1R-W-20190509 (460-181653-14). One voa vial for RSK received empty

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-612063 was outside the method criteria for the following analytes: Bromomethane (bias low), Chloromethane and Dichlorodifluoromethane (bias high). 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 analytical batch 460-612063 recovered outside control limits for the following analytes: Chloromethane and Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-612256 was outside the method criteria for the following analytes: Chloromethane and Bromoform (bias high), Dichlorodifluoromethane, Bromomethane, Trichlorofluoromethane and 1,1,2-Trichloro-1,2,2-trifluoroethane(bias 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) and laboratory control sample duplicate (LCSD) for analytical batch 460-612256 recovered outside the lower control limits for the following analytes: 1,1,2-Trichloro-1,2,2-trifluoroethane and Trichlorofluoromethane.

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 due to the nature of the sample matrix: MW-24-VDR-W-20190509 (460-181653-3) and MW-23-D2R-W-20190509 (460-181653-9). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The following samples were diluted to bring the concentration of target analytes within the calibration range: MW-28-D2R-W-20190509 (460-181653-1), MW-28-D1-W-20190509 (460-181653-7), MW-26-D2-W-20190509 (460-181653-8), AMW-15-D1-20190509 (460-181653-12) and MW-24-D1R-W-20190509 (460-181653-14). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The following samples was diluted to bring the concentration of target analytes within the calibration range: AMW-14-D2-W-20190510 (460-181653-6), AMW-15-D2-W-20190510 (460-181653-10), AMW-15-D3-W-20190510 (460-181653-11) and AMW-14-D1-W-20190510 (460-181653-13). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: Reanalysis of the following samples were performed outside of the analytical holding time due to over-dilution in the initial analysis: AMW-15-VD-W-20190510 (460-181653-4) and AMW-14-VD-W-20190510 (460-181653-5).

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

GC Semi VOA
Method(s) 300.0: The following samples were diluted to bring the concentration of Sulfate within the calibration range:

Job ID: 460-181653-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

MW-28-D2R-W-20190509 (460-181653-1), MW-24-VDR-W-20190509 (460-181653-3), AMW-15-VD-W-20190510 (460-181653-4), AMW-14-VD-W-20190510 (460-181653-5), AMW-14-D2-W-20190510 (460-181653-6), MW-28-D1-W-20190509 (460-181653-7), MW-26-D2-W-20190509 (460-181653-8), MW-23-D2R-W-20190509 (460-181653-9), AMW-15-D2-W-20190510 (460-181653-10), AMW-15-D3-W-20190510 (460-181653-11), AMW-15-D1-20190509 (460-181653-12), AMW-14-D1-W-20190510 (460-181653-13) and MW-24-D1R-W-20190509 (460-181653-14). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of Chloride within the calibration range: MW-28-D2R-W-20190509 (460-181653-1), MW-24-D2-W-20190509 (460-181653-2), MW-24-VDR-W-20190509 (460-181653-3), AMW-15-VD-W-20190510 (460-181653-4), AMW-14-VD-W-20190510 (460-181653-5), AMW-14-D2-W-20190510 (460-181653-6), MW-28-D1-W-20190509 (460-181653-7), MW-26-D2-W-20190509 (460-181653-8), MW-23-D2R-W-20190509 (460-181653-9), AMW-15-D2-W-20190510 (460-181653-10), AMW-15-D3-W-20190510 (460-181653-11), AMW-14-D1-W-20190510 (460-181653-13) and MW-24-D1R-W-20190509 (460-181653-14). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following sample was diluted to bring the concentration of Chloride within the calibration range: AMW-15-D1-20190509 (460-181653-12). 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) 6010D: The method blank for preparation batch 460-610741 and analytical batch 460-610812 contained Sodium above the method detection limit. This target analyte concentration was less than half the reporting limit (1/2RL); therefore, re-extraction and re-analysis of samples 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) 9060A: The method blank for analytical batch 460-611313 contained total organic carbon above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

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

Job ID: 460-181653-1

Client Sample ID: MW-28-D2R-W-20190509 — Lab Sample ID: 460-181653-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.67	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	0.50	J	1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	0.27	J	1.0	0.16	ug/L	1		8260C	Total/NA
Carbon dioxide	42000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	730		180	44	ug/L	44		RSK-175	Total/NA
Chloride	7600		240	28	mg/L	2000		300.0	Total/NA
Sulfate	870		60	35	mg/L	100		300.0	Total/NA
Iron	569		150	34.2	ug/L	1		6010D	Total/NA
Manganese	224		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2850000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.036	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Total Organic Carbon	9.4	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	385		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.37		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.20	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	10.9		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-24-D2-W-20190509 — Lab Sample ID: 460-181653-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	5000		5000	1800	ug/L	1		RSK-175	Total/NA
Chloride	89		2.4	0.28	mg/L	20		300.0	Total/NA
Sulfate	9.1		0.60	0.35	mg/L	1		300.0	Total/NA
Iron	391		150	34.2	ug/L	1		6010D	Total/NA
Manganese	7.7	J	15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	100000		5000	460	ug/L	1		6010D	Total/NA
Nitrite as N	0.038	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.018	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	6.3	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	112		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.39		0.10	0.10	mg/L	1		SM 3500	Total/NA

Client Sample ID: MW-24-VDR-W-20190509 — Lab Sample ID: 460-181653-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.30	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.6		1.0	0.47	ug/L	1		8260C	Total/NA
Vinyl chloride	0.40	J	1.0	0.17	ug/L	1		8260C	Total/NA
Carbon dioxide	92000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	13	J	44	11	ug/L	11		RSK-175	Total/NA
Chloride	16000		600	70	mg/L	5000		300.0	Total/NA
Sulfate	1700		60	35	mg/L	100		300.0	Total/NA
Iron	25200		150	34.2	ug/L	1		6010D	Total/NA
Manganese	597		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	6100000		250000	23000	ug/L	50		6010D	Total/NA
Nitrite as N	0.063	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.010	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	7.7	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	461		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	25.2		0.10	0.10	mg/L	1		SM 3500	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 460-181653-1

Client Sample ID: AMW-15-VD-W-20190510 — Lab Sample ID: 460-181653-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.0		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	17000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane - RA	25	H	4.0	1.0	ug/L	1		RSK-175	Total/NA
Chloride	18000		1200	140	mg/L	10000		300.0	Total/NA
Sulfate	2000		60	35	mg/L	100		300.0	Total/NA
Iron	3600		150	34.2	ug/L	1		6010D	Total/NA
Manganese	287		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	8560000		250000	23000	ug/L	50		6010D	Total/NA
Nitrite as N	0.035	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Total Organic Carbon	6.8	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	432		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	3.6		0.10	0.10	mg/L	1		SM 3500	Total/NA

Client Sample ID: AMW-14-VD-W-20190510 — Lab Sample ID: 460-181653-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	130000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane - RA	12	H	4.0	1.0	ug/L	1		RSK-175	Total/NA
Chloride	110000		7200	840	mg/L	60000		300.0	Total/NA
Sulfate	2000		60	35	mg/L	100		300.0	Total/NA
Iron	14700		150	34.2	ug/L	1		6010D	Total/NA
Manganese	387		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	7150000	B	250000	23000	ug/L	50		6010D	Total/NA
Nitrite as N	0.076	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.094	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	18.3	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	493		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	14.4		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.30	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA

Client Sample ID: AMW-14-D2-W-20190510 — Lab Sample ID: 460-181653-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.32	J	1.0	0.16	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.35	J	1.0	0.22	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	33		1.0	0.47	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.85	J	1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	0.32	J	1.0	0.17	ug/L	1		8260C	Total/NA
Carbon dioxide	150000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1900		180	44	ug/L	44		RSK-175	Total/NA
Chloride	4200		300	35	mg/L	2500		300.0	Total/NA
Sulfate	84		30	17	mg/L	50		300.0	Total/NA
Iron	548		150	34.2	ug/L	1		6010D	Total/NA
Manganese	80.1		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2080000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate as N	0.049	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	18.5	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	822		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferrous Iron	1.1	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	71.6		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 460-181653-1

Client Sample ID: MW-28-D1-W-20190509 — Lab Sample ID: 460-181653-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.69	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	2.4		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	0.34	J	1.0	0.16	ug/L	1		8260C	Total/NA
Ethylbenzene	0.49	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	7.0		1.0	0.47	ug/L	1		8260C	Total/NA
Xylenes, Total	0.47	J	2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	120000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1300		350	88	ug/L	88		RSK-175	Total/NA
Chloride	3300		300	35	mg/L	2500		300.0	Total/NA
Sulfate	170		60	35	mg/L	100		300.0	Total/NA
Iron	2480		150	34.2	ug/L	1		6010D	Total/NA
Manganese	89.0		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1940000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.016	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Total Organic Carbon	12.9	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	667		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.9		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.60	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	45.2		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-26-D2-W-20190509 — Lab Sample ID: 460-181653-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.79	J	1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	0.25	J	1.0	0.16	ug/L	1		8260C	Total/NA
Ethylbenzene	0.44	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	84		1.0	0.47	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.90	J	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.50	J	1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	1.5		1.0	0.17	ug/L	1		8260C	Total/NA
Carbon dioxide	130000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	750		350	88	ug/L	88		RSK-175	Total/NA
Chloride	5000		300	35	mg/L	2500		300.0	Total/NA
Sulfate	350		60	35	mg/L	100		300.0	Total/NA
Iron	466		150	34.2	ug/L	1		6010D	Total/NA
Manganese	75.2		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2420000		100000	9200	ug/L	20		6010D	Total/NA
Nitrate as N	0.021	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	14.6	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	684		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.47		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	54.6		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-23-D2R-W-20190509 — Lab Sample ID: 460-181653-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.3		1.0	0.43	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	8.8		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	32000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	290		88	22	ug/L	22		RSK-175	Total/NA
Chloride	3800		240	28	mg/L	2000		300.0	Total/NA
Sulfate	290		60	35	mg/L	100		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-23-D2R-W-20190509 (Continued) — Lab Sample ID: 460-181653-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Iron	1660		150	34.2	ug/L	1		6010D	Total/NA
Manganese	279		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1930000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.0045	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.038	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	20.7	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	587		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.4		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.24	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	10.9		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-15-D2-W-20190510 — Lab Sample ID: 460-181653-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	61		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	130000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	520		88	22	ug/L	22		RSK-175	Total/NA
Chloride	4200		240	28	mg/L	2000		300.0	Total/NA
Sulfate	220		60	35	mg/L	100		300.0	Total/NA
Iron	328		150	34.2	ug/L	1		6010D	Total/NA
Manganese	72.0		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2030000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.0070	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.047	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	14.2	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	672		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.24		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.085	J HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	50.8		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-15-D3-W-20190510 — Lab Sample ID: 460-181653-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.29	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	16		1.0	0.47	ug/L	1		8260C	Total/NA
Trichloroethene	0.39	J	1.0	0.31	ug/L	1		8260C	Total/NA
Carbon dioxide	140000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1600		180	44	ug/L	44		RSK-175	Total/NA
Chloride	8800		300	35	mg/L	2500		300.0	Total/NA
Sulfate	980		60	35	mg/L	100		300.0	Total/NA
Iron	301		150	34.2	ug/L	1		6010D	Total/NA
Manganese	222		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2730000		100000	9200	ug/L	20		6010D	Total/NA
Nitrite as N	0.056	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.042	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	14.4	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	616		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.30		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	41.4		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

Job ID: 460-181653-1

Client Sample ID: AMW-15-D1-20190509 — Lab Sample ID: 460-181653-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.89	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	6.3		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	1.3		1.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	0.79	J	1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	2.6		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	120		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.50	J	1.0	0.26	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	7.4		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	1.1		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	6.3		2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	52000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	3200		440	110	ug/L	110		RSK-175	Total/NA
Chloride	2500		120	14	mg/L	1000		300.0	Total/NA
Sulfate	200		60	35	mg/L	100		300.0	Total/NA
Iron	3340		150	34.2	ug/L	1		6010D	Total/NA
Manganese	335		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1170000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.38	J	0.50	0.015	mg/L	5		353.2	Total/NA
Nitrate as N	0.43	J	0.50	0.050	mg/L	5		353.2	Total/NA
Total Organic Carbon	36.8	B	5.0	1.8	mg/L	5		9060A	Total/NA
Alkalinity	422		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	3.3		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	41.4		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-14-D1-W-20190510 — Lab Sample ID: 460-181653-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.62	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	7.0		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	0.79	J	1.0	0.16	ug/L	1		8260C	Total/NA
Cyclohexane	2.1		1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	5.9		1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	1.0		1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	250		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	3.0		1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	0.84	J	1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	11		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	2.1		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	16		2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	73000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	150	J	170	33	ug/L	22		RSK-175	Total/NA
Ethene	440		150	33	ug/L	22		RSK-175	Total/NA
Methane	1900		88	22	ug/L	22		RSK-175	Total/NA
Chloride	3700		240	28	mg/L	2000		300.0	Total/NA
Sulfate	98		60	35	mg/L	100		300.0	Total/NA
Iron	5780		150	34.2	ug/L	1		6010D	Total/NA
Manganese	94.9		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1740000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate as N	0.080	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	45.4	B	5.0	1.8	mg/L	5		9060A	Total/NA
Alkalinity	805		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMW-14-D1-W-20190510 (Continued) — Lab Sample ID: 460-181653-13

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Ferric Iron	5.8		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	52.7		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-24-D1R-W-20190509 — Lab Sample ID: 460-181653-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.5		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	0.62	J	1.0	0.16	ug/L	1		8260C	Total/NA
Ethylbenzene	1.0		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	65		1.0	0.47	ug/L	1		8260C	Total/NA
Toluene	1.5		1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	2.0		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	1.5		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	3.6		2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	98000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1600		180	44	ug/L	44		RSK-175	Total/NA
Chloride	3900		240	28	mg/L	2000		300.0	Total/NA
Sulfate	250		60	35	mg/L	100		300.0	Total/NA
Iron	4120		150	34.2	ug/L	1		6010D	Total/NA
Manganese	79.6		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1720000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.014	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.063	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	15.4	B	1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	572		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	3.3		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.86	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	41.4		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: TB-W-20190509 — Lab Sample ID: 460-181653-15

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 460-181653-1

Client Sample ID: MW-28-D2R-W-20190509
Date Collected: 05/09/19 21:00
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-1
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			05/23/19 02:41	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 02:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 02:41	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 02:41	1
1,1-Dichloroethane	**0.67**	**J**	1.0	0.26	ug/L			05/23/19 02:41	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 02:41	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 02:41	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 02:41	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 02:41	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 02:41	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 02:41	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 02:41	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 02:41	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 02:41	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 02:41	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 02:41	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 02:41	1
Benzene	**0.50**	**J**	1.0	0.43	ug/L			05/23/19 02:41	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 02:41	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 02:41	1
Carbon disulfide	**0.27**	**J**	1.0	0.16	ug/L			05/23/19 02:41	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 02:41	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 02:41	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 02:41	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 02:41	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 02:41	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 02:41	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 02:41	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 02:41	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 02:41	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 02:41	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 02:41	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 02:41	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 02:41	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 02:41	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 02:41	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/23/19 02:41	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 02:41	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 02:41	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 02:41	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 02:41	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 02:41	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 02:41	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 02:41	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 02:41	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 02:41	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 02:41	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 02:41	1

Client Sample ID: MW-28-D2R-W-20190509

Lab Sample ID: 460-181653-1

Date Collected: 05/09/19 21:00

Matrix: Water

Date Received: 05/10/19 17:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/23/19 02:41*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*05/23/19 02:41*	*1*
Dibromofluoromethane (Surr)	*100*		*72 - 131*		*05/23/19 02:41*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/23/19 02:41*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**42000**		5000	1800	ug/L			05/14/19 15:52	1
Ethane	330	U	330	66	ug/L			05/22/19 20:00	44
Ethene	310	U	310	66	ug/L			05/22/19 20:00	44
Methane	**730**		180	44	ug/L			05/22/19 20:00	44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**7600**		240	28	mg/L			05/21/19 21:39	2000
Sulfate	**870**		60	35	mg/L			05/21/19 21:18	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**569**		150	34.2	ug/L		05/16/19 08:57	05/17/19 23:46	1
Manganese	**224**		15.0	0.99	ug/L		05/16/19 08:57	05/17/19 23:46	1
Sodium	**2850000**		50000	4600	ug/L		05/16/19 08:57	05/19/19 09:43	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.036**	**J**	0.10	0.0030	mg/L			05/11/19 03:47	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 03:47	1
Total Organic Carbon	**9.4**	**B**	1.0	0.35	mg/L			05/17/19 23:52	1
Ferrous Iron	**0.20**	**HF**	0.10	0.055	mg/L			05/14/19 17:52	1
Sulfide	**10.9**		1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**385**		5.0	5.0	mg/L			05/17/19 14:19	1
Ferric Iron	**0.37**		0.10	0.10	mg/L			05/20/19 06:07	1

Client Sample ID: MW-24-D2-W-20190509

Lab Sample ID: 460-181653-2

Date Collected: 05/09/19 22:15

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 03:06	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 03:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 03:06	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 03:06	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 03:06	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 03:06	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 03:06	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 03:06	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 03:06	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 03:06	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 03:06	1

Client Sample ID: MW-24-D2-W-20190509
Date Collected: 05/09/19 22:15
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 03:06	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 03:06	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 03:06	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 03:06	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 03:06	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 03:06	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 03:06	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 03:06	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 03:06	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 03:06	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 03:06	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 03:06	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 03:06	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 03:06	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 03:06	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 03:06	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 03:06	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 03:06	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 03:06	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 03:06	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 03:06	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 03:06	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 03:06	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 03:06	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 03:06	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/23/19 03:06	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 03:06	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 03:06	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 03:06	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 03:06	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 03:06	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 03:06	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 03:06	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 03:06	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 03:06	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 03:06	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 03:06	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 03:06*	*1*
4-Bromofluorobenzene	*98*		*77 - 124*		*05/23/19 03:06*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*05/23/19 03:06*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/23/19 03:06*	*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			05/14/19 16:01	1
Ethane	7.5	U	7.5	1.5	ug/L			05/22/19 20:17	1
Ethene	7.0	U	7.0	1.5	ug/L			05/22/19 20:17	1
Methane	4.0	U	4.0	1.0	ug/L			05/22/19 20:17	1

Client Sample ID: MW-24-D2-W-20190509

Lab Sample ID: 460-181653-2

Date Collected: 05/09/19 22:15

Matrix: Water

Date Received: 05/10/19 17:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**89**		2.4	0.28	mg/L			05/21/19 17:02	20
Sulfate	**9.1**		0.60	0.35	mg/L			05/21/19 21:53	1

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**391**		150	34.2	ug/L		05/16/19 08:57	05/17/19 23:50	1
Manganese	**7.7**	**J**	15.0	0.99	ug/L		05/16/19 08:57	05/17/19 23:50	1
Sodium	**100000**		5000	460	ug/L		05/16/19 08:57	05/17/19 23:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.038**	**J**	0.10	0.0030	mg/L			05/11/19 03:46	1
Nitrate as N	**0.018**	**J**	0.10	0.010	mg/L			05/11/19 03:46	1
Total Organic Carbon	**6.3**	**B**	1.0	0.35	mg/L			05/18/19 00:17	1
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:52	1
Sulfide	1.0	U	1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**112**		5.0	5.0	mg/L			05/17/19 14:28	1
Ferric Iron	**0.39**		0.10	0.10	mg/L			05/20/19 06:07	1

Client Sample ID: MW-24-VDR-W-20190509

Lab Sample ID: 460-181653-3

Date Collected: 05/09/19 21:47

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 03:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 03:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 03:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 03:31	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 03:31	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 03:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 03:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 03:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 03:31	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 03:31	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 03:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 03:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 03:31	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 03:31	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 03:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 03:31	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 03:31	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 03:31	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 03:31	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 03:31	1
Carbon disulfide	**0.30**	**J**	1.0	0.16	ug/L			05/23/19 03:31	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 03:31	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 03:31	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 03:31	1

Client Sample ID: MW-24-VDR-W-20190509
Date Collected: 05/09/19 21:47
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-3
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 03:31	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 03:31	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 03:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 03:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 03:31	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 03:31	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 03:31	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 03:31	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 03:31	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 03:31	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 03:31	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 03:31	1
Methyl tert-butyl ether	**1.6**		1.0	0.47	ug/L			05/23/19 03:31	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 03:31	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 03:31	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 03:31	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 03:31	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 03:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 03:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 03:31	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 03:31	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 03:31	1
Vinyl chloride	**0.40**	**J**	1.0	0.17	ug/L			05/23/19 03:31	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 03:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*		*05/23/19 03:31*	*1*
4-Bromofluorobenzene	*96*		*77 - 124*		*05/23/19 03:31*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/23/19 03:31*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/23/19 03:31*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**92000**		5000	1800	ug/L			05/14/19 16:09	1
Ethane	83	U	83	17	ug/L			05/22/19 20:35	11
Ethene	77	U	77	17	ug/L			05/22/19 20:35	11
Methane	**13**	**J**	44	11	ug/L			05/22/19 20:35	11

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**16000**		600	70	mg/L			05/21/19 22:23	5000
Sulfate	**1700**		60	35	mg/L			05/21/19 22:08	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**25200**		150	34.2	ug/L		05/22/19 08:50	05/22/19 16:27	1
Manganese	**597**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 16:27	1
Sodium	**6100000**		250000	23000	ug/L		05/22/19 08:50	05/22/19 22:12	50

Client Sample ID: MW-24-VDR-W-20190509

Lab Sample ID: 460-181653-3

Date Collected: 05/09/19 21:47

Matrix: Water

Date Received: 05/10/19 17:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.063**	**J**	0.10	0.0030	mg/L			05/11/19 03:48	1
Nitrate as N	**0.010**	**J**	0.10	0.010	mg/L			05/11/19 03:48	1
Total Organic Carbon	**7.7**	**B**	1.0	0.35	mg/L			05/18/19 00:41	1
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:52	1
Sulfide	1.0	U	1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**461**		5.0	5.0	mg/L			05/17/19 14:37	1
Ferric Iron	**25.2**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: AMW-15-VD-W-20190510

Lab Sample ID: 460-181653-4

Date Collected: 05/10/19 00:40

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 03:56	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 03:56	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 03:56	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 03:56	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 03:56	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 03:56	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 03:56	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 03:56	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 03:56	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 03:56	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 03:56	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 03:56	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 03:56	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 03:56	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 03:56	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 03:56	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 03:56	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 03:56	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 03:56	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 03:56	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 03:56	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 03:56	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 03:56	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 03:56	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 03:56	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 03:56	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 03:56	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 03:56	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 03:56	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 03:56	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 03:56	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 03:56	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 03:56	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 03:56	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 03:56	1

Client Sample ID: AMW-15-VD-W-20190510
Date Collected: 05/10/19 00:40
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 03:56	1
Methyl tert-butyl ether	**1.0**		1.0	0.47	ug/L			05/23/19 03:56	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 03:56	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 03:56	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 03:56	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 03:56	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 03:56	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 03:56	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 03:56	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 03:56	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 03:56	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 03:56	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 03:56	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*74 - 132*		*05/23/19 03:56*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/23/19 03:56*	*1*
Dibromofluoromethane (Surr)	*100*		*72 - 131*		*05/23/19 03:56*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 03:56*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**17000**		5000	1800	ug/L			05/14/19 16:18	1
Ethane	170	U	170	33	ug/L			05/23/19 13:00	22
Ethene	150	U	150	33	ug/L			05/23/19 13:00	22
Methane	88	U	88	22	ug/L			05/23/19 13:00	22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	7.5	U H	7.5	1.5	ug/L			06/03/19 18:25	1
Ethene	7.0	U H	7.0	1.5	ug/L			06/03/19 18:25	1
Methane	**25**	**H**	4.0	1.0	ug/L			06/03/19 18:25	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**18000**		1200	140	mg/L			05/21/19 22:52	10000
Sulfate	**2000**		60	35	mg/L			05/21/19 22:38	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3600**		150	34.2	ug/L		05/22/19 08:50	05/22/19 16:31	1
Manganese	**287**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 16:31	1
Sodium	**8560000**		250000	23000	ug/L		05/22/19 08:50	05/22/19 22:23	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.035**	**J**	0.10	0.0030	mg/L			05/11/19 04:05	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 04:05	1
Total Organic Carbon	**6.8**	**B**	1.0	0.35	mg/L			05/18/19 01:06	1
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:52	1
Sulfide	1.0	U	1.0	0.58	mg/L			05/16/19 15:22	1

Client Sample ID: AMW-15-VD-W-20190510

Lab Sample ID: 460-181653-4

Date Collected: 05/10/19 00:40

Matrix: Water

Date Received: 05/10/19 17:20

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	432		5.0	5.0	mg/L			05/17/19 14:47	1
Ferric Iron	3.6		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: AMW-14-VD-W-20190510

Lab Sample ID: 460-181653-5

Date Collected: 05/10/19 01:55

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 04:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 04:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 04:21	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 04:21	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 04:21	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 04:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 04:21	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 04:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 04:21	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 04:21	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 04:21	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 04:21	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 04:21	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 04:21	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 04:21	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 04:21	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 04:21	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 04:21	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 04:21	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 04:21	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 04:21	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 04:21	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 04:21	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 04:21	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 04:21	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 04:21	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 04:21	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 04:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 04:21	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 04:21	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 04:21	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 04:21	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 04:21	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 04:21	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 04:21	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 04:21	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/23/19 04:21	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 04:21	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 04:21	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 04:21	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 04:21	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 04:21	1

Client Sample ID: AMW-14-VD-W-20190510
Date Collected: 05/10/19 01:55
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 04:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 04:21	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 04:21	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 04:21	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 04:21	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 04:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*		*05/23/19 04:21*	*1*
4-Bromofluorobenzene	*95*		*77 - 124*		*05/23/19 04:21*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/23/19 04:21*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/23/19 04:21*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**130000**		5000	1800	ug/L			05/14/19 16:27	1
Ethane	170	U	170	33	ug/L			05/23/19 13:17	22
Ethene	150	U	150	33	ug/L			05/23/19 13:17	22
Methane	88	U	88	22	ug/L			05/23/19 13:17	22

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	7.5	U H	7.5	1.5	ug/L			06/03/19 18:43	1
Ethene	7.0	U H	7.0	1.5	ug/L			06/03/19 18:43	1
Methane	**12**	**H**	4.0	1.0	ug/L			06/03/19 18:43	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**110000**		7200	840	mg/L			05/21/19 23:22	60000
Sulfate	**2000**		60	35	mg/L			05/21/19 23:07	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**14700**		150	34.2	ug/L		05/17/19 08:49	05/17/19 18:14	1
Manganese	**387**		15.0	0.99	ug/L		05/17/19 08:49	05/17/19 18:14	1
Sodium	**7150000**	**B**	250000	23000	ug/L		05/17/19 08:49	05/18/19 00:29	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.076**	**J**	0.10	0.0030	mg/L			05/11/19 04:07	1
Nitrate as N	**0.094**	**J**	0.10	0.010	mg/L			05/11/19 04:07	1
Total Organic Carbon	**18.3**	**B**	1.0	0.35	mg/L			05/18/19 01:31	1
Ferrous Iron	**0.30**	**HF**	0.10	0.055	mg/L			05/14/19 17:52	1
Sulfide	1.0	U	1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**493**		5.0	5.0	mg/L			05/17/19 14:57	1
Ferric Iron	**14.4**		0.10	0.10	mg/L			05/20/19 06:07	1

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

Job ID: 460-181653-1

Client Sample ID: AMW-14-D2-W-20190510
Date Collected: 05/10/19 01:25
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-6
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			05/23/19 04:46	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 04:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 04:46	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 04:46	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 04:46	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 04:46	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 04:46	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 04:46	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 04:46	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 04:46	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 04:46	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 04:46	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 04:46	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 04:46	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 04:46	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 04:46	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 04:46	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 04:46	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 04:46	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 04:46	1
Carbon disulfide	**0.32**	**J**	1.0	0.16	ug/L			05/23/19 04:46	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 04:46	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 04:46	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 04:46	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 04:46	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 04:46	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 04:46	1
cis-1,2-Dichloroethene	**0.35**	**J**	1.0	0.22	ug/L			05/23/19 04:46	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 04:46	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 04:46	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 04:46	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 04:46	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 04:46	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 04:46	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 04:46	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 04:46	1
Methyl tert-butyl ether	**33**		1.0	0.47	ug/L			05/23/19 04:46	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 04:46	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 04:46	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 04:46	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 04:46	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 04:46	1
trans-1,2-Dichloroethene	**0.85**	**J**	1.0	0.24	ug/L			05/23/19 04:46	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 04:46	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 04:46	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 04:46	1
Vinyl chloride	**0.32**	**J**	1.0	0.17	ug/L			05/23/19 04:46	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 04:46	1

Client Sample ID: AMW-14-D2-W-20190510

Lab Sample ID: 460-181653-6

Date Collected: 05/10/19 01:25

Matrix: Water

Date Received: 05/10/19 17:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*74 - 132*		*05/23/19 04:46*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*05/23/19 04:46*	*1*
Dibromofluoromethane (Surr)	*109*		*72 - 131*		*05/23/19 04:46*	*1*
Toluene-d8 (Surr)	*110*		*80 - 120*		*05/23/19 04:46*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**150000**		5000	1800	ug/L			05/14/19 16:36	1
Ethane	330	U	330	66	ug/L			05/23/19 13:35	44
Ethene	310	U	310	66	ug/L			05/23/19 13:35	44
Methane	**1900**		180	44	ug/L			05/23/19 13:35	44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4200**		300	35	mg/L			05/21/19 23:37	2500
Sulfate	**84**		30	17	mg/L			05/21/19 18:01	50

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**548**		150	34.2	ug/L		05/22/19 08:50	05/22/19 16:35	1
Manganese	**80.1**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 16:35	1
Sodium	**2080000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:27	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.10	U	0.10	0.0030	mg/L			05/11/19 04:06	1
Nitrate as N	**0.049**	**J**	0.10	0.010	mg/L			05/11/19 04:06	1
Total Organic Carbon	**18.5**	**B**	1.0	0.35	mg/L			05/18/19 01:56	1
Ferrous Iron	**1.1**	**HF**	0.10	0.055	mg/L			05/14/19 17:53	1
Sulfide	**71.6**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**822**		5.0	5.0	mg/L			05/17/19 15:09	1
Ferric Iron	0.10	U	0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: MW-28-D1-W-20190509

Lab Sample ID: 460-181653-7

Date Collected: 05/09/19 21:20

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 05:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 05:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 05:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 05:10	1
1,1-Dichloroethane	**0.69**	**J**	1.0	0.26	ug/L			05/23/19 05:10	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 05:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 05:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 05:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 05:10	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 05:10	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 05:10	1

Client Sample ID: MW-28-D1-W-20190509
Date Collected: 05/09/19 21:20
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 05:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 05:10	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 05:10	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 05:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 05:10	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 05:10	1
Benzene	**2.4**		1.0	0.43	ug/L			05/23/19 05:10	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 05:10	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 05:10	1
Carbon disulfide	**0.34**	**J**	1.0	0.16	ug/L			05/23/19 05:10	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 05:10	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 05:10	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 05:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 05:10	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 05:10	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 05:10	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 05:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 05:10	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 05:10	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 05:10	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 05:10	1
Ethylbenzene	**0.49**	**J**	1.0	0.30	ug/L			05/23/19 05:10	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 05:10	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 05:10	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 05:10	1
Methyl tert-butyl ether	**7.0**		1.0	0.47	ug/L			05/23/19 05:10	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 05:10	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 05:10	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 05:10	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 05:10	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 05:10	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 05:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 05:10	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 05:10	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 05:10	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 05:10	1
Xylenes, Total	**0.47**	**J**	2.0	0.30	ug/L			05/23/19 05:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 05:10*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*05/23/19 05:10*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*05/23/19 05:10*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 05:10*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**120000**		5000	1800	ug/L			05/14/19 16:44	1
Ethane	660	U	660	130	ug/L			05/22/19 20:52	88
Ethene	620	U	620	130	ug/L			05/22/19 20:52	88
Methane	**1300**		350	88	ug/L			05/22/19 20:52	88

Client Sample ID: MW-28-D1-W-20190509

Lab Sample ID: 460-181653-7

Date Collected: 05/09/19 21:20
Matrix: Water
Date Received: 05/10/19 17:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3300**		300	35	mg/L			05/22/19 00:21	2500
Sulfate	**170**		60	35	mg/L			05/21/19 18:46	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2480**		150	34.2	ug/L		05/22/19 08:50	05/22/19 19:10	1
Manganese	**89.0**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 19:10	1
Sodium	**1940000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:31	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.016**	**J**	0.10	0.0030	mg/L			05/11/19 03:49	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 03:49	1
Total Organic Carbon	**12.9**	**B**	1.0	0.35	mg/L			05/18/19 02:21	1
Ferrous Iron	**0.60**	**HF**	0.10	0.055	mg/L			05/14/19 17:53	1
Sulfide	**45.2**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**667**		5.0	5.0	mg/L			05/17/19 15:21	1
Ferric Iron	**1.9**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: MW-26-D2-W-20190509

Lab Sample ID: 460-181653-8

Date Collected: 05/09/19 20:00
Matrix: Water
Date Received: 05/10/19 17:20

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			05/23/19 05:35	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 05:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 05:35	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 05:35	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 05:35	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 05:35	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 05:35	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 05:35	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 05:35	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 05:35	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 05:35	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 05:35	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 05:35	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 05:35	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 05:35	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 05:35	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 05:35	1
Benzene	**0.79**	**J**	1.0	0.43	ug/L			05/23/19 05:35	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 05:35	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 05:35	1
Carbon disulfide	**0.25**	**J**	1.0	0.16	ug/L			05/23/19 05:35	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 05:35	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 05:35	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 05:35	1

Client Sample ID: MW-26-D2-W-20190509
Date Collected: 05/09/19 20:00
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 05:35	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 05:35	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 05:35	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 05:35	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 05:35	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 05:35	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 05:35	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 05:35	1
Ethylbenzene	**0.44**	**J**	1.0	0.30	ug/L			05/23/19 05:35	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 05:35	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 05:35	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 05:35	1
Methyl tert-butyl ether	**84**		1.0	0.47	ug/L			05/23/19 05:35	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 05:35	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 05:35	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 05:35	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 05:35	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 05:35	1
trans-1,2-Dichloroethene	**0.90**	**J**	1.0	0.24	ug/L			05/23/19 05:35	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 05:35	1
Trichloroethene	**0.50**	**J**	1.0	0.31	ug/L			05/23/19 05:35	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 05:35	1
Vinyl chloride	**1.5**		1.0	0.17	ug/L			05/23/19 05:35	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 05:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*05/23/19 05:35*	*1*
4-Bromofluorobenzene	*98*		*77 - 124*		*05/23/19 05:35*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/23/19 05:35*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 05:35*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**130000**		5000	1800	ug/L			05/14/19 16:53	1
Ethane	660	U	660	130	ug/L			05/22/19 21:10	88
Ethene	620	U	620	130	ug/L			05/22/19 21:10	88
Methane	**750**		350	88	ug/L			05/22/19 21:10	88

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5000**		300	35	mg/L			05/22/19 00:36	2500
Sulfate	**350**		60	35	mg/L			05/21/19 19:00	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**466**		150	34.2	ug/L		05/22/19 08:50	05/22/19 19:14	1
Manganese	**75.2**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 19:14	1
Sodium	**2420000**		100000	9200	ug/L		05/22/19 08:50	05/22/19 22:35	20

Client Sample ID: MW-26-D2-W-20190509

Lab Sample ID: 460-181653-8

Date Collected: 05/09/19 20:00

Matrix: Water

Date Received: 05/10/19 17:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.10	U	0.10	0.0030	mg/L			05/11/19 03:49	1
Nitrate as N	**0.021**	**J**	0.10	0.010	mg/L			05/11/19 03:49	1
Total Organic Carbon	**14.6**	**B**	1.0	0.35	mg/L			05/18/19 02:46	1
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:53	1
Sulfide	**54.6**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**684**		5.0	5.0	mg/L			05/17/19 15:32	1
Ferric Iron	**0.47**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: MW-23-D2R-W-20190509

Lab Sample ID: 460-181653-9

Date Collected: 05/09/19 23:00

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 06:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 06:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 06:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 06:00	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 06:00	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 06:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 06:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 06:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 06:00	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 06:00	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 06:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 06:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 06:00	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 06:00	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 06:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 06:00	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 06:00	1
Benzene	**2.3**		1.0	0.43	ug/L			05/23/19 06:00	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 06:00	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 06:00	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 06:00	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 06:00	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 06:00	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 06:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 06:00	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 06:00	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 06:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 06:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 06:00	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 06:00	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 06:00	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 06:00	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 06:00	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 06:00	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 06:00	1

Client Sample ID: MW-23-D2R-W-20190509

Lab Sample ID: 460-181653-9

Date Collected: 05/09/19 23:00

Matrix: Water

Date Received: 05/10/19 17:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 06:00	1
Methyl tert-butyl ether	**8.8**		1.0	0.47	ug/L			05/23/19 06:00	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 06:00	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 06:00	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 06:00	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 06:00	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 06:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 06:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 06:00	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 06:00	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 06:00	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 06:00	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 06:00	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*05/23/19 06:00*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/23/19 06:00*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/23/19 06:00*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 06:00*	*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			05/14/19 17:02	1
Ethane	170	U	170	33	ug/L			05/22/19 21:27	22
Ethene	150	U	150	33	ug/L			05/22/19 21:27	22
Methane	**290**		88	22	ug/L			05/22/19 21:27	22

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3800**		240	28	mg/L			05/22/19 00:51	2000
Sulfate	**290**		60	35	mg/L			05/21/19 19:15	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1660**		150	34.2	ug/L		05/22/19 08:50	05/22/19 19:18	1
Manganese	**279**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 19:18	1
Sodium	**1930000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:39	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.0045**	**J**	0.10	0.0030	mg/L			05/11/19 03:57	1
Nitrate as N	**0.038**	**J**	0.10	0.010	mg/L			05/11/19 03:57	1
Total Organic Carbon	**20.7**	**B**	1.0	0.35	mg/L			05/18/19 03:11	1
Ferrous Iron	**0.24**	**HF**	0.10	0.055	mg/L			05/14/19 17:59	1
Sulfide	**10.9**		1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**587**		5.0	5.0	mg/L			05/17/19 15:43	1
Ferric Iron	**1.4**		0.10	0.10	mg/L			05/23/19 06:00	1

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

Job ID: 460-181653-1

Client Sample ID: AMW-15-D2-W-20190510
Date Collected: 05/10/19 00:04
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-10
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			05/23/19 06:24	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 06:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 06:24	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 06:24	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 06:24	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 06:24	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 06:24	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 06:24	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 06:24	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 06:24	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 06:24	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 06:24	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 06:24	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 06:24	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 06:24	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 06:24	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 06:24	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 06:24	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 06:24	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 06:24	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 06:24	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 06:24	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 06:24	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 06:24	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 06:24	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 06:24	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 06:24	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 06:24	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 06:24	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 06:24	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 06:24	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 06:24	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 06:24	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 06:24	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 06:24	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 06:24	1
Methyl tert-butyl ether	**61**		1.0	0.47	ug/L			05/23/19 06:24	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 06:24	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 06:24	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 06:24	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 06:24	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 06:24	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 06:24	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 06:24	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 06:24	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 06:24	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 06:24	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 06:24	1

Client Sample ID: AMW-15-D2-W-20190510

Lab Sample ID: 460-181653-10

Date Collected: 05/10/19 00:04

Matrix: Water

Date Received: 05/10/19 17:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*		*05/23/19 06:24*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/23/19 06:24*	*1*
Dibromofluoromethane (Surr)	*102*		*72 - 131*		*05/23/19 06:24*	*1*
Toluene-d8 (Surr)	*103*		*80 - 120*		*05/23/19 06:24*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**130000**		5000	1800	ug/L			05/14/19 17:10	1
Ethane	170	U	170	33	ug/L			05/23/19 13:52	22
Ethene	150	U	150	33	ug/L			05/23/19 13:52	22
Methane	**520**		88	22	ug/L			05/23/19 13:52	22

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4200**		240	28	mg/L			05/22/19 01:05	2000
Sulfate	**220**		60	35	mg/L			05/21/19 19:30	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**328**		150	34.2	ug/L		05/22/19 08:50	05/22/19 16:19	1
Manganese	**72.0**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 16:19	1
Sodium	**2030000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:04	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.0070**	**J**	0.10	0.0030	mg/L			05/11/19 04:05	1
Nitrate as N	**0.047**	**J**	0.10	0.010	mg/L			05/11/19 04:05	1
Total Organic Carbon	**14.2**	**B**	1.0	0.35	mg/L			05/18/19 03:36	1
Ferrous Iron	**0.085**	**J HF**	0.10	0.055	mg/L			05/14/19 17:59	1
Sulfide	**50.8**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**672**		5.0	5.0	mg/L			05/17/19 15:54	1
Ferric Iron	**0.24**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: AMW-15-D3-W-20190510

Lab Sample ID: 460-181653-11

Date Collected: 05/10/19 00:20

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 06:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 06:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 06:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 06:49	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 06:49	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 06:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 06:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 06:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 06:49	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 06:49	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 06:49	1

Client Sample ID: AMW-15-D3-W-20190510
Date Collected: 05/10/19 00:20
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-11
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 06:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 06:49	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 06:49	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 06:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 06:49	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 06:49	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 06:49	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 06:49	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 06:49	1
Carbon disulfide	**0.29**	**J**	1.0	0.16	ug/L			05/23/19 06:49	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 06:49	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 06:49	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 06:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 06:49	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 06:49	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 06:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 06:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 06:49	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 06:49	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 06:49	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 06:49	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 06:49	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 06:49	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 06:49	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 06:49	1
Methyl tert-butyl ether	**16**		1.0	0.47	ug/L			05/23/19 06:49	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 06:49	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 06:49	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 06:49	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 06:49	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 06:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 06:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 06:49	1
Trichloroethene	**0.39**	**J**	1.0	0.31	ug/L			05/23/19 06:49	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 06:49	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 06:49	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 06:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*74 - 132*		*05/23/19 06:49*	*1*
4-Bromofluorobenzene	*107*		*77 - 124*		*05/23/19 06:49*	*1*
Dibromofluoromethane (Surr)	*112*		*72 - 131*		*05/23/19 06:49*	*1*
Toluene-d8 (Surr)	*111*		*80 - 120*		*05/23/19 06:49*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**140000**		5000	1800	ug/L			05/14/19 17:19	1
Ethane	330	U	330	66	ug/L			05/23/19 14:10	44
Ethene	310	U	310	66	ug/L			05/23/19 14:10	44
Methane	**1600**		180	44	ug/L			05/23/19 14:10	44

Client Sample ID: AMW-15-D3-W-20190510

Lab Sample ID: 460-181653-11

Date Collected: 05/10/19 00:20

Matrix: Water

Date Received: 05/10/19 17:20

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**8800**		300	35	mg/L			05/22/19 01:20	2500
Sulfate	**980**		60	35	mg/L			05/21/19 19:45	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**301**		150	34.2	ug/L		05/22/19 08:50	05/22/19 16:59	1
Manganese	**222**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 16:59	1
Sodium	**2730000**		100000	9200	ug/L		05/22/19 08:50	05/22/19 22:43	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.056**	**J**	0.10	0.0030	mg/L			05/11/19 04:08	1
Nitrate as N	**0.042**	**J**	0.10	0.010	mg/L			05/11/19 04:08	1
Total Organic Carbon	**14.4**	**B**	1.0	0.35	mg/L			05/18/19 04:50	1
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:59	1
Sulfide	**41.4**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**616**		5.0	5.0	mg/L			05/17/19 16:05	1
Ferric Iron	**0.30**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: AMW-15-D1-20190509

Lab Sample ID: 460-181653-12

Date Collected: 05/09/19 23:51

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 16:55	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 16:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.31	ug/L			05/23/19 16:55	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 16:55	1
1,1-Dichloroethane	**0.89**	**J**	1.0	0.26	ug/L			05/23/19 16:55	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 16:55	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 16:55	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 16:55	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 16:55	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 16:55	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 16:55	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 16:55	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 16:55	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 16:55	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 16:55	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 16:55	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 16:55	1
Benzene	**6.3**		1.0	0.43	ug/L			05/23/19 16:55	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 16:55	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 16:55	1
Carbon disulfide	**1.3**		1.0	0.16	ug/L			05/23/19 16:55	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 16:55	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 16:55	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 16:55	1

Client Sample ID: AMW-15-D1-20190509
Date Collected: 05/09/19 23:51
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 16:55	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 16:55	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/23/19 16:55	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 16:55	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 16:55	1
Cyclohexane	**0.79**	**J**	1.0	0.32	ug/L			05/23/19 16:55	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 16:55	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/23/19 16:55	1
Ethylbenzene	**2.6**		1.0	0.30	ug/L			05/23/19 16:55	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 16:55	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 16:55	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 16:55	1
Methyl tert-butyl ether	**120**		1.0	0.47	ug/L			05/23/19 16:55	1
Methylcyclohexane	**0.50**	**J**	1.0	0.26	ug/L			05/23/19 16:55	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 16:55	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 16:55	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 16:55	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 16:55	1
trans-1,2-Dichloroethene	**7.4**		1.0	0.24	ug/L			05/23/19 16:55	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 16:55	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 16:55	1
Trichlorofluoromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 16:55	1
Vinyl chloride	**1.1**		1.0	0.17	ug/L			05/23/19 16:55	1
Xylenes, Total	**6.3**		2.0	0.30	ug/L			05/23/19 16:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*109*		*74 - 132*		*05/23/19 16:55*	*1*
4-Bromofluorobenzene	*103*		*77 - 124*		*05/23/19 16:55*	*1*
Dibromofluoromethane (Surr)	*105*		*72 - 131*		*05/23/19 16:55*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*05/23/19 16:55*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**52000**		5000	1800	ug/L			05/14/19 17:28	1
Ethane	830	U	830	170	ug/L			05/22/19 21:45	110
Ethene	770	U	770	170	ug/L			05/22/19 21:45	110
Methane	**3200**		440	110	ug/L			05/22/19 21:45	110

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2500**		120	14	mg/L			05/22/19 15:06	1000
Sulfate	**200**		60	35	mg/L			05/21/19 19:59	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3340**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:03	1
Manganese	**335**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:03	1
Sodium	**1170000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:47	10

Client Sample ID: AMW-15-D1-20190509

Lab Sample ID: 460-181653-12

Date Collected: 05/09/19 23:51

Matrix: Water

Date Received: 05/10/19 17:20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.38**	**J**	0.50	0.015	mg/L			05/11/19 04:04	5
Nitrate as N	**0.43**	**J**	0.50	0.050	mg/L			05/11/19 04:04	5
Total Organic Carbon	**36.8**	**B**	5.0	1.8	mg/L			05/18/19 05:15	5
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:59	1
Sulfide	**41.4**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**422**		5.0	5.0	mg/L			05/23/19 16:03	1
Ferric Iron	**3.3**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: AMW-14-D1-W-20190510

Lab Sample ID: 460-181653-13

Date Collected: 05/10/19 01:00

Matrix: Water

Date Received: 05/10/19 17:20

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			05/23/19 17:20	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 17:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.31	ug/L			05/23/19 17:20	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 17:20	1
1,1-Dichloroethane	**0.62**	**J**	1.0	0.26	ug/L			05/23/19 17:20	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 17:20	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 17:20	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 17:20	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 17:20	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 17:20	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 17:20	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 17:20	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 17:20	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 17:20	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 17:20	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 17:20	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 17:20	1
Benzene	**7.0**		1.0	0.43	ug/L			05/23/19 17:20	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 17:20	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 17:20	1
Carbon disulfide	**0.79**	**J**	1.0	0.16	ug/L			05/23/19 17:20	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 17:20	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 17:20	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 17:20	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 17:20	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 17:20	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/23/19 17:20	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 17:20	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 17:20	1
Cyclohexane	**2.1**		1.0	0.32	ug/L			05/23/19 17:20	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 17:20	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/23/19 17:20	1
Ethylbenzene	**5.9**		1.0	0.30	ug/L			05/23/19 17:20	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 17:20	1
Isopropylbenzene	**1.0**		1.0	0.34	ug/L			05/23/19 17:20	1

Client Sample ID: AMW-14-D1-W-20190510
Date Collected: 05/10/19 01:00
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-13
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 17:20	1
Methyl tert-butyl ether	**250**		1.0	0.47	ug/L			05/23/19 17:20	1
Methylcyclohexane	**3.0**		1.0	0.26	ug/L			05/23/19 17:20	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 17:20	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 17:20	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 17:20	1
Toluene	**0.84**	**J**	1.0	0.38	ug/L			05/23/19 17:20	1
trans-1,2-Dichloroethene	**11**		1.0	0.24	ug/L			05/23/19 17:20	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 17:20	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 17:20	1
Trichlorofluoromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 17:20	1
Vinyl chloride	**2.1**		1.0	0.17	ug/L			05/23/19 17:20	1
Xylenes, Total	**16**		2.0	0.30	ug/L			05/23/19 17:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*		*05/23/19 17:20*	*1*
4-Bromofluorobenzene	*102*		*77 - 124*		*05/23/19 17:20*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/23/19 17:20*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 17:20*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**73000**		5000	1800	ug/L			05/14/19 17:36	1
Ethane	**150**	**J**	170	33	ug/L			05/23/19 14:27	22
Ethene	**440**		150	33	ug/L			05/23/19 14:27	22
Methane	**1900**		88	22	ug/L			05/23/19 14:27	22

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3700**		240	28	mg/L			05/22/19 01:49	2000
Sulfate	**98**		60	35	mg/L			05/21/19 20:14	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5780**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:07	1
Manganese	**94.9**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:07	1
Sodium	**1740000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:51	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.10	U	0.10	0.0030	mg/L			05/11/19 04:08	1
Nitrate as N	**0.080**	**J**	0.10	0.010	mg/L			05/11/19 04:08	1
Total Organic Carbon	**45.4**	**B**	5.0	1.8	mg/L			05/18/19 05:41	5
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:59	1
Sulfide	**52.7**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**805**		5.0	5.0	mg/L			05/17/19 16:17	1
Ferric Iron	**5.8**		0.10	0.10	mg/L			05/23/19 06:00	1

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

Job ID: 460-181653-1

Client Sample ID: MW-24-D1R-W-20190509
Date Collected: 05/09/19 21:55
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-14
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			05/23/19 17:45	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 17:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U *	1.0	0.31	ug/L			05/23/19 17:45	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 17:45	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 17:45	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 17:45	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 17:45	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 17:45	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 17:45	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 17:45	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 17:45	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 17:45	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 17:45	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 17:45	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 17:45	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 17:45	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 17:45	1
Benzene	**1.5**		1.0	0.43	ug/L			05/23/19 17:45	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 17:45	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 17:45	1
Carbon disulfide	**0.62**	**J**	1.0	0.16	ug/L			05/23/19 17:45	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 17:45	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 17:45	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 17:45	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 17:45	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 17:45	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/23/19 17:45	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 17:45	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 17:45	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 17:45	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 17:45	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/23/19 17:45	1
Ethylbenzene	**1.0**		1.0	0.30	ug/L			05/23/19 17:45	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 17:45	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 17:45	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 17:45	1
Methyl tert-butyl ether	**65**		1.0	0.47	ug/L			05/23/19 17:45	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 17:45	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 17:45	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 17:45	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 17:45	1
Toluene	**1.5**		1.0	0.38	ug/L			05/23/19 17:45	1
trans-1,2-Dichloroethene	**2.0**		1.0	0.24	ug/L			05/23/19 17:45	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 17:45	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 17:45	1
Trichlorofluoromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 17:45	1
Vinyl chloride	**1.5**		1.0	0.17	ug/L			05/23/19 17:45	1
Xylenes, Total	**3.6**		2.0	0.30	ug/L			05/23/19 17:45	1

Client Sample ID: MW-24-D1R-W-20190509

Lab Sample ID: 460-181653-14

Date Collected: 05/09/19 21:55

Matrix: Water

Date Received: 05/10/19 17:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*		*05/23/19 17:45*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/23/19 17:45*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*05/23/19 17:45*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/23/19 17:45*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**98000**		5000	1800	ug/L			05/14/19 17:45	1
Ethane	330	U	330	66	ug/L			05/22/19 22:02	44
Ethene	310	U	310	66	ug/L			05/22/19 22:02	44
Methane	**1600**		180	44	ug/L			05/22/19 22:02	44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3900**		240	28	mg/L			05/22/19 02:04	2000
Sulfate	**250**		60	35	mg/L			05/21/19 20:29	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4120**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:11	1
Manganese	**79.6**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:11	1
Sodium	**1720000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:55	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.014**	**J**	0.10	0.0030	mg/L			05/11/19 03:58	1
Nitrate as N	**0.063**	**J**	0.10	0.010	mg/L			05/11/19 03:58	1
Total Organic Carbon	**15.4**	**B**	1.0	0.35	mg/L			05/18/19 06:06	1
Ferrous Iron	**0.86**	**HF**	0.10	0.055	mg/L			05/14/19 17:59	1
Sulfide	**41.4**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**572**		5.0	5.0	mg/L			05/17/19 16:28	1
Ferric Iron	**3.3**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: TB-W-20190509

Lab Sample ID: 460-181653-15

Date Collected: 05/09/19 19:40

Matrix: Water

Date Received: 05/10/19 17:20

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			05/22/19 22:29	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/22/19 22:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/22/19 22:29	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:29	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/22/19 22:29	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/22/19 22:29	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/22/19 22:29	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/22/19 22:29	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:29	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:29	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/22/19 22:29	1

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

Job ID: 460-181653-1

Client Sample ID: TB-W-20190509
Date Collected: 05/09/19 19:40
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-15
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:29	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/22/19 22:29	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/22/19 22:29	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/22/19 22:29	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/22/19 22:29	1
Acetone	5.0	U	5.0	5.0	ug/L			05/22/19 22:29	1
Benzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:29	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/22/19 22:29	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/22/19 22:29	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/22/19 22:29	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/22/19 22:29	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/22/19 22:29	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/22/19 22:29	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/22/19 22:29	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/22/19 22:29	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/22/19 22:29	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/22/19 22:29	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/22/19 22:29	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/22/19 22:29	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/22/19 22:29	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/22/19 22:29	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/22/19 22:29	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/22/19 22:29	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:29	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/22/19 22:29	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/22/19 22:29	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/22/19 22:29	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/22/19 22:29	1
Styrene	1.0	U	1.0	0.42	ug/L			05/22/19 22:29	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/22/19 22:29	1
Toluene	1.0	U	1.0	0.38	ug/L			05/22/19 22:29	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/22/19 22:29	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/22/19 22:29	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/22/19 22:29	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/22/19 22:29	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/22/19 22:29	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/22/19 22:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*111*		*74 - 132*		*05/22/19 22:29*	*1*
4-Bromofluorobenzene	*103*		*77 - 124*		*05/22/19 22:29*	*1*
Dibromofluoromethane (Surr)	*106*		*72 - 131*		*05/22/19 22:29*	*1*
Toluene-d8 (Surr)	*107*		*80 - 120*		*05/22/19 22:29*	*1*

Surrogate Summary

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

Job ID: 460-181653-1

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)
460-181653-1	MW-28-D2R-W-20190509	105	100	100	102
460-181653-2	MW-24-D2-W-20190509	104	98	98	102
460-181653-3	MW-24-VDR-W-20190509	107	96	99	100
460-181653-4	AMW-15-VD-W-20190510	109	99	100	101
460-181653-5	AMW-14-VD-W-20190510	108	95	99	100
460-181653-6	AMW-14-D2-W-20190510	114	107	109	110
460-181653-7	MW-28-D1-W-20190509	104	100	98	101
460-181653-8	MW-26-D2-W-20190509	105	98	99	101
460-181653-9	MW-23-D2R-W-20190509	106	99	99	101
460-181653-10	AMW-15-D2-W-20190510	108	99	102	103
460-181653-11	AMW-15-D3-W-20190510	117	107	112	111
460-181653-12	AMW-15-D1-20190509	109	103	105	105
460-181653-13	AMW-14-D1-W-20190510	103	102	99	101
460-181653-14	MW-24-D1R-W-20190509	102	99	98	100
460-181653-15	TB-W-20190509	111	103	106	107
LCS 460-612063/3	Lab Control Sample	98	106	99	102
LCS 460-612256/3	Lab Control Sample	105	104	98	100
LCSD 460-612063/4	Lab Control Sample Dup	107	109	99	104
LCSD 460-612256/4	Lab Control Sample Dup	105	106	97	100
MB 460-612063/7	Method Blank	102	96	97	99
MB 460-612256/7	Method Blank	104	98	98	101

Surrogate Legend

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

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

Lab Sample ID: MB 460-612063/7
Matrix: Water
Analysis Batch: 612063

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			05/22/19 22:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/22/19 22:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/22/19 22:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/22/19 22:05	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/22/19 22:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/22/19 22:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/22/19 22:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/22/19 22:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/22/19 22:05	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/22/19 22:05	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/22/19 22:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/22/19 22:05	1
Acetone	5.0	U	5.0	5.0	ug/L			05/22/19 22:05	1
Benzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/22/19 22:05	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/22/19 22:05	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/22/19 22:05	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/22/19 22:05	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/22/19 22:05	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/22/19 22:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/22/19 22:05	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/22/19 22:05	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/22/19 22:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/22/19 22:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/22/19 22:05	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/22/19 22:05	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/22/19 22:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/22/19 22:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/22/19 22:05	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/22/19 22:05	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:05	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/22/19 22:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/22/19 22:05	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/22/19 22:05	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/22/19 22:05	1
Styrene	1.0	U	1.0	0.42	ug/L			05/22/19 22:05	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/22/19 22:05	1
Toluene	1.0	U	1.0	0.38	ug/L			05/22/19 22:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/22/19 22:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/22/19 22:05	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/22/19 22:05	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/22/19 22:05	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/22/19 22:05	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/22/19 22:05	1

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

Lab Sample ID: MB 460-612063/7
Matrix: Water
Analysis Batch: 612063

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		74 - 132		05/22/19 22:05	1
4-Bromofluorobenzene	96		77 - 124		05/22/19 22:05	1
Dibromofluoromethane (Surr)	97		72 - 131		05/22/19 22:05	1
Toluene-d8 (Surr)	99		80 - 120		05/22/19 22:05	1

Lab Sample ID: LCS 460-612063/3
Matrix: Water
Analysis Batch: 612063

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	18.3		ug/L		92	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.0		ug/L		90	59 - 150
1,1,2-Trichloroethane	20.0	20.9		ug/L		104	78 - 120
1,1-Dichloroethane	20.0	20.2		ug/L		101	77 - 123
1,1-Dichloroethene	20.0	17.0		ug/L		85	74 - 123
1,2,4-Trichlorobenzene	20.0	22.1		ug/L		111	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.3		ug/L		97	55 - 134
1,2-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 120
1,2-Dichloroethane	20.0	19.5		ug/L		98	76 - 121
1,2-Dichloropropane	20.0	20.0		ug/L		100	77 - 123
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	19.3		ug/L		96	80 - 120
2-Butanone (MEK)	100	87.3		ug/L		87	64 - 120
2-Hexanone	100	99.3		ug/L		99	71 - 125
4-Methyl-2-pentanone (MIBK)	100	98.4		ug/L		98	78 - 124
Acetone	100	77.2		ug/L		77	39 - 150
Benzene	20.0	20.6		ug/L		103	77 - 121
Bromoform	20.0	21.8		ug/L		109	53 - 120
Bromomethane	20.0	10.1		ug/L		51	10 - 150
Carbon disulfide	20.0	18.0		ug/L		90	69 - 133
Carbon tetrachloride	20.0	18.2		ug/L		91	70 - 132
Chlorobenzene	20.0	18.9		ug/L		94	80 - 120
Chlorodibromomethane	20.0	20.0		ug/L		100	73 - 120
Chloroethane	20.0	15.4		ug/L		77	52 - 150
Chloroform	20.0	18.9		ug/L		95	80 - 120
Chloromethane	20.0	27.0	*	ug/L		135	56 - 131
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 120
cis-1,3-Dichloropropene	20.0	21.3		ug/L		107	77 - 120
Cyclohexane	20.0	20.6		ug/L		103	56 - 150
Dichlorobromomethane	20.0	19.2		ug/L		96	76 - 120
Dichlorodifluoromethane	20.0	26.7	*	ug/L		133	50 - 131
Ethylbenzene	20.0	19.5		ug/L		98	80 - 120
Ethylene Dibromide	20.0	21.1		ug/L		105	80 - 120
Isopropylbenzene	20.0	20.4		ug/L		102	80 - 123
Methyl acetate	40.0	35.6		ug/L		89	66 - 144
Methyl tert-butyl ether	20.0	18.4		ug/L		92	79 - 122
Methylcyclohexane	20.0	20.1		ug/L		100	61 - 145

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

Lab Sample ID: LCS 460-612063/3
Matrix: Water
Analysis Batch: 612063

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	20.0	17.2		ug/L		86	77 - 123
Styrene	20.0	20.7		ug/L		104	80 - 120
Tetrachloroethene	20.0	19.1		ug/L		96	78 - 122
Toluene	20.0	19.6		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	17.3		ug/L		86	79 - 120
trans-1,3-Dichloropropene	20.0	18.3		ug/L		91	76 - 120
Trichloroethene	20.0	18.0		ug/L		90	77 - 120
Trichlorofluoromethane	20.0	20.4		ug/L		102	71 - 143
Vinyl chloride	20.0	22.2		ug/L		111	62 - 138
Xylenes, Total	40.0	39.6		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*74 - 132*
4-Bromofluorobenzene	*106*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCSD 460-612063/4
Matrix: Water
Analysis Batch: 612063

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	20.0	17.8		ug/L		89	75 - 125	3	30
1,1,2,2-Tetrachloroethane	20.0	20.7		ug/L		104	74 - 120	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.0		ug/L		85	59 - 150	6	30
1,1,2-Trichloroethane	20.0	20.3		ug/L		102	78 - 120	3	30
1,1-Dichloroethane	20.0	19.2		ug/L		96	77 - 123	5	30
1,1-Dichloroethene	20.0	15.7		ug/L		78	74 - 123	8	30
1,2,4-Trichlorobenzene	20.0	22.0		ug/L		110	80 - 124	1	30
1,2-Dibromo-3-Chloropropane	20.0	20.4		ug/L		102	55 - 134	6	30
1,2-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120	3	30
1,2-Dichloroethane	20.0	19.0		ug/L		95	76 - 121	3	30
1,2-Dichloropropane	20.0	19.2		ug/L		96	77 - 123	4	30
1,3-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120	5	30
1,4-Dichlorobenzene	20.0	18.5		ug/L		92	80 - 120	4	30
2-Butanone (MEK)	100	83.9		ug/L		84	64 - 120	4	30
2-Hexanone	100	98.3		ug/L		98	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)	100	96.4		ug/L		96	78 - 124	2	30
Acetone	100	74.9		ug/L		75	39 - 150	3	30
Benzene	20.0	19.7		ug/L		98	77 - 121	5	30
Bromoform	20.0	21.8		ug/L		109	53 - 120	0	30
Bromomethane	20.0	9.43		ug/L		47	10 - 150	7	30
Carbon disulfide	20.0	16.6		ug/L		83	69 - 133	8	30
Carbon tetrachloride	20.0	17.2		ug/L		86	70 - 132	6	30
Chlorobenzene	20.0	18.0		ug/L		90	80 - 120	5	30
Chlorodibromomethane	20.0	19.2		ug/L		96	73 - 120	4	30
Chloroethane	20.0	14.6		ug/L		73	52 - 150	6	30
Chloroform	20.0	18.5		ug/L		92	80 - 120	2	30

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

Lab Sample ID: LCSD 460-612063/4
Matrix: Water
Analysis Batch: 612063

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
Chloromethane			20.0	25.1		ug/L		126	56 - 131	7	30
cis-1,2-Dichloroethene			20.0	17.9		ug/L		90	80 - 120	6	30
cis-1,3-Dichloropropene			20.0	20.6		ug/L		103	77 - 120	4	30
Cyclohexane			20.0	19.6		ug/L		98	56 - 150	5	30
Dichlorobromomethane			20.0	18.5		ug/L		93	76 - 120	4	30
Dichlorodifluoromethane			20.0	25.4		ug/L		127	50 - 131	5	30
Ethylbenzene			20.0	18.6		ug/L		93	80 - 120	5	30
Ethylene Dibromide			20.0	20.6		ug/L		103	80 - 120	2	30
Isopropylbenzene			20.0	19.5		ug/L		97	80 - 123	5	30
Methyl acetate			40.0	35.7		ug/L		89	66 - 144	0	30
Methyl tert-butyl ether			20.0	18.1		ug/L		90	79 - 122	2	30
Methylcyclohexane			20.0	19.1		ug/L		95	61 - 145	5	30
Methylene Chloride			20.0	16.6		ug/L		83	77 - 123	3	30
Styrene			20.0	20.0		ug/L		100	80 - 120	4	30
Tetrachloroethene			20.0	18.1		ug/L		91	78 - 122	5	30
Toluene			20.0	18.7		ug/L		94	80 - 120	4	30
trans-1,2-Dichloroethene			20.0	16.8		ug/L		84	79 - 120	3	30
trans-1,3-Dichloropropene			20.0	18.1		ug/L		90	76 - 120	1	30
Trichloroethene			20.0	17.2		ug/L		86	77 - 120	4	30
Trichlorofluoromethane			20.0	19.4		ug/L		97	71 - 143	5	30
Vinyl chloride			20.0	21.1		ug/L		106	62 - 138	5	30
Xylenes, Total			40.0	38.0		ug/L		95	80 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*109*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 460-612256/7
Matrix: Water
Analysis Batch: 612256

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			05/23/19 14:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 14:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 14:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 14:27	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 14:27	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 14:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 14:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 14:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 14:27	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 14:27	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 14:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 14:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 14:27	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 14:27	1

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

Lab Sample ID: MB 460-612256/7
Matrix: Water
Analysis Batch: 612256

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 14:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 14:27	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 14:27	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 14:27	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 14:27	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 14:27	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 14:27	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 14:27	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 14:27	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 14:27	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 14:27	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 14:27	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/23/19 14:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 14:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 14:27	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 14:27	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 14:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/23/19 14:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 14:27	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 14:27	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 14:27	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 14:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/23/19 14:27	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 14:27	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 14:27	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 14:27	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 14:27	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 14:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 14:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 14:27	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 14:27	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 14:27	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 14:27	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 14:27	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 14:27*	*1*
4-Bromofluorobenzene	*98*		*77 - 124*		*05/23/19 14:27*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*05/23/19 14:27*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 14:27*	*1*

Lab Sample ID: LCS 460-612256/3
Matrix: Water
Analysis Batch: 612256

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	17.7		ug/L		88	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.4		ug/L		107	74 - 120

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

Lab Sample ID: LCS 460-612256/3
Matrix: Water
Analysis Batch: 612256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	11.5	*	ug/L		58	59 - 150
1,1,2-Trichloroethane	20.0	21.0		ug/L		105	78 - 120
1,1-Dichloroethane	20.0	18.6		ug/L		93	77 - 123
1,1-Dichloroethene	20.0	14.8		ug/L		74	74 - 123
1,2,4-Trichlorobenzene	20.0	22.5		ug/L		112	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	21.0		ug/L		105	55 - 134
1,2-Dichlorobenzene	20.0	20.7		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	19.4		ug/L		97	76 - 121
1,2-Dichloropropane	20.0	20.0		ug/L		100	77 - 123
1,3-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
1,4-Dichlorobenzene	20.0	18.8		ug/L		94	80 - 120
2-Butanone (MEK)	100	85.8		ug/L		86	64 - 120
2-Hexanone	100	101		ug/L		101	71 - 125
4-Methyl-2-pentanone (MIBK)	100	98.7		ug/L		99	78 - 124
Acetone	100	82.1		ug/L		82	39 - 150
Benzene	20.0	19.7		ug/L		99	77 - 121
Bromoform	20.0	23.8		ug/L		119	53 - 120
Bromomethane	20.0	7.70		ug/L		38	10 - 150
Carbon disulfide	20.0	17.7		ug/L		89	69 - 133
Carbon tetrachloride	20.0	16.6		ug/L		83	70 - 132
Chlorobenzene	20.0	18.2		ug/L		91	80 - 120
Chlorodibromomethane	20.0	21.5		ug/L		108	73 - 120
Chloroethane	20.0	16.2		ug/L		81	52 - 150
Chloroform	20.0	19.0		ug/L		95	80 - 120
Chloromethane	20.0	24.7		ug/L		124	56 - 131
cis-1,2-Dichloroethene	20.0	17.6		ug/L		88	80 - 120
cis-1,3-Dichloropropene	20.0	22.0		ug/L		110	77 - 120
Cyclohexane	20.0	14.2		ug/L		71	56 - 150
Dichlorobromomethane	20.0	20.1		ug/L		101	76 - 120
Dichlorodifluoromethane	20.0	10.8		ug/L		54	50 - 131
Ethylbenzene	20.0	19.1		ug/L		95	80 - 120
Ethylene Dibromide	20.0	21.6		ug/L		108	80 - 120
Isopropylbenzene	20.0	19.6		ug/L		98	80 - 123
Methyl acetate	40.0	40.6		ug/L		101	66 - 144
Methyl tert-butyl ether	20.0	18.6		ug/L		93	79 - 122
Methylcyclohexane	20.0	13.3		ug/L		66	61 - 145
Methylene Chloride	20.0	17.1		ug/L		85	77 - 123
Styrene	20.0	20.3		ug/L		101	80 - 120
Tetrachloroethene	20.0	17.8		ug/L		89	78 - 122
Toluene	20.0	19.0		ug/L		95	80 - 120
trans-1,2-Dichloroethene	20.0	16.3		ug/L		82	79 - 120
trans-1,3-Dichloropropene	20.0	19.1		ug/L		96	76 - 120
Trichloroethene	20.0	16.9		ug/L		85	77 - 120
Trichlorofluoromethane	20.0	13.8	*	ug/L		69	71 - 143
Vinyl chloride	20.0	18.7		ug/L		94	62 - 138
Xylenes, Total	40.0	38.4		ug/L		96	80 - 120

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

Lab Sample ID: LCS 460-612256/3
Matrix: Water
Analysis Batch: 612256

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*
4-Bromofluorobenzene	*104*		*77 - 124*
Dibromofluoromethane (Surr)	*98*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 460-612256/4
Matrix: Water
Analysis Batch: 612256

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	17.6		ug/L		88	75 - 125	0	30
1,1,2,2-Tetrachloroethane			20.0	21.2		ug/L		106	74 - 120	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	11.4	*	ug/L		57	59 - 150	1	30
1,1,2-Trichloroethane			20.0	20.4		ug/L		102	78 - 120	3	30
1,1-Dichloroethane			20.0	19.6		ug/L		98	77 - 123	5	30
1,1-Dichloroethene			20.0	14.9		ug/L		74	74 - 123	0	30
1,2,4-Trichlorobenzene			20.0	22.3		ug/L		111	80 - 124	1	30
1,2-Dibromo-3-Chloropropane			20.0	21.2		ug/L		106	55 - 134	1	30
1,2-Dichlorobenzene			20.0	20.5		ug/L		102	80 - 120	1	30
1,2-Dichloroethane			20.0	19.3		ug/L		96	76 - 121	1	30
1,2-Dichloropropane			20.0	19.8		ug/L		99	77 - 123	1	30
1,3-Dichlorobenzene			20.0	19.6		ug/L		98	80 - 120	2	30
1,4-Dichlorobenzene			20.0	18.8		ug/L		94	80 - 120	0	30
2-Butanone (MEK)			100	83.4		ug/L		83	64 - 120	3	30
2-Hexanone			100	99.4		ug/L		99	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)			100	97.7		ug/L		98	78 - 124	1	30
Acetone			100	79.5		ug/L		79	39 - 150	3	30
Benzene			20.0	19.5		ug/L		98	77 - 121	1	30
Bromoform			20.0	23.4		ug/L		117	53 - 120	2	30
Bromomethane			20.0	7.53		ug/L		38	10 - 150	2	30
Carbon disulfide			20.0	17.4		ug/L		87	69 - 133	2	30
Carbon tetrachloride			20.0	16.5		ug/L		83	70 - 132	0	30
Chlorobenzene			20.0	17.9		ug/L		89	80 - 120	2	30
Chlorodibromomethane			20.0	20.7		ug/L		104	73 - 120	4	30
Chloroethane			20.0	16.3		ug/L		81	52 - 150	1	30
Chloroform			20.0	18.8		ug/L		94	80 - 120	1	30
Chloromethane			20.0	23.9		ug/L		119	56 - 131	4	30
cis-1,2-Dichloroethene			20.0	17.7		ug/L		88	80 - 120	0	30
cis-1,3-Dichloropropene			20.0	21.6		ug/L		108	77 - 120	2	30
Cyclohexane			20.0	14.1		ug/L		71	56 - 150	0	30
Dichlorobromomethane			20.0	19.4		ug/L		97	76 - 120	3	30
Dichlorodifluoromethane			20.0	10.9		ug/L		54	50 - 131	1	30
Ethylbenzene			20.0	18.7		ug/L		93	80 - 120	2	30
Ethylene Dibromide			20.0	21.0		ug/L		105	80 - 120	3	30
Isopropylbenzene			20.0	19.3		ug/L		97	80 - 123	1	30
Methyl acetate			40.0	37.6		ug/L		94	66 - 144	8	30
Methyl tert-butyl ether			20.0	18.5		ug/L		93	79 - 122	1	30
Methylcyclohexane			20.0	13.1		ug/L		65	61 - 145	1	30

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

Lab Sample ID: LCSD 460-612256/4
Matrix: Water
Analysis Batch: 612256

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	20.0	16.6		ug/L		83	77 - 123	3	30
Styrene	20.0	20.1		ug/L		100	80 - 120	1	30
Tetrachloroethene	20.0	17.2		ug/L		86	78 - 122	3	30
Toluene	20.0	18.8		ug/L		94	80 - 120	1	30
trans-1,2-Dichloroethene	20.0	16.4		ug/L		82	79 - 120	1	30
trans-1,3-Dichloropropene	20.0	18.7		ug/L		94	76 - 120	2	30
Trichloroethene	20.0	16.8		ug/L		84	77 - 120	1	30
Trichlorofluoromethane	20.0	13.8	*	ug/L		69	71 - 143	0	30
Vinyl chloride	20.0	18.6		ug/L		93	62 - 138	1	30
Xylenes, Total	40.0	38.6		ug/L		97	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*
4-Bromofluorobenzene	*106*		*77 - 124*
Dibromofluoromethane (Surr)	*97*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-143001/17
Matrix: Water
Analysis Batch: 143001

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			05/14/19 15:43	1

Lab Sample ID: MB 200-143001/4
Matrix: Water
Analysis Batch: 143001

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			05/14/19 13:50	1

Lab Sample ID: LCS 200-143001/15
Matrix: Water
Analysis Batch: 143001

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon dioxide	40000	40700		ug/L		102	70 - 130

Lab Sample ID: LCSD 200-143001/16
Matrix: Water
Analysis Batch: 143001

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	43700		ug/L		109	70 - 130	7	30

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

Lab Sample ID: MB 480-474256/3
Matrix: Water
Analysis Batch: 474256

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			05/22/19 19:07	1
Ethene	7.0	U	7.0	1.5	ug/L			05/22/19 19:07	1
Methane	4.0	U	4.0	1.0	ug/L			05/22/19 19:07	1

Lab Sample ID: LCS 480-474256/4
Matrix: Water
Analysis Batch: 474256

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	14.5	14.0		ug/L		96	79 - 120
Ethene	13.5	13.3		ug/L		99	85 - 120
Methane	7.67	7.41		ug/L		97	85 - 120

Lab Sample ID: LCSD 480-474256/5
Matrix: Water
Analysis Batch: 474256

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	13.9		ug/L		96	79 - 120	0	50
Ethene	13.5	13.2		ug/L		98	85 - 120	1	50
Methane	7.67	7.35		ug/L		96	85 - 120	1	50

Lab Sample ID: MB 480-474332/6
Matrix: Water
Analysis Batch: 474332

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			05/23/19 11:45	1
Ethene	7.0	U	7.0	1.5	ug/L			05/23/19 11:45	1
Methane	4.0	U	4.0	1.0	ug/L			05/23/19 11:45	1

Lab Sample ID: LCS 480-474332/7
Matrix: Water
Analysis Batch: 474332

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	13.1		ug/L		90	79 - 120
Ethene	13.5	12.2		ug/L		90	85 - 120
Methane	7.67	6.95		ug/L		91	85 - 120

Lab Sample ID: LCSD 480-474332/8
Matrix: Water
Analysis Batch: 474332

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	3	50
Ethene	13.5	12.8		ug/L		95	85 - 120	5	50
Methane	7.67	7.20		ug/L		94	85 - 120	3	50

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

Lab Sample ID: MB 480-475930/2
Matrix: Water
Analysis Batch: 475930

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			06/03/19 15:03	1
Ethene	7.0	U	7.0	1.5	ug/L			06/03/19 15:03	1
Methane	4.0	U	4.0	1.0	ug/L			06/03/19 15:03	1

Lab Sample ID: LCS 480-475930/3
Matrix: Water
Analysis Batch: 475930

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	36.2	34.0		ug/L		94	79 - 120
Ethene	33.8	31.5		ug/L		93	85 - 120
Methane	19.2	18.0		ug/L		94	85 - 120

Lab Sample ID: LCSD 480-475930/4
Matrix: Water
Analysis Batch: 475930

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	36.2	33.7		ug/L		93	79 - 120	1	50
Ethene	33.8	30.3		ug/L		90	85 - 120	4	50
Methane	19.2	18.1		ug/L		94	85 - 120	0	50

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 460-611733/3
Matrix: Water
Analysis Batch: 611733

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.12	U	0.12	0.014	mg/L			05/21/19 15:28	1
Sulfate	0.60	U	0.60	0.35	mg/L			05/21/19 15:28	1

Lab Sample ID: LCS 460-611733/5
Matrix: Water
Analysis Batch: 611733

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.54		mg/L		103	90 - 110
Sulfate	7.50	7.73		mg/L		103	90 - 110

Lab Sample ID: LCSD 460-611733/6
Matrix: Water
Analysis Batch: 611733

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
Chloride	1.50	1.55		mg/L		103	90 - 110	0	15
Sulfate	7.50	7.77		mg/L		104	90 - 110	0	15

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: MB 460-612027/3
Matrix: Water
Analysis Batch: 612027

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.12	U	0.12	0.014	mg/L			05/22/19 12:45	1
Sulfate	0.60	U	0.60	0.35	mg/L			05/22/19 12:45	1

Lab Sample ID: LCS 460-612027/5
Matrix: Water
Analysis Batch: 612027

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.50	1.59		mg/L		106	90 - 110
Sulfate	7.50	8.12		mg/L		108	90 - 110

Lab Sample ID: LCSD 460-612027/6
Matrix: Water
Analysis Batch: 612027

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
Chloride	1.50	1.53		mg/L		102	90 - 110	4	15
Sulfate	7.50	7.93		mg/L		106	90 - 110	2	15

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 460-610467/1-A
Matrix: Water
Analysis Batch: 611136

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 610467

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		05/16/19 08:57	05/19/19 09:39	1
Manganese	15.0	U	15.0	0.99	ug/L		05/16/19 08:57	05/19/19 09:39	1
Sodium	5000	U	5000	460	ug/L		05/16/19 08:57	05/19/19 09:39	1

Lab Sample ID: LCS 460-610467/2-A
Matrix: Water
Analysis Batch: 610812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 610467

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	1010		ug/L		101	80 - 120
Manganese	500	510.3		ug/L		102	80 - 120
Sodium	20000	20090		ug/L		100	80 - 120

Lab Sample ID: MB 460-610741/1-A
Matrix: Water
Analysis Batch: 610812

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 610741

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		05/17/19 08:49	05/17/19 18:30	1
Manganese	15.0	U	15.0	0.99	ug/L		05/17/19 08:49	05/17/19 18:30	1
Sodium	629.2	J	5000	460	ug/L		05/17/19 08:49	05/17/19 18:30	1

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

Lab Sample ID: LCS 460-610741/3-A
Matrix: Water
Analysis Batch: 610812

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 610741

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			1000	1014		ug/L		101	80 - 120		
Manganese			500	502.7		ug/L		101	80 - 120		
Sodium			20000	20500		ug/L		103	80 - 120		

Lab Sample ID: 460-181653-5 MS
Matrix: Water
Analysis Batch: 610812

Client Sample ID: AMW-14-VD-W-20190510
Prep Type: Total/NA
Prep Batch: 610741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron	14700		1000	14900	4	ug/L		16	75 - 125		
Manganese	387		500	876.4		ug/L		98	75 - 125		

Lab Sample ID: 460-181653-5 MS
Matrix: Water
Analysis Batch: 610812

Client Sample ID: AMW-14-VD-W-20190510
Prep Type: Total/NA
Prep Batch: 610741

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sodium	7150000	B	20000	6780000	4	ug/L		-1850	75 - 125		

Lab Sample ID: 460-181653-5 DU
Matrix: Water
Analysis Batch: 610812

Client Sample ID: AMW-14-VD-W-20190510
Prep Type: Total/NA
Prep Batch: 610741

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Iron	14700			14340		ug/L				3	20
Manganese	387			375.3		ug/L				3	20

Lab Sample ID: 460-181653-5 DU
Matrix: Water
Analysis Batch: 610812

Client Sample ID: AMW-14-VD-W-20190510
Prep Type: Total/NA
Prep Batch: 610741

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Sodium	7150000	B		6945000		ug/L				3	20

Lab Sample ID: MB 460-611923/1-A
Matrix: Water
Analysis Batch: 611973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 611923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		05/22/19 08:50	05/22/19 15:59	1
Manganese	15.0	U	15.0	0.99	ug/L		05/22/19 08:50	05/22/19 15:59	1
Sodium	5000	U	5000	460	ug/L		05/22/19 08:50	05/22/19 15:59	1

Lab Sample ID: LCS 460-611923/2-A
Matrix: Water
Analysis Batch: 611973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611923

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Iron			1000	1007		ug/L		101	80 - 120		
Manganese			500	507.5		ug/L		102	80 - 120		

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

Lab Sample ID: LCS 460-611923/2-A
Matrix: Water
Analysis Batch: 611973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	20000	19890		ug/L		99	80 - 120

Lab Sample ID: 460-181653-10 MS
Matrix: Water
Analysis Batch: 611973

Client Sample ID: AMW-15-D2-W-20190510
Prep Type: Total/NA
Prep Batch: 611923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	328		1000	1339		ug/L		101	75 - 125
Manganese	72.0		500	586.9		ug/L		103	75 - 125

Lab Sample ID: 460-181653-10 MS
Matrix: Water
Analysis Batch: 611973

Client Sample ID: AMW-15-D2-W-20190510
Prep Type: Total/NA
Prep Batch: 611923

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sodium	2030000		20000	2113000	4	ug/L		395	75 - 125

Lab Sample ID: 460-181653-10 DU
Matrix: Water
Analysis Batch: 611973

Client Sample ID: AMW-15-D2-W-20190510
Prep Type: Total/NA
Prep Batch: 611923

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Iron	328		318.5		ug/L		3	20
Manganese	72.0		70.45		ug/L		2	20

Lab Sample ID: 460-181653-10 DU
Matrix: Water
Analysis Batch: 611973

Client Sample ID: AMW-15-D2-W-20190510
Prep Type: Total/NA
Prep Batch: 611923

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sodium	2030000		2018000		ug/L		0.8	20

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 460-609251/11
Matrix: Water
Analysis Batch: 609251

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	0.10	U	0.10	0.0030	mg/L			05/11/19 03:32	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 03:32	1

Lab Sample ID: MB 460-609251/42
Matrix: Water
Analysis Batch: 609251

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	0.10	U	0.10	0.0030	mg/L			05/11/19 03:58	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 03:58	1

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: LCSSRM 460-609251/12
Matrix: Water
Analysis Batch: 609251

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.63	1.63		mg/L		100.2	82.2 - 117.3

Lab Sample ID: LCSSRM 460-609251/13
Matrix: Water
Analysis Batch: 609251

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.803	0.733		mg/L		91.3	79.1 - 120.4

Lab Sample ID: LCSSRM 460-609251/43
Matrix: Water
Analysis Batch: 609251

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	1.63	1.65		mg/L		101.5	82.2 - 117.3

Lab Sample ID: LCSSRM 460-609251/44
Matrix: Water
Analysis Batch: 609251

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.803	0.732		mg/L		91.2	79.1 - 120.4

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

Lab Sample ID: MB 460-611313/3
Matrix: Water
Analysis Batch: 611313

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	0.353	J	1.0	0.35	mg/L			05/17/19 18:55	1

Lab Sample ID: LCSSRM 460-611313/4
Matrix: Water
Analysis Batch: 611313

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	36.0	35.55		mg/L		98.7	82.5 - 116.7

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-611315/2
Matrix: Water
Analysis Batch: 611315

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			05/17/19 13:38	1

Method: SM 2320B - Alkalinity

Lab Sample ID: LCSSRM 460-611315/3
Matrix: Water
Analysis Batch: 611315

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			168	160.4		mg/L		95.5	84.5 - 114.9		

Lab Sample ID: MB 460-612322/1
Matrix: Water
Analysis Batch: 612322

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			05/23/19 16:03	1

Lab Sample ID: LCSSRM 460-612322/2
Matrix: Water
Analysis Batch: 612322

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

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity			168	164.0		mg/L		97.6	84.5 - 114.9		

Lab Sample ID: 460-181653-12 DU
Matrix: Water
Analysis Batch: 612322

Client Sample ID: AMW-15-D1-20190509
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Alkalinity	422			422.0		mg/L				0	10

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

Lab Sample ID: MB 460-610004/29
Matrix: Water
Analysis Batch: 610004

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	0.055	mg/L			05/14/19 17:52	1

Lab Sample ID: LCS 460-610004/30
Matrix: Water
Analysis Batch: 610004

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron			0.500	0.471		mg/L		94	84 - 119		

Lab Sample ID: 460-181653-2 MS
Matrix: Water
Analysis Batch: 610004

Client Sample ID: MW-24-D2-W-20190509
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ferrous Iron	0.10	U HF	2.00	2.10		mg/L		105	84 - 119		

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

Lab Sample ID: 460-181653-2 MSD
Matrix: Water
Analysis Batch: 610004

Client Sample ID: MW-24-D2-W-20190509
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Ferrous Iron	0.10	U HF	2.00	2.13		mg/L		107	84 - 119	1	20

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 460-610568/1
Matrix: Water
Analysis Batch: 610568

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	0.58	mg/L			05/16/19 15:22	1

Lab Sample ID: LCSSRM 460-610568/3
Matrix: Water
Analysis Batch: 610568

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	4.52	3.37		mg/L		74.6	38.9 - 148.7

GC/MS VOA

Analysis Batch: 612063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	8260C	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	8260C	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	8260C	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	8260C	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	8260C	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	8260C	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	8260C	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	8260C	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	8260C	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	8260C	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	8260C	
460-181653-15	TB-W-20190509	Total/NA	Water	8260C	
MB 460-612063/7	Method Blank	Total/NA	Water	8260C	
LCS 460-612063/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-612063/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 612256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	8260C	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	8260C	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	8260C	
MB 460-612256/7	Method Blank	Total/NA	Water	8260C	
LCS 460-612256/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-612256/4	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 143001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	RSK-175	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	RSK-175	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	RSK-175	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	RSK-175	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	RSK-175	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	RSK-175	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	RSK-175	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	RSK-175	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	RSK-175	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	RSK-175	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	RSK-175	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	RSK-175	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	RSK-175	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	RSK-175	
MB 200-143001/17	Method Blank	Total/NA	Water	RSK-175	
MB 200-143001/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-143001/15	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-143001/16	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 474256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 474256 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	RSK-175	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	RSK-175	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	RSK-175	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	RSK-175	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	RSK-175	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	RSK-175	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	RSK-175	
MB 480-474256/3	Method Blank	Total/NA	Water	RSK-175	
LCS 480-474256/4	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-474256/5	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 474332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	RSK-175	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	RSK-175	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	RSK-175	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	RSK-175	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	RSK-175	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	RSK-175	
MB 480-474332/6	Method Blank	Total/NA	Water	RSK-175	
LCS 480-474332/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-474332/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 475930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-4 - RA	AMW-15-VD-W-20190510	Total/NA	Water	RSK-175	
460-181653-5 - RA	AMW-14-VD-W-20190510	Total/NA	Water	RSK-175	
MB 480-475930/2	Method Blank	Total/NA	Water	RSK-175	
LCS 480-475930/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-475930/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 611733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	300.0	
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	300.0	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	300.0	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	300.0	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	300.0	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	300.0	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	300.0	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	300.0	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	300.0	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	300.0	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	300.0	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	300.0	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	300.0	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	300.0	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	300.0	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 611733 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	300.0	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	300.0	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	300.0	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	300.0	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	300.0	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	300.0	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	300.0	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	300.0	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	300.0	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	300.0	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	300.0	
MB 460-611733/3	Method Blank	Total/NA	Water	300.0	
LCS 460-611733/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-611733/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 612027

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	300.0	
MB 460-612027/3	Method Blank	Total/NA	Water	300.0	
LCS 460-612027/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-612027/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 610467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	3010A	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	3010A	
MB 460-610467/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-610467/2-A	Lab Control Sample	Total/NA	Water	3010A	

Prep Batch: 610741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	3010A	
MB 460-610741/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-610741/3-A	Lab Control Sample	Total/NA	Water	3010A	
460-181653-5 MS	AMW-14-VD-W-20190510	Total/NA	Water	3010A	
460-181653-5 DU	AMW-14-VD-W-20190510	Total/NA	Water	3010A	

Analysis Batch: 610812

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	6010D	610467
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	6010D	610467
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	6010D	610741
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	6010D	610741
MB 460-610741/1-A	Method Blank	Total/NA	Water	6010D	610741
LCS 460-610467/2-A	Lab Control Sample	Total/NA	Water	6010D	610467
LCS 460-610741/3-A	Lab Control Sample	Total/NA	Water	6010D	610741
460-181653-5 MS	AMW-14-VD-W-20190510	Total/NA	Water	6010D	610741
460-181653-5 MS	AMW-14-VD-W-20190510	Total/NA	Water	6010D	610741
460-181653-5 DU	AMW-14-VD-W-20190510	Total/NA	Water	6010D	610741

Metals (Continued)

Analysis Batch: 610812 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-5 DU	AMW-14-VD-W-20190510	Total/NA	Water	6010D	610741

Analysis Batch: 611136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	6010D	610467
MB 460-610467/1-A	Method Blank	Total/NA	Water	6010D	610467

Prep Batch: 611923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	3010A	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	3010A	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	3010A	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	3010A	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	3010A	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	3010A	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	3010A	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	3010A	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	3010A	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	3010A	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	3010A	
MB 460-611923/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-611923/2-A	Lab Control Sample	Total/NA	Water	3010A	
460-181653-10 MS	AMW-15-D2-W-20190510	Total/NA	Water	3010A	
460-181653-10 DU	AMW-15-D2-W-20190510	Total/NA	Water	3010A	

Analysis Batch: 611973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	6010D	611923
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	6010D	611923
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	6010D	611923
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	6010D	611923
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	6010D	611923
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	6010D	611923
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	6010D	611923
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	6010D	611923
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	6010D	611923
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	6010D	611923
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	6010D	611923
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	6010D	611923
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	6010D	611923
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	6010D	611923
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	6010D	611923
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	6010D	611923
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	6010D	611923
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	6010D	611923
MB 460-611923/1-A	Method Blank	Total/NA	Water	6010D	611923
LCS 460-611923/2-A	Lab Control Sample	Total/NA	Water	6010D	611923

Metals (Continued)

Analysis Batch: 611973 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-10 MS	AMW-15-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-10 MS	AMW-15-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-10 DU	AMW-15-D2-W-20190510	Total/NA	Water	6010D	611923
460-181653-10 DU	AMW-15-D2-W-20190510	Total/NA	Water	6010D	611923

General Chemistry

Analysis Batch: 609251

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	353.2	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	353.2	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	353.2	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	353.2	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	353.2	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	353.2	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	353.2	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	353.2	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	353.2	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	353.2	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	353.2	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	353.2	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	353.2	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	353.2	
MB 460-609251/11	Method Blank	Total/NA	Water	353.2	
MB 460-609251/42	Method Blank	Total/NA	Water	353.2	
LCSSRM 460-609251/12	Lab Control Sample	Total/NA	Water	353.2	
LCSSRM 460-609251/13	Lab Control Sample	Total/NA	Water	353.2	
LCSSRM 460-609251/43	Lab Control Sample	Total/NA	Water	353.2	
LCSSRM 460-609251/44	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 610004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	SM 3500 FE D	
MB 460-610004/29	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 460-610004/30	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
460-181653-2 MS	MW-24-D2-W-20190509	Total/NA	Water	SM 3500 FE D	
460-181653-2 MSD	MW-24-D2-W-20190509	Total/NA	Water	SM 3500 FE D	

General Chemistry

Analysis Batch: 610116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	SM 3500	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	SM 3500	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	SM 3500	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	SM 3500	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	SM 3500	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	SM 3500	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	SM 3500	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	SM 3500	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	SM 3500	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	SM 3500	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	SM 3500	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	SM 3500	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	SM 3500	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	SM 3500	

Analysis Batch: 610568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	SM 4500 S2 F	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	SM 4500 S2 F	
MB 460-610568/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCSSRM 460-610568/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 611313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	9060A	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	9060A	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	9060A	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	9060A	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	9060A	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	9060A	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	9060A	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	9060A	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	9060A	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	9060A	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	9060A	
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	9060A	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	9060A	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	9060A	
MB 460-611313/3	Method Blank	Total/NA	Water	9060A	

General Chemistry (Continued)

Analysis Batch: 611313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 460-611313/4	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 611315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-1	MW-28-D2R-W-20190509	Total/NA	Water	SM 2320B	
460-181653-2	MW-24-D2-W-20190509	Total/NA	Water	SM 2320B	
460-181653-3	MW-24-VDR-W-20190509	Total/NA	Water	SM 2320B	
460-181653-4	AMW-15-VD-W-20190510	Total/NA	Water	SM 2320B	
460-181653-5	AMW-14-VD-W-20190510	Total/NA	Water	SM 2320B	
460-181653-6	AMW-14-D2-W-20190510	Total/NA	Water	SM 2320B	
460-181653-7	MW-28-D1-W-20190509	Total/NA	Water	SM 2320B	
460-181653-8	MW-26-D2-W-20190509	Total/NA	Water	SM 2320B	
460-181653-9	MW-23-D2R-W-20190509	Total/NA	Water	SM 2320B	
460-181653-10	AMW-15-D2-W-20190510	Total/NA	Water	SM 2320B	
460-181653-11	AMW-15-D3-W-20190510	Total/NA	Water	SM 2320B	
460-181653-13	AMW-14-D1-W-20190510	Total/NA	Water	SM 2320B	
460-181653-14	MW-24-D1R-W-20190509	Total/NA	Water	SM 2320B	
MB 460-611315/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-611315/3	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 612322

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181653-12	AMW-15-D1-20190509	Total/NA	Water	SM 2320B	
MB 460-612322/1	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-612322/2	Lab Control Sample	Total/NA	Water	SM 2320B	
460-181653-12 DU	AMW-15-D1-20190509	Total/NA	Water	SM 2320B	

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: MW-28-D2R-W-20190509

Lab Sample ID: 460-181653-1

Date Collected: 05/09/19 21:00
Matrix: Water
Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 02:41	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 15:52	MLT	TAL BUR
Total/NA	Analysis	RSK-175		44	474256	05/22/19 20:00	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 21:18	VMI	TAL EDI
Total/NA	Analysis	300.0		2000	611733	05/21/19 21:39	VMI	TAL EDI
Total/NA	Prep	3010A			610467	05/16/19 08:57	QZY	TAL EDI
Total/NA	Analysis	6010D		1	610812	05/17/19 23:46	CDC	TAL EDI
Total/NA	Prep	3010A			610467	05/16/19 08:57	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611136	05/19/19 09:43	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:47	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/17/19 23:52	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 14:19	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/20/19 06:07	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:52	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: MW-24-D2-W-20190509

Lab Sample ID: 460-181653-2

Date Collected: 05/09/19 22:15
Matrix: Water
Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 03:06	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:01	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	474256	05/22/19 20:17	DSC	TAL BUF
Total/NA	Analysis	300.0		20	611733	05/21/19 17:02	VMI	TAL EDI
Total/NA	Analysis	300.0		1	611733	05/21/19 21:53	VMI	TAL EDI
Total/NA	Prep	3010A			610467	05/16/19 08:57	QZY	TAL EDI
Total/NA	Analysis	6010D		1	610812	05/17/19 23:50	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:46	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 00:17	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 14:28	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/20/19 06:07	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:52	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: MW-24-VDR-W-20190509

Lab Sample ID: 460-181653-3

Date Collected: 05/09/19 21:47
Matrix: Water
Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 03:31	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:09	MLT	TAL BUR

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: MW-24-VDR-W-20190509

Lab Sample ID: 460-181653-3

Date Collected: 05/09/19 21:47

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		11	474256	05/22/19 20:35	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 22:08	VMI	TAL EDI
Total/NA	Analysis	300.0		5000	611733	05/21/19 22:23	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 16:27	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		50	611973	05/22/19 22:12	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:48	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 00:41	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 14:37	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:52	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: AMW-15-VD-W-20190510

Lab Sample ID: 460-181653-4

Date Collected: 05/10/19 00:40

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 03:56	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:18	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	474332	05/23/19 13:00	CAM	TAL BUF
Total/NA	Analysis	RSK-175	RA	1	475930	06/03/19 18:25	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 22:38	VMI	TAL EDI
Total/NA	Analysis	300.0		10000	611733	05/21/19 22:52	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 16:31	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		50	611973	05/22/19 22:23	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 04:05	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 01:06	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 14:47	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:52	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: AMW-14-VD-W-20190510

Lab Sample ID: 460-181653-5

Date Collected: 05/10/19 01:55

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 04:21	DAS	TAL EDI

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: AMW-14-VD-W-20190510

Lab Sample ID: 460-181653-5

Date Collected: 05/10/19 01:55

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:27	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	474332	05/23/19 13:17	CAM	TAL BUF
Total/NA	Analysis	RSK-175	RA	1	475930	06/03/19 18:43	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 23:07	VMI	TAL EDI
Total/NA	Analysis	300.0		60000	611733	05/21/19 23:22	VMI	TAL EDI
Total/NA	Prep	3010A			610741	05/17/19 08:49	QZY	TAL EDI
Total/NA	Analysis	6010D		1	610812	05/17/19 18:14	CDC	TAL EDI
Total/NA	Prep	3010A			610741	05/17/19 08:49	QZY	TAL EDI
Total/NA	Analysis	6010D		50	610812	05/18/19 00:29	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 04:07	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 01:31	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 14:57	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/20/19 06:07	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:52	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: AMW-14-D2-W-20190510

Lab Sample ID: 460-181653-6

Date Collected: 05/10/19 01:25

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 04:46	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:36	MLT	TAL BUR
Total/NA	Analysis	RSK-175		44	474332	05/23/19 13:35	CAM	TAL BUF
Total/NA	Analysis	300.0		50	611733	05/21/19 18:01	VMI	TAL EDI
Total/NA	Analysis	300.0		2500	611733	05/21/19 23:37	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 16:35	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:27	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 04:06	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 01:56	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 15:09	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:53	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: MW-28-D1-W-20190509

Lab Sample ID: 460-181653-7

Date Collected: 05/09/19 21:20

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 05:10	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:44	MLT	TAL BUR
Total/NA	Analysis	RSK-175		88	474256	05/22/19 20:52	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 18:46	VMI	TAL EDI
Total/NA	Analysis	300.0		2500	611733	05/22/19 00:21	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 19:10	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:31	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:49	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 02:21	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 15:21	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:53	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: MW-26-D2-W-20190509

Lab Sample ID: 460-181653-8

Date Collected: 05/09/19 20:00

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 05:35	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 16:53	MLT	TAL BUR
Total/NA	Analysis	RSK-175		88	474256	05/22/19 21:10	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 19:00	VMI	TAL EDI
Total/NA	Analysis	300.0		2500	611733	05/22/19 00:36	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 19:14	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		20	611973	05/22/19 22:35	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:49	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 02:46	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 15:32	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:53	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: MW-23-D2R-W-20190509

Lab Sample ID: 460-181653-9

Date Collected: 05/09/19 23:00
Matrix: Water
Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 06:00	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 17:02	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	474256	05/22/19 21:27	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 19:15	VMI	TAL EDI
Total/NA	Analysis	300.0		2000	611733	05/22/19 00:51	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 19:18	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:39	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:57	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 03:11	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 15:43	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:59	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: AMW-15-D2-W-20190510

Lab Sample ID: 460-181653-10

Date Collected: 05/10/19 00:04
Matrix: Water
Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 06:24	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 17:10	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	474332	05/23/19 13:52	CAM	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 19:30	VMI	TAL EDI
Total/NA	Analysis	300.0		2000	611733	05/22/19 01:05	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 16:19	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:04	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 04:05	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 03:36	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 15:54	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:59	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: AMW-15-D3-W-20190510

Lab Sample ID: 460-181653-11

Date Collected: 05/10/19 00:20

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 06:49	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 17:19	MLT	TAL BUR
Total/NA	Analysis	RSK-175		44	474332	05/23/19 14:10	CAM	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 19:45	VMI	TAL EDI
Total/NA	Analysis	300.0		2500	611733	05/22/19 01:20	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 16:59	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		20	611973	05/22/19 22:43	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 04:08	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 04:50	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 16:05	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:59	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: AMW-15-D1-20190509

Lab Sample ID: 460-181653-12

Date Collected: 05/09/19 23:51

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612256	05/23/19 16:55	SZD	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 17:28	MLT	TAL BUR
Total/NA	Analysis	RSK-175		110	474256	05/22/19 21:45	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 19:59	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	612027	05/22/19 15:06	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:03	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:47	CDC	TAL EDI
Total/NA	Analysis	353.2		5	609251	05/11/19 04:04	KYN	TAL EDI
Total/NA	Analysis	9060A		5	611313	05/18/19 05:15	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	612322	05/23/19 16:03	RAK	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:59	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: AMW-14-D1-W-20190510

Lab Sample ID: 460-181653-13

Date Collected: 05/10/19 01:00

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612256	05/23/19 17:20	SZD	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 17:36	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	474332	05/23/19 14:27	CAM	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 20:14	VMI	TAL EDI
Total/NA	Analysis	300.0		2000	611733	05/22/19 01:49	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:07	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:51	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 04:08	KYN	TAL EDI
Total/NA	Analysis	9060A		5	611313	05/18/19 05:41	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 16:17	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:59	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: MW-24-D1R-W-20190509

Lab Sample ID: 460-181653-14

Date Collected: 05/09/19 21:55

Matrix: Water

Date Received: 05/10/19 17:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612256	05/23/19 17:45	SZD	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 17:45	MLT	TAL BUR
Total/NA	Analysis	RSK-175		44	474256	05/22/19 22:02	DSC	TAL BUF
Total/NA	Analysis	300.0		100	611733	05/21/19 20:29	VMI	TAL EDI
Total/NA	Analysis	300.0		2000	611733	05/22/19 02:04	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:11	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:55	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609251	05/11/19 03:58	KYN	TAL EDI
Total/NA	Analysis	9060A		1	611313	05/18/19 06:06	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 16:28	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:59	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Lab Chronicle

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

Job ID: 460-181653-1

Client Sample ID: TB-W-20190509

Date Collected: 05/09/19 19:40
Date Received: 05/10/19 17:20

Lab Sample ID: 460-181653-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/22/19 22:29	DAS	TAL EDI

Laboratory References:

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

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

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

Accreditation/Certification Summary

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

Job ID: 460-181653-1

Laboratory: Eurofins 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	06-30-20
New York	NELAP	2	11452	04-01-20
Pennsylvania	NELAP	3	68-00522	02-28-20
Pennsylvania	NELAP		68-00522	02-28-20
Rhode Island	State Program	1	LAO00132	12-30-19
USDA	Federal		NJCA-003-08	05-03-21

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

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

Laboratory: Eurofins 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		Water	Carbon dioxide

Method Summary

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

Job ID: 460-181653-1

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
300.0	Anions, Ion Chromatography	MCAWW	TAL EDI
6010D	Metals (ICP)	SW846	TAL EDI
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL EDI
9060A	Organic Carbon, Total (TOC)	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
SM 3500	Iron, Ferric	SM	TAL EDI
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL EDI
SM 4500 S2 F	Sulfide, Total	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

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

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

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

Sample Summary

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

Job ID: 460-181653-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-181653-1	MW-28-D2R-W-20190509	Water	05/09/19 21:00	05/10/19 17:20	
460-181653-2	MW-24-D2-W-20190509	Water	05/09/19 22:15	05/10/19 17:20	
460-181653-3	MW-24-VDR-W-20190509	Water	05/09/19 21:47	05/10/19 17:20	
460-181653-4	AMW-15-VD-W-20190510	Water	05/10/19 00:40	05/10/19 17:20	
460-181653-5	AMW-14-VD-W-20190510	Water	05/10/19 01:55	05/10/19 17:20	
460-181653-6	AMW-14-D2-W-20190510	Water	05/10/19 01:25	05/10/19 17:20	
460-181653-7	MW-28-D1-W-20190509	Water	05/09/19 21:20	05/10/19 17:20	
460-181653-8	MW-26-D2-W-20190509	Water	05/09/19 20:00	05/10/19 17:20	
460-181653-9	MW-23-D2R-W-20190509	Water	05/09/19 23:00	05/10/19 17:20	
460-181653-10	AMW-15-D2-W-20190510	Water	05/10/19 00:04	05/10/19 17:20	
460-181653-11	AMW-15-D3-W-20190510	Water	05/10/19 00:20	05/10/19 17:20	
460-181653-12	AMW-15-D1-20190509	Water	05/09/19 23:51	05/10/19 17:20	
460-181653-13	AMW-14-D1-W-20190510	Water	05/10/19 01:00	05/10/19 17:20	
460-181653-14	MW-24-D1R-W-20190509	Water	05/09/19 21:55	05/10/19 17:20	
460-181653-15	TB-W-20190509	Water	05/09/19 19:40	05/10/19 17:20	

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-129780-26696.1
Client Contact: Loretta Kwong	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S. Inc				Job #: 181653
Address: 655 Third Avenue 12th Floor	Due Date Requested:			
City: New York City	TAT Requested (days):			
State, Zip: NY, 10017-9118				
Phone: 646-760-0584(Tel)	PO #: ASRTM0RS.8040.00001			
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02			
Project Name: MNA Analysis	Project #: 48016199			
Site: New York	SSOW#:			

Analysis Requested

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

Other:

SHORT HOLD

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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)	SM4500_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:
			Preservation Code:				N	N	D	A	A	A	CB	N	N	N		
MW-27-D2-W-				Water														
MW-28-D2R-W- 20190509	5/9/19	2100	G	Water			X	X	X	X	X	X	X	X	X	X	18	
MW-24-D2-W- 20190509	5/9/19	2215	G	Water			X	X	X	X	X	X	X	X	X	X	18	
MW-24-VDR-W- 20190509	5/9/19	2247	G	Water			X	X	X	X	X	X	X	X	X	X	18	Sam 47
AMW-15-VD-W- 20190510	5/10/19	2440	G	Water			X	X	X	X	X	X	X	X	X	X	18	
AMW-7R-W-				Water														
AMW-14-VD-W- 20190510	5/10/19	0155	G	Water			X	X	X	X	X	X	X	X	X	X	18	
AMW-14-D2-W- 20190510	5/10/19	0125	G	Water			X	X	X	X	X	X	X	X	X	X	18	
MW-28-D1-W- 20190509	5/9/19	2220	G	Water			X	X	X	X	X	X	X	X	X	X	18	Samp 20
MW-26-D2-W- 20190509	5/9/19	2000	G	Water			X	X	X	X	X	X	X	X	X	X	18	
MW-23-D2R-W- 20190509	5/9/19	2300	G	Water			X	X	X	X	X	X	X	X	X	X	18	

460-181653 Chain of Custody

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Felix Congo	5/10/19 / 1720		Deborah B	5/10/19	TA 1720
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

NOCSIR9 2.1°C, 2.4°C, 2.5°C

Ver: 01/16/2019

7/9/2019 (Rev. 1)

1 2 3 4 5 6 7 8 9

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

7/9/2019 (Rev. 1)

Client Information	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-129780-26696.2
Client Contact: Loretta Kwong	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 2 of 2
Company: ARCADIS U.S. Inc				Job #: 181653
Address: 655 Third Avenue 12th Floor	Due Date Requested:			
City: New York City	TAT Requested (days):			
State, Zip: NY, 10017-9118				
Phone: 646-760-0584(Tel)	PO #: ASRTM0RS.8040.00001			
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02			
Project Name: MNA Analysis	Project #: 48016199			
Site: New York	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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)	SM4500_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:	
			Preservation Code:				N	N	D	A	A	A	CB	N	N	N			
AMW-15-D2-W- 20190510	5/10/19	2404	G	Water			X	X	X	X	X	X	X	X	X	X	18		10
AMW-15-D3-W- 20190540	5/10/19	2420	G	Water			X	X	X	X	X	X	X	X	X	X	18		11
~~MW-23-D1R-W~~	~~5/9/19~~	~~2244~~	~~G~~	~~Water~~			~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~	~~X~~			
AMW-15-D1-W- 20190509	5/9/19	2351	G	Water			X	X	X	X	X	X	X	X	X	X	18		12
MW-27-D1R-W-				Water															
MW-26-D1-W-				Water															
MW-29-D1-W-				Water															
AMW-14-D1-W- 20190510	5/10/19	0100	G	Water			X	X	X	X	X	X	X	X	X	X	18		13
MW-24-D1R-W- 20190510	5/9/19	2155	G	Water			X	X	X	X	X	X	X	X	X	X	18		14
TB-W- 20190509	5/9/19	1940	—	Water							X						1		15
				Water															

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:				
Relinquished by: Felix Conde	Date/Time: 5/10/19 1720	Company	Received by: [signature]	Date/Time: 5.10.19 1720	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

DOCS IR9 2.1°C, 2.4°C, 2.5°C

Ver: 01/16/2019

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 181653

Number of Coolers: 1 IR Gun # 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.1 °C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.4 °C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	2.5 °C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1				<2					>9						
2				<2					>9						
3				<2					>9						
4				<2					>9						
5				<2					>9						
6				<2					>9						
7				<2					>9						
8				<2					>9						
9				<2					>9						
10				<2					>9						
11				<2					>9						
12				<2					>9						
13				<2					>9						
14				<2					>9						

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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

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

Initials: CD Date: 5/10/19

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

Chain of Custody Record

460-181653 Chain of Custody

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R		COC No: 460-54796.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	State of Origin: New York	Page: Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-181653-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 5/22/2019			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: MNA Analysis	Project #: 48016199			
Site: Chevron Oceanside - CVX# 6518040	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175_CO2/ Dissolved Gases - CO2	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-28-D2R-W-20190509 (460-181653-1)	5/9/19	21:00 Eastern		Water			X	3	
MW-24-D2-W-20190509 (460-181653-2)	5/9/19	22:15 Eastern		Water			X	3	
MW-24-VDR-W-20190509 (460-181653-3)	5/9/19	21:47 Eastern		Water			X	3	
AMW-15-VD-W-20190510 (460-181653-4)	5/10/19	00:40 Eastern		Water			X	3	
AMW-14-VD-W-20190510 (460-181653-5)	5/10/19	01:55 Eastern		Water			X	3	
AMW-14-D2-W-20190510 (460-181653-6)	5/10/19	01:25 Eastern		Water			X	3	
MW-28-D1-W-20190509 (460-181653-7)	5/9/19	21:20 Eastern		Water			X	3	
MW-28-D2-W-20190509 (460-181653-8)	5/9/19	20:00 Eastern		Water			X	3	
MW-23-D2R-W-20190509 (460-181653-9)	5/9/19	23:00 Eastern		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/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 complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		5/13/19 18:10	TA 601			
					5/14/19 1025	TASK

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.: N/A	Cooler Temperature(s) °C and Other Remarks: 1.1

Ver: 01/16/2019

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

Chain of Custody Record

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 460-54796.2
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	State of Origin: New York	Page: Page 2 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-181653-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 5/22/2019			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: MNA Analysis	Project #: 48016199			
Site: Chevron Oceanside - CVX# 6518040	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175_CO2/ Dissolved Gases - CO2	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AMW-15-D2-W-20190510 (460-181653-10)	5/10/19	00:04 Eastern		Water			X	3	
AMW-15-D3-W-20190510 (460-181653-11)	5/10/19	00:20 Eastern		Water			X	3	
AMW-15-D1-20190509 (460-181653-12)	5/9/19	23:51 Eastern		Water			X	3	
AMW-14-D1-W-20190510 (460-181653-13)	5/10/19	01:00 Eastern		Water			X	3	
AMW-24-D1R-W-20190510 (460-181653-14)	5/9/19	21:55 Eastern		Water			X	3	

Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/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 complicance to TestAmerica Laboratories, Inc.

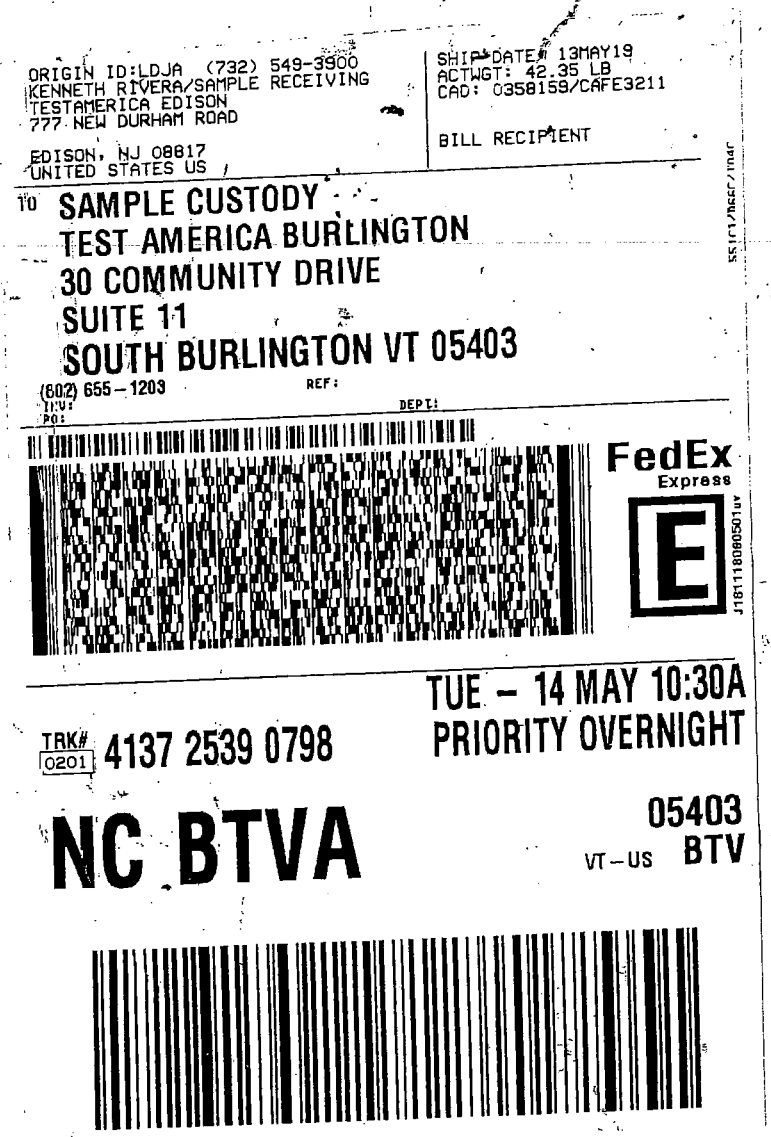
Possible Hazard Identification	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)***
Unconfirmed	☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

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

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		5/13/19 18:10	TAL			
2	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
3	Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 5/14/19 1025	Company TAL

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

Ver: 01/16/2019



ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA/SAMPLE RECEIVING
TESTAMERICA EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 13MAY19
ACTWGT: 42.35 LB
CAD: 0358159/CAFE3211

BILL RECIPIENT

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

(802) 655-1203

REF:

INV:
PO:

DEPT:

FedEx Express

TUE - 14 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 0201 4137 2539 0798

NC BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-181653-1

Login Number: 181653
List Number: 1
Creator: DiGuardia, Joseph L

List Source: Eurofins TestAmerica, Edison

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: 460-181653-1

Login Number: 181653
List Number: 4
Creator: Rudz, Gary S

List Source: Eurofins TestAmerica, Buffalo
List Creation: 05/21/19 03:24 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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	
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: 460-181653-1

Login Number: 181653
List Number: 3
Creator: Lavigne, Scott M

List Source: Eurofins TestAmerica, Burlington
List Creation: 05/14/19 12:43 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Eurofins TestAmerica, Edison
777 New Durham Road
Edison, NJ 08817
Tel: (732)549-3900

Laboratory Job ID: 460-181703-1
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:
6/6/2019 12:11:27 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

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

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

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

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

Table of Contents

Qualifiers

GC/MS VOA

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

GC VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
H	Sample was prepped or analyzed beyond the specified holding time
U	Indicates the analyte was analyzed for but not detected.

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
U	Indicates the analyte was analyzed for but not detected.

Metals

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

General Chemistry

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

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)

Job ID: 460-181703-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative
460-181703-1

Receipt
The samples were received on 5/11/2019 10:20 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 5.3º C.

Receipt Exceptions

The Chain-of-Custody (COC) was incomplete as received. No turnaround time was indicated on the COC.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-612063 was outside the method criteria for the following analytes: Bromomethane (bias low), Chloromethane and Dichlorodifluoromethane (bias high). 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 analytical batch 460-612063 recovered outside control limits for the following analytes: Chloromethane and Dichlorodifluoromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 460-612254 was outside the method criteria for the following analytes: 1,2,4-Trichlorobenzene, Bromoform and Chloromethane. 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.

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 was diluted to bring the concentration of target analytes within the calibration range: MW-27-D1R-W-20190510 (460-181703-1) and MW-27-D2-W-20190510 (460-181703-5). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-29-D1-W-20190510 (460-181703-2). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: The following sample was diluted due to the nature of the sample matrix: MW-29-D1-W-20190510 (460-181703-2). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: Reanalysis of the following sample was performed outside of the analytical holding time due to the initial analysis yielding results over the calibration curve range: MW-29-D1-W-20190510 (460-181703-2).

Method(s) RSK-175: Sample was analyzed within holding time at a dilution of 44. Upon reanalysis of a dilution at a 1x outisde of holding time, it was suspected that an error occured in the original analysis. Sample results of the 1x dilution was confirmed with another reanalysis outside of holding time at a dilution of 44. Both sets of data outside of holding times are reported: AMW-7R-W-20190510 (460-181703-6).

Method(s) RSK-175: The following sample was diluted to bring the concentration of target analytes within the calibration range: AMW-7R-W-20190510 (460-181703-6). Elevated reporting limits (RLs) are provided.

Method(s) RSK-175: Reanalysis of the following sample was performed outside of the analytical holding time due to an analyst error: AMW-7R-W-20190510 (460-181703-6). Upon reanalysis, the sample yielded a result at the reported dilution within the calibration curve range.

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

Job ID: 460-181703-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

GC Semi VOA

Method(s) 300.0: The following samples were diluted to bring the concentration of Sulfate within the calibration range: MW-27-D1R-W-20190510 (460-181703-1), MW-29-D1-W-20190510 (460-181703-2) and MW-27-D2-W-20190510 (460-181703-5). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of Chloride within the calibration range: MW-27-D1R-W-20190510 (460-181703-1), MW-29-D1-W-20190510 (460-181703-2) and MW-27-D2-W-20190510 (460-181703-5). Elevated reporting limits (RLs) are provided.

Method(s) 300.0: The following samples were diluted to bring the concentration of Chloride and Sulfate within the calibration range: AMW-7R-W-20190510 (460-181703-6), (460-181703-M-6 DU), (460-181703-M-6 MS) and (460-181703-M-6 MSD). 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

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

General Chemistry

No analytical or quality issues were noted, other than those described 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

Job ID: 460-181703-1

Client Sample ID: MW-27-D1R-W-20190510 — Lab Sample ID: 460-181703-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.4		1.0	0.43	ug/L	1		8260C	Total/NA
Carbon disulfide	1.0		1.0	0.16	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.57	J	1.0	0.22	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	18		1.0	0.47	ug/L	1		8260C	Total/NA
Toluene	0.44	J	1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.96	J	1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	17		1.0	0.17	ug/L	1		8260C	Total/NA
Carbon dioxide	97000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1600		44	11	ug/L	11		RSK-175	Total/NA
Chloride	3500		120	14	mg/L	1000		300.0	Total/NA
Sulfate	260		12	6.9	mg/L	20		300.0	Total/NA
Iron	51600		150	34.2	ug/L	1		6010D	Total/NA
Manganese	456		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1900000		50000	4600	ug/L	10		6010D	Total/NA
Nitrite as N	0.010	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Nitrate as N	0.019	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	17.6		1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	579		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	50.7		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.91	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	37.6		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-29-D1-W-20190510 — Lab Sample ID: 460-181703-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	9.8		1.0	0.43	ug/L	1		8260C	Total/NA
Cyclohexane	24		1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	0.34	J	1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	18		1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	51		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	8.6		1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	2.3		1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	3.3		2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	190000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	9300	E	44	11	ug/L	11		RSK-175	Total/NA
Methane - DL	10000	H	350	88	ug/L	88		RSK-175	Total/NA
Chloride	1700		60	7.0	mg/L	500		300.0	Total/NA
Sulfate	13		12	6.9	mg/L	20		300.0	Total/NA
Iron	1450		150	34.2	ug/L	1		6010D	Total/NA
Manganese	470		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	839000		15000	1380	ug/L	3		6010D	Total/NA
Nitrite as N	0.026	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Total Organic Carbon	14.2		1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	469		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.4		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.063	J HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	1.1		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: BD-W-20190510 — Lab Sample ID: 460-181703-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.32	J	1.0	0.26	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: BD-W-20190510 (Continued) — Lab Sample ID: 460-181703-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon disulfide	0.22	J	1.0	0.16	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	7.4		1.0	0.47	ug/L	1		8260C	Total/NA
Iron	7980		150	34.2	ug/L	1		6010D	Total/NA
Manganese	279		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1670000		50000	4600	ug/L	10		6010D	Total/NA

Client Sample ID: TB-W-20190510 — Lab Sample ID: 460-181703-4

No Detections.

Client Sample ID: MW-27-D2-W-20190510 — Lab Sample ID: 460-181703-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.28	J	1.0	0.26	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	7.9		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	66000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	310		88	22	ug/L	22		RSK-175	Total/NA
Chloride	4100		240	28	mg/L	2000		300.0	Total/NA
Sulfate	250		12	6.9	mg/L	20		300.0	Total/NA
Iron	902		150	34.2	ug/L	1		6010D	Total/NA
Manganese	197		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	505000		15000	1380	ug/L	3		6010D	Total/NA
Nitrate as N	0.029	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	15.2		1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	599		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.14		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.76	HF	0.10	0.055	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	24.4		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-7R-W-20190510 — Lab Sample ID: 460-181703-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.69	J	1.0	0.43	ug/L	1		8260C	Total/NA
Cyclohexane	19		1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	0.39	J	1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	4.2		1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	31		1.0	0.26	ug/L	1		8260C	Total/NA
Xylenes, Total	1.3	J	2.0	0.30	ug/L	1		8260C	Total/NA
Carbon dioxide	94000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1200	H E	4.0	1.0	ug/L	1		RSK-175	Total/NA
Methane - RA	3100	H	180	44	ug/L	44		RSK-175	Total/NA
Chloride	120	F1	4.8	0.56	mg/L	40		300.0	Total/NA
Sulfate	82	F1	24	14	mg/L	40		300.0	Total/NA
Iron	8080		150	34.2	ug/L	1		6010D	Total/NA
Manganese	2770		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	105000		5000	460	ug/L	1		6010D	Total/NA
Nitrite as N	0.023	J	0.10	0.0030	mg/L	1		353.2	Total/NA
Total Organic Carbon	19.8		1.0	0.35	mg/L	1		9060A	Total/NA
Alkalinity	558		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	8.1		0.10	0.10	mg/L	1		SM 3500	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 460-181703-1

Client Sample ID: MW-27-D1R-W-20190510
Date Collected: 05/10/19 20:40
Date Received: 05/11/19 10:20

Lab Sample ID: 460-181703-1
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			05/23/19 15:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 15:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 15:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 15:10	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 15:10	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 15:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 15:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 15:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 15:10	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 15:10	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 15:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 15:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 15:10	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 15:10	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 15:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 15:10	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 15:10	1
Benzene	**2.4**		1.0	0.43	ug/L			05/23/19 15:10	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 15:10	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 15:10	1
Carbon disulfide	**1.0**		1.0	0.16	ug/L			05/23/19 15:10	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 15:10	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 15:10	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 15:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 15:10	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 15:10	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/23/19 15:10	1
cis-1,2-Dichloroethene	**0.57**	**J**	1.0	0.22	ug/L			05/23/19 15:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 15:10	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 15:10	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 15:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/23/19 15:10	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 15:10	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 15:10	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 15:10	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 15:10	1
Methyl tert-butyl ether	**18**		1.0	0.47	ug/L			05/23/19 15:10	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 15:10	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 15:10	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 15:10	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 15:10	1
Toluene	**0.44**	**J**	1.0	0.38	ug/L			05/23/19 15:10	1
trans-1,2-Dichloroethene	**0.96**	**J**	1.0	0.24	ug/L			05/23/19 15:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 15:10	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 15:10	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 15:10	1
Vinyl chloride	**17**		1.0	0.17	ug/L			05/23/19 15:10	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 15:10	1

Client Sample ID: MW-27-D1R-W-20190510

Lab Sample ID: 460-181703-1

Date Collected: 05/10/19 20:40

Matrix: Water

Date Received: 05/11/19 10:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 15:10*	*1*
4-Bromofluorobenzene	*101*		*77 - 124*		*05/23/19 15:10*	*1*
Dibromofluoromethane (Surr)	*102*		*72 - 131*		*05/23/19 15:10*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/23/19 15:10*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**97000**		5000	1800	ug/L			05/14/19 14:42	1
Ethane	83	U	83	17	ug/L			05/23/19 14:45	11
Ethene	77	U	77	17	ug/L			05/23/19 14:45	11
Methane	**1600**		44	11	ug/L			05/23/19 14:45	11

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3500**		120	14	mg/L			05/21/19 21:36	1000
Sulfate	**260**		12	6.9	mg/L			05/21/19 13:42	20

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**51600**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:15	1
Manganese	**456**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:15	1
Sodium	**1900000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 22:59	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.010**	**J**	0.10	0.0030	mg/L			05/11/19 18:57	1
Nitrate as N	**0.019**	**J**	0.10	0.010	mg/L			05/11/19 18:57	1
Total Organic Carbon	**17.6**		1.0	0.35	mg/L			05/21/19 13:17	1
Ferrous Iron	**0.91**	**HF**	0.10	0.055	mg/L			05/14/19 17:22	1
Sulfide	**37.6**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**579**		5.0	5.0	mg/L			05/17/19 16:38	1
Ferric Iron	**50.7**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: MW-29-D1-W-20190510

Lab Sample ID: 460-181703-2

Date Collected: 05/10/19 21:55

Matrix: Water

Date Received: 05/11/19 10:20

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			05/23/19 01:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 01:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 01:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 01:02	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 01:02	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 01:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 01:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 01:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 01:02	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 01:02	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 01:02	1

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

Job ID: 460-181703-1

Client Sample ID: MW-29-D1-W-20190510
Date Collected: 05/10/19 21:55
Date Received: 05/11/19 10:20

Lab Sample ID: 460-181703-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 01:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 01:02	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 01:02	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 01:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 01:02	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 01:02	1
Benzene	**9.8**		1.0	0.43	ug/L			05/23/19 01:02	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 01:02	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 01:02	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 01:02	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 01:02	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 01:02	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 01:02	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 01:02	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 01:02	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 01:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 01:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 01:02	1
Cyclohexane	**24**		1.0	0.32	ug/L			05/23/19 01:02	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 01:02	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 01:02	1
Ethylbenzene	**0.34**	**J**	1.0	0.30	ug/L			05/23/19 01:02	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 01:02	1
Isopropylbenzene	**18**		1.0	0.34	ug/L			05/23/19 01:02	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 01:02	1
Methyl tert-butyl ether	**51**		1.0	0.47	ug/L			05/23/19 01:02	1
Methylcyclohexane	**8.6**		1.0	0.26	ug/L			05/23/19 01:02	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 01:02	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 01:02	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 01:02	1
Toluene	**2.3**		1.0	0.38	ug/L			05/23/19 01:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 01:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 01:02	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 01:02	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 01:02	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 01:02	1
Xylenes, Total	**3.3**		2.0	0.30	ug/L			05/23/19 01:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*74 - 132*		*05/23/19 01:02*	*1*
4-Bromofluorobenzene	*102*		*77 - 124*		*05/23/19 01:02*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*05/23/19 01:02*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*		*05/23/19 01:02*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**190000**		5000	1800	ug/L			05/14/19 14:51	1
Ethane	83	U	83	17	ug/L			05/23/19 15:02	11
Ethene	77	U	77	17	ug/L			05/23/19 15:02	11
Methane	**9300**	**E**	44	11	ug/L			05/23/19 15:02	11

Client Sample ID: MW-29-D1-W-20190510

Lab Sample ID: 460-181703-2

Date Collected: 05/10/19 21:55

Matrix: Water

Date Received: 05/11/19 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	660	U H	660	130	ug/L			06/03/19 19:00	88
Ethene	620	U H	620	130	ug/L			06/03/19 19:00	88
Methane	**10000**	**H**	350	88	ug/L			06/03/19 19:00	88

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1700**		60	7.0	mg/L			05/21/19 21:50	500
Sulfate	**13**		12	6.9	mg/L			05/21/19 14:04	20

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1450**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:19	1
Manganese	**470**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:19	1
Sodium	**839000**		15000	1380	ug/L		05/22/19 08:50	05/22/19 23:11	3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.026**	**J**	0.10	0.0030	mg/L			05/11/19 19:01	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 19:01	1
Total Organic Carbon	**14.2**		1.0	0.35	mg/L			05/21/19 13:42	1
Ferrous Iron	**0.063**	**J HF**	0.10	0.055	mg/L			05/14/19 17:22	1
Sulfide	**1.1**		1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**469**		5.0	5.0	mg/L			05/17/19 16:49	1
Ferric Iron	**1.4**		0.10	0.10	mg/L			05/23/19 06:00	1

Client Sample ID: BD-W-20190510

Lab Sample ID: 460-181703-3

Date Collected: 05/10/19 00:00

Matrix: Water

Date Received: 05/11/19 10:20

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			05/23/19 01:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 01:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 01:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 01:27	1
1,1-Dichloroethane	**0.32**	**J**	1.0	0.26	ug/L			05/23/19 01:27	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 01:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 01:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 01:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 01:27	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 01:27	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 01:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 01:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 01:27	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 01:27	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 01:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 01:27	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 01:27	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 01:27	1

Client Sample ID: BD-W-20190510

Lab Sample ID: 460-181703-3

Date Collected: 05/10/19 00:00

Matrix: Water

Date Received: 05/11/19 10:20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 01:27	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 01:27	1
Carbon disulfide	**0.22**	**J**	1.0	0.16	ug/L			05/23/19 01:27	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 01:27	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 01:27	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 01:27	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 01:27	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 01:27	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 01:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 01:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 01:27	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 01:27	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 01:27	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 01:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 01:27	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 01:27	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 01:27	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 01:27	1
Methyl tert-butyl ether	**7.4**		1.0	0.47	ug/L			05/23/19 01:27	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 01:27	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 01:27	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 01:27	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 01:27	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 01:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 01:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 01:27	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 01:27	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 01:27	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 01:27	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 01:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 01:27*	*1*
4-Bromofluorobenzene	*100*		*77 - 124*		*05/23/19 01:27*	*1*
Dibromofluoromethane (Surr)	*99*		*72 - 131*		*05/23/19 01:27*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/23/19 01:27*	*1*

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**7980**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:23	1
Manganese	**279**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:23	1
Sodium	**1670000**		50000	4600	ug/L		05/22/19 08:50	05/22/19 23:15	10

Client Sample ID: TB-W-20190510

Lab Sample ID: 460-181703-4

Date Collected: 05/10/19 20:15

Matrix: Water

Date Received: 05/11/19 10:20

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			05/22/19 22:54	1

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

Job ID: 460-181703-1

Client Sample ID: TB-W-20190510
Date Collected: 05/10/19 20:15
Date Received: 05/11/19 10:20

Lab Sample ID: 460-181703-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/22/19 22:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/22/19 22:54	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:54	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/22/19 22:54	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/22/19 22:54	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/22/19 22:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/22/19 22:54	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:54	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:54	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/22/19 22:54	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:54	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/22/19 22:54	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/22/19 22:54	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/22/19 22:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/22/19 22:54	1
Acetone	5.0	U	5.0	5.0	ug/L			05/22/19 22:54	1
Benzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:54	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/22/19 22:54	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/22/19 22:54	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/22/19 22:54	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/22/19 22:54	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/22/19 22:54	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/22/19 22:54	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/22/19 22:54	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/22/19 22:54	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/22/19 22:54	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/22/19 22:54	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/22/19 22:54	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/22/19 22:54	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/22/19 22:54	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/22/19 22:54	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/22/19 22:54	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/22/19 22:54	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:54	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/22/19 22:54	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/22/19 22:54	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/22/19 22:54	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/22/19 22:54	1
Styrene	1.0	U	1.0	0.42	ug/L			05/22/19 22:54	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/22/19 22:54	1
Toluene	1.0	U	1.0	0.38	ug/L			05/22/19 22:54	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/22/19 22:54	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/22/19 22:54	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/22/19 22:54	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/22/19 22:54	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/22/19 22:54	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/22/19 22:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/22/19 22:54*	*1*

Client Sample ID: TB-W-20190510

Lab Sample ID: 460-181703-4

Date Collected: 05/10/19 20:15

Matrix: Water

Date Received: 05/11/19 10:20

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

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene	*96*		*77 - 124*		*05/22/19 22:54*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*05/22/19 22:54*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*05/22/19 22:54*	*1*

Client Sample ID: MW-27-D2-W-20190510

Lab Sample ID: 460-181703-5

Date Collected: 05/10/19 20:30

Matrix: Water

Date Received: 05/11/19 10:20

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			05/23/19 01:52	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 01:52	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 01:52	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 01:52	1
1,1-Dichloroethane	**0.28**	**J**	1.0	0.26	ug/L			05/23/19 01:52	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 01:52	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 01:52	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 01:52	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 01:52	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 01:52	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 01:52	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 01:52	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 01:52	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 01:52	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 01:52	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 01:52	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 01:52	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 01:52	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 01:52	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 01:52	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 01:52	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 01:52	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 01:52	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 01:52	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 01:52	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 01:52	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 01:52	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 01:52	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 01:52	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 01:52	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 01:52	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 01:52	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 01:52	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 01:52	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 01:52	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 01:52	1
Methyl tert-butyl ether	**7.9**		1.0	0.47	ug/L			05/23/19 01:52	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 01:52	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 01:52	1

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

Job ID: 460-181703-1

Client Sample ID: MW-27-D2-W-20190510
Date Collected: 05/10/19 20:30
Date Received: 05/11/19 10:20

Lab Sample ID: 460-181703-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 01:52	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 01:52	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 01:52	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 01:52	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 01:52	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 01:52	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 01:52	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 01:52	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 01:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*05/23/19 01:52*	*1*
4-Bromofluorobenzene	*99*		*77 - 124*		*05/23/19 01:52*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*05/23/19 01:52*	*1*
Toluene-d8 (Surr)	*100*		*80 - 120*		*05/23/19 01:52*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**66000**		5000	1800	ug/L			05/14/19 15:00	1
Ethane	170	U	170	33	ug/L			05/23/19 15:20	22
Ethene	150	U	150	33	ug/L			05/23/19 15:20	22
Methane	**310**		88	22	ug/L			05/23/19 15:20	22

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4100**		240	28	mg/L			05/21/19 22:35	2000
Sulfate	**250**		12	6.9	mg/L			05/21/19 14:19	20

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**902**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:35	1
Manganese	**197**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:35	1
Sodium	**505000**		15000	1380	ug/L		05/22/19 08:50	05/22/19 23:19	3

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	0.10	U	0.10	0.0030	mg/L			05/11/19 19:06	1
Nitrate as N	**0.029**	**J**	0.10	0.010	mg/L			05/11/19 19:06	1
Total Organic Carbon	**15.2**		1.0	0.35	mg/L			05/21/19 14:07	1
Ferrous Iron	**0.76**	**HF**	0.10	0.055	mg/L			05/14/19 17:22	1
Sulfide	**24.4**		5.0	2.9	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**599**		5.0	5.0	mg/L			05/17/19 16:59	1
Ferric Iron	**0.14**		0.10	0.10	mg/L			05/23/19 06:00	1

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

Job ID: 460-181703-1

Client Sample ID: AMW-7R-W-20190510
Date Collected: 05/10/19 21:00
Date Received: 05/11/19 10:20

Lab Sample ID: 460-181703-6
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			05/23/19 02:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 02:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 02:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 02:17	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 02:17	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 02:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 02:17	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 02:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 02:17	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 02:17	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 02:17	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 02:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 02:17	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 02:17	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 02:17	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 02:17	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 02:17	1
Benzene	**0.69**	**J**	1.0	0.43	ug/L			05/23/19 02:17	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 02:17	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 02:17	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 02:17	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 02:17	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 02:17	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 02:17	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 02:17	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 02:17	1
Chloromethane	1.0	U *	1.0	0.14	ug/L			05/23/19 02:17	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 02:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 02:17	1
Cyclohexane	**19**		1.0	0.32	ug/L			05/23/19 02:17	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 02:17	1
Dichlorodifluoromethane	1.0	U *	1.0	0.12	ug/L			05/23/19 02:17	1
Ethylbenzene	**0.39**	**J**	1.0	0.30	ug/L			05/23/19 02:17	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 02:17	1
Isopropylbenzene	**4.2**		1.0	0.34	ug/L			05/23/19 02:17	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 02:17	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/23/19 02:17	1
Methylcyclohexane	**31**		1.0	0.26	ug/L			05/23/19 02:17	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 02:17	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 02:17	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 02:17	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 02:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 02:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 02:17	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 02:17	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 02:17	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 02:17	1
Xylenes, Total	**1.3**	**J**	2.0	0.30	ug/L			05/23/19 02:17	1

Client Sample ID: AMW-7R-W-20190510

Lab Sample ID: 460-181703-6

Date Collected: 05/10/19 21:00

Matrix: Water

Date Received: 05/11/19 10:20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 02:17*	*1*
4-Bromofluorobenzene	*101*		*77 - 124*		*05/23/19 02:17*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*05/23/19 02:17*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*		*05/23/19 02:17*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**94000**		5000	1800	ug/L			05/14/19 15:08	1
Ethane	7.5	U H	7.5	1.5	ug/L			06/03/19 19:18	1
Ethene	7.0	U H	7.0	1.5	ug/L			06/03/19 19:18	1
Methane	**1200**	**H E**	4.0	1.0	ug/L			06/03/19 19:18	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	330	U H	330	66	ug/L			06/04/19 14:01	44
Ethene	310	U H	310	66	ug/L			06/04/19 14:01	44
Methane	**3100**	**H**	180	44	ug/L			06/04/19 14:01	44

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**120**	**F1**	4.8	0.56	mg/L			05/21/19 16:54	40
Sulfate	**82**	**F1**	24	14	mg/L			05/21/19 16:54	40

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**8080**		150	34.2	ug/L		05/22/19 08:50	05/22/19 17:39	1
Manganese	**2770**		15.0	0.99	ug/L		05/22/19 08:50	05/22/19 17:39	1
Sodium	**105000**		5000	460	ug/L		05/22/19 08:50	05/22/19 17:39	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrite as N	**0.023**	**J**	0.10	0.0030	mg/L			05/11/19 19:07	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 19:07	1
Total Organic Carbon	**19.8**		1.0	0.35	mg/L			05/21/19 14:32	1
Ferrous Iron	0.10	U HF	0.10	0.055	mg/L			05/14/19 17:22	1
Sulfide	1.0	U	1.0	0.58	mg/L			05/16/19 15:22	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	**558**		5.0	5.0	mg/L			05/17/19 17:10	1
Ferric Iron	**8.1**		0.10	0.10	mg/L			05/23/19 06:00	1

Surrogate Summary

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

Job ID: 460-181703-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(74-132)	(77-124)	(72-131)	(80-120)
460-181703-1	MW-27-D1R-W-20190510	104	101	102	99
460-181703-2	MW-29-D1-W-20190510	102	102	97	102
460-181703-3	BD-W-20190510	104	100	99	100
460-181703-4	TB-W-20190510	104	96	97	99
460-181703-5	MW-27-D2-W-20190510	106	99	101	100
460-181703-6	AMW-7R-W-20190510	104	101	97	105
LCS 460-612063/3	Lab Control Sample	98	106	99	102
LCS 460-612254/4	Lab Control Sample	103	101	102	99
LCSD 460-612063/4	Lab Control Sample Dup	107	109	99	104
LCSD 460-612254/5	Lab Control Sample Dup	101	100	99	99
MB 460-612063/7	Method Blank	102	96	97	99
MB 460-612254/9	Method Blank	104	103	101	101

Surrogate Legend

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

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

Job ID: 460-181703-1

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

Lab Sample ID: MB 460-612063/7
Matrix: Water
Analysis Batch: 612063

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			05/22/19 22:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/22/19 22:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/22/19 22:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/22/19 22:05	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/22/19 22:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/22/19 22:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/22/19 22:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/22/19 22:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/22/19 22:05	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/22/19 22:05	1
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/22/19 22:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/22/19 22:05	1
Acetone	5.0	U	5.0	5.0	ug/L			05/22/19 22:05	1
Benzene	1.0	U	1.0	0.43	ug/L			05/22/19 22:05	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/22/19 22:05	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/22/19 22:05	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/22/19 22:05	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/22/19 22:05	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/22/19 22:05	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/22/19 22:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/22/19 22:05	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/22/19 22:05	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/22/19 22:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/22/19 22:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/22/19 22:05	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/22/19 22:05	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/22/19 22:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/22/19 22:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/22/19 22:05	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/22/19 22:05	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/22/19 22:05	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/22/19 22:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/22/19 22:05	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/22/19 22:05	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/22/19 22:05	1
Styrene	1.0	U	1.0	0.42	ug/L			05/22/19 22:05	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/22/19 22:05	1
Toluene	1.0	U	1.0	0.38	ug/L			05/22/19 22:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/22/19 22:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/22/19 22:05	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/22/19 22:05	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/22/19 22:05	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/22/19 22:05	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/22/19 22:05	1

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

Lab Sample ID: MB 460-612063/7
Matrix: Water
Analysis Batch: 612063

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		74 - 132		05/22/19 22:05	1
4-Bromofluorobenzene	96		77 - 124		05/22/19 22:05	1
Dibromofluoromethane (Surr)	97		72 - 131		05/22/19 22:05	1
Toluene-d8 (Surr)	99		80 - 120		05/22/19 22:05	1

Lab Sample ID: LCS 460-612063/3
Matrix: Water
Analysis Batch: 612063

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	18.3		ug/L		92	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.6		ug/L		108	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.0		ug/L		90	59 - 150
1,1,2-Trichloroethane	20.0	20.9		ug/L		104	78 - 120
1,1-Dichloroethane	20.0	20.2		ug/L		101	77 - 123
1,1-Dichloroethene	20.0	17.0		ug/L		85	74 - 123
1,2,4-Trichlorobenzene	20.0	22.1		ug/L		111	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.3		ug/L		97	55 - 134
1,2-Dichlorobenzene	20.0	20.9		ug/L		105	80 - 120
1,2-Dichloroethane	20.0	19.5		ug/L		98	76 - 121
1,2-Dichloropropane	20.0	20.0		ug/L		100	77 - 123
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	19.3		ug/L		96	80 - 120
2-Butanone (MEK)	100	87.3		ug/L		87	64 - 120
2-Hexanone	100	99.3		ug/L		99	71 - 125
4-Methyl-2-pentanone (MIBK)	100	98.4		ug/L		98	78 - 124
Acetone	100	77.2		ug/L		77	39 - 150
Benzene	20.0	20.6		ug/L		103	77 - 121
Bromoform	20.0	21.8		ug/L		109	53 - 120
Bromomethane	20.0	10.1		ug/L		51	10 - 150
Carbon disulfide	20.0	18.0		ug/L		90	69 - 133
Carbon tetrachloride	20.0	18.2		ug/L		91	70 - 132
Chlorobenzene	20.0	18.9		ug/L		94	80 - 120
Chlorodibromomethane	20.0	20.0		ug/L		100	73 - 120
Chloroethane	20.0	15.4		ug/L		77	52 - 150
Chloroform	20.0	18.9		ug/L		95	80 - 120
Chloromethane	20.0	27.0	*	ug/L		135	56 - 131
cis-1,2-Dichloroethene	20.0	19.1		ug/L		96	80 - 120
cis-1,3-Dichloropropene	20.0	21.3		ug/L		107	77 - 120
Cyclohexane	20.0	20.6		ug/L		103	56 - 150
Dichlorobromomethane	20.0	19.2		ug/L		96	76 - 120
Dichlorodifluoromethane	20.0	26.7	*	ug/L		133	50 - 131
Ethylbenzene	20.0	19.5		ug/L		98	80 - 120
Ethylene Dibromide	20.0	21.1		ug/L		105	80 - 120
Isopropylbenzene	20.0	20.4		ug/L		102	80 - 123
Methyl acetate	40.0	35.6		ug/L		89	66 - 144
Methyl tert-butyl ether	20.0	18.4		ug/L		92	79 - 122
Methylcyclohexane	20.0	20.1		ug/L		100	61 - 145

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

Lab Sample ID: LCS 460-612063/3
Matrix: Water
Analysis Batch: 612063

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Methylene Chloride			20.0	17.2		ug/L		86	77 - 123		
Styrene			20.0	20.7		ug/L		104	80 - 120		
Tetrachloroethene			20.0	19.1		ug/L		96	78 - 122		
Toluene			20.0	19.6		ug/L		98	80 - 120		
trans-1,2-Dichloroethene			20.0	17.3		ug/L		86	79 - 120		
trans-1,3-Dichloropropene			20.0	18.3		ug/L		91	76 - 120		
Trichloroethene			20.0	18.0		ug/L		90	77 - 120		
Trichlorofluoromethane			20.0	20.4		ug/L		102	71 - 143		
Vinyl chloride			20.0	22.2		ug/L		111	62 - 138		
Xylenes, Total			40.0	39.6		ug/L		99	80 - 120		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*74 - 132*
4-Bromofluorobenzene	*106*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*102*		*80 - 120*

Lab Sample ID: LCSD 460-612063/4
Matrix: Water
Analysis Batch: 612063

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	17.8		ug/L		89	75 - 125	3	30
1,1,2,2-Tetrachloroethane			20.0	20.7		ug/L		104	74 - 120	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	17.0		ug/L		85	59 - 150	6	30
1,1,2-Trichloroethane			20.0	20.3		ug/L		102	78 - 120	3	30
1,1-Dichloroethane			20.0	19.2		ug/L		96	77 - 123	5	30
1,1-Dichloroethene			20.0	15.7		ug/L		78	74 - 123	8	30
1,2,4-Trichlorobenzene			20.0	22.0		ug/L		110	80 - 124	1	30
1,2-Dibromo-3-Chloropropane			20.0	20.4		ug/L		102	55 - 134	6	30
1,2-Dichlorobenzene			20.0	20.3		ug/L		101	80 - 120	3	30
1,2-Dichloroethane			20.0	19.0		ug/L		95	76 - 121	3	30
1,2-Dichloropropane			20.0	19.2		ug/L		96	77 - 123	4	30
1,3-Dichlorobenzene			20.0	19.3		ug/L		97	80 - 120	5	30
1,4-Dichlorobenzene			20.0	18.5		ug/L		92	80 - 120	4	30
2-Butanone (MEK)			100	83.9		ug/L		84	64 - 120	4	30
2-Hexanone			100	98.3		ug/L		98	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)			100	96.4		ug/L		96	78 - 124	2	30
Acetone			100	74.9		ug/L		75	39 - 150	3	30
Benzene			20.0	19.7		ug/L		98	77 - 121	5	30
Bromoform			20.0	21.8		ug/L		109	53 - 120	0	30
Bromomethane			20.0	9.43		ug/L		47	10 - 150	7	30
Carbon disulfide			20.0	16.6		ug/L		83	69 - 133	8	30
Carbon tetrachloride			20.0	17.2		ug/L		86	70 - 132	6	30
Chlorobenzene			20.0	18.0		ug/L		90	80 - 120	5	30
Chlorodibromomethane			20.0	19.2		ug/L		96	73 - 120	4	30
Chloroethane			20.0	14.6		ug/L		73	52 - 150	6	30
Chloroform			20.0	18.5		ug/L		92	80 - 120	2	30

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

Lab Sample ID: LCSD 460-612063/4
Matrix: Water
Analysis Batch: 612063

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
Chloromethane			20.0	25.1		ug/L		126	56 - 131	7	30
cis-1,2-Dichloroethene			20.0	17.9		ug/L		90	80 - 120	6	30
cis-1,3-Dichloropropene			20.0	20.6		ug/L		103	77 - 120	4	30
Cyclohexane			20.0	19.6		ug/L		98	56 - 150	5	30
Dichlorobromomethane			20.0	18.5		ug/L		93	76 - 120	4	30
Dichlorodifluoromethane			20.0	25.4		ug/L		127	50 - 131	5	30
Ethylbenzene			20.0	18.6		ug/L		93	80 - 120	5	30
Ethylene Dibromide			20.0	20.6		ug/L		103	80 - 120	2	30
Isopropylbenzene			20.0	19.5		ug/L		97	80 - 123	5	30
Methyl acetate			40.0	35.7		ug/L		89	66 - 144	0	30
Methyl tert-butyl ether			20.0	18.1		ug/L		90	79 - 122	2	30
Methylcyclohexane			20.0	19.1		ug/L		95	61 - 145	5	30
Methylene Chloride			20.0	16.6		ug/L		83	77 - 123	3	30
Styrene			20.0	20.0		ug/L		100	80 - 120	4	30
Tetrachloroethene			20.0	18.1		ug/L		91	78 - 122	5	30
Toluene			20.0	18.7		ug/L		94	80 - 120	4	30
trans-1,2-Dichloroethene			20.0	16.8		ug/L		84	79 - 120	3	30
trans-1,3-Dichloropropene			20.0	18.1		ug/L		90	76 - 120	1	30
Trichloroethene			20.0	17.2		ug/L		86	77 - 120	4	30
Trichlorofluoromethane			20.0	19.4		ug/L		97	71 - 143	5	30
Vinyl chloride			20.0	21.1		ug/L		106	62 - 138	5	30
Xylenes, Total			40.0	38.0		ug/L		95	80 - 120	4	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*109*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*104*		*80 - 120*

Lab Sample ID: MB 460-612254/9
Matrix: Water
Analysis Batch: 612254

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			05/23/19 13:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			05/23/19 13:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			05/23/19 13:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 13:31	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			05/23/19 13:31	1
1,1-Dichloroethene	1.0	U	1.0	0.12	ug/L			05/23/19 13:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			05/23/19 13:31	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			05/23/19 13:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			05/23/19 13:31	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			05/23/19 13:31	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			05/23/19 13:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			05/23/19 13:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.76	ug/L			05/23/19 13:31	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			05/23/19 13:31	1

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

Lab Sample ID: MB 460-612254/9
Matrix: Water
Analysis Batch: 612254

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	5.0	U	5.0	2.9	ug/L			05/23/19 13:31	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	2.7	ug/L			05/23/19 13:31	1
Acetone	5.0	U	5.0	5.0	ug/L			05/23/19 13:31	1
Benzene	1.0	U	1.0	0.43	ug/L			05/23/19 13:31	1
Bromoform	1.0	U	1.0	0.54	ug/L			05/23/19 13:31	1
Bromomethane	1.0	U	1.0	1.0	ug/L			05/23/19 13:31	1
Carbon disulfide	1.0	U	1.0	0.16	ug/L			05/23/19 13:31	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			05/23/19 13:31	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			05/23/19 13:31	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			05/23/19 13:31	1
Chloroethane	1.0	U	1.0	0.32	ug/L			05/23/19 13:31	1
Chloroform	1.0	U	1.0	0.33	ug/L			05/23/19 13:31	1
Chloromethane	1.0	U	1.0	0.14	ug/L			05/23/19 13:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			05/23/19 13:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.46	ug/L			05/23/19 13:31	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			05/23/19 13:31	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			05/23/19 13:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.12	ug/L			05/23/19 13:31	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			05/23/19 13:31	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			05/23/19 13:31	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			05/23/19 13:31	1
Methyl acetate	5.0	U	5.0	0.31	ug/L			05/23/19 13:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			05/23/19 13:31	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			05/23/19 13:31	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			05/23/19 13:31	1
Styrene	1.0	U	1.0	0.42	ug/L			05/23/19 13:31	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			05/23/19 13:31	1
Toluene	1.0	U	1.0	0.38	ug/L			05/23/19 13:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			05/23/19 13:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			05/23/19 13:31	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			05/23/19 13:31	1
Trichlorofluoromethane	1.0	U	1.0	0.14	ug/L			05/23/19 13:31	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			05/23/19 13:31	1
Xylenes, Total	2.0	U	2.0	0.30	ug/L			05/23/19 13:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*05/23/19 13:31*	*1*
4-Bromofluorobenzene	*103*		*77 - 124*		*05/23/19 13:31*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*05/23/19 13:31*	*1*
Toluene-d8 (Surr)	*101*		*80 - 120*		*05/23/19 13:31*	*1*

Lab Sample ID: LCS 460-612254/4
Matrix: Water
Analysis Batch: 612254

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	20.2		ug/L		101	75 - 125
1,1,2,2-Tetrachloroethane	20.0	18.7		ug/L		94	74 - 120

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

Lab Sample ID: LCS 460-612254/4
Matrix: Water
Analysis Batch: 612254

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.3		ug/L		102	59 - 150
1,1,2-Trichloroethane	20.0	18.9		ug/L		95	78 - 120
1,1-Dichloroethane	20.0	19.1		ug/L		96	77 - 123
1,1-Dichloroethene	20.0	18.3		ug/L		92	74 - 123
1,2,4-Trichlorobenzene	20.0	18.7		ug/L		93	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	16.9		ug/L		84	55 - 134
1,2-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,2-Dichloroethane	20.0	19.6		ug/L		98	76 - 121
1,2-Dichloropropane	20.0	18.7		ug/L		94	77 - 123
1,3-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,4-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 120
2-Butanone (MEK)	100	103		ug/L		103	64 - 120
2-Hexanone	100	107		ug/L		107	71 - 125
4-Methyl-2-pentanone (MIBK)	100	104		ug/L		104	78 - 124
Acetone	100	88.7		ug/L		89	39 - 150
Benzene	20.0	20.1		ug/L		101	77 - 121
Bromoform	20.0	16.3		ug/L		82	53 - 120
Bromomethane	20.0	26.6		ug/L		133	10 - 150
Carbon disulfide	20.0	17.9		ug/L		89	69 - 133
Carbon tetrachloride	20.0	18.2		ug/L		91	70 - 132
Chlorobenzene	20.0	19.6		ug/L		98	80 - 120
Chlorodibromomethane	20.0	17.5		ug/L		88	73 - 120
Chloroethane	20.0	19.5		ug/L		97	52 - 150
Chloroform	20.0	20.2		ug/L		101	80 - 120
Chloromethane	20.0	16.2		ug/L		81	56 - 131
cis-1,2-Dichloroethene	20.0	19.1		ug/L		95	80 - 120
cis-1,3-Dichloropropene	20.0	19.3		ug/L		97	77 - 120
Cyclohexane	20.0	19.0		ug/L		95	56 - 150
Dichlorobromomethane	20.0	19.6		ug/L		98	76 - 120
Dichlorodifluoromethane	20.0	18.9		ug/L		94	50 - 131
Ethylbenzene	20.0	19.6		ug/L		98	80 - 120
Ethylene Dibromide	20.0	19.1		ug/L		96	80 - 120
Isopropylbenzene	20.0	20.8		ug/L		104	80 - 123
Methyl acetate	40.0	34.0		ug/L		85	66 - 144
Methyl tert-butyl ether	20.0	18.6		ug/L		93	79 - 122
Methylcyclohexane	20.0	19.6		ug/L		98	61 - 145
Methylene Chloride	20.0	18.3		ug/L		91	77 - 123
Styrene	20.0	19.5		ug/L		97	80 - 120
Tetrachloroethene	20.0	19.8		ug/L		99	78 - 122
Toluene	20.0	19.9		ug/L		99	80 - 120
trans-1,2-Dichloroethene	20.0	18.4		ug/L		92	79 - 120
trans-1,3-Dichloropropene	20.0	19.1		ug/L		96	76 - 120
Trichloroethene	20.0	20.1		ug/L		100	77 - 120
Trichlorofluoromethane	20.0	19.8		ug/L		99	71 - 143
Vinyl chloride	20.0	16.8		ug/L		84	62 - 138
Xylenes, Total	40.0	38.4		ug/L		96	80 - 120

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

Lab Sample ID: LCS 460-612254/4
Matrix: Water
Analysis Batch: 612254

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*
4-Bromofluorobenzene	*101*		*77 - 124*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Lab Sample ID: LCSD 460-612254/5
Matrix: Water
Analysis Batch: 612254

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			20.0	20.1		ug/L		100	75 - 125	1	30
1,1,2,2-Tetrachloroethane			20.0	18.6		ug/L		93	74 - 120	1	30
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	20.0		ug/L		100	59 - 150	1	30
1,1,2-Trichloroethane			20.0	18.7		ug/L		93	78 - 120	1	30
1,1-Dichloroethane			20.0	18.6		ug/L		93	77 - 123	3	30
1,1-Dichloroethene			20.0	17.3		ug/L		86	74 - 123	6	30
1,2,4-Trichlorobenzene			20.0	18.7		ug/L		94	80 - 124	0	30
1,2-Dibromo-3-Chloropropane			20.0	17.1		ug/L		86	55 - 134	1	30
1,2-Dichlorobenzene			20.0	20.5		ug/L		102	80 - 120	1	30
1,2-Dichloroethane			20.0	19.7		ug/L		98	76 - 121	0	30
1,2-Dichloropropane			20.0	18.4		ug/L		92	77 - 123	2	30
1,3-Dichlorobenzene			20.0	20.5		ug/L		103	80 - 120	0	30
1,4-Dichlorobenzene			20.0	20.0		ug/L		100	80 - 120	0	30
2-Butanone (MEK)			100	100		ug/L		100	64 - 120	3	30
2-Hexanone			100	109		ug/L		109	71 - 125	2	30
4-Methyl-2-pentanone (MIBK)			100	107		ug/L		107	78 - 124	3	30
Acetone			100	84.3		ug/L		84	39 - 150	5	30
Benzene			20.0	19.7		ug/L		99	77 - 121	2	30
Bromoform			20.0	15.9		ug/L		80	53 - 120	2	30
Bromomethane			20.0	27.7		ug/L		138	10 - 150	4	30
Carbon disulfide			20.0	17.4		ug/L		87	69 - 133	3	30
Carbon tetrachloride			20.0	18.5		ug/L		92	70 - 132	2	30
Chlorobenzene			20.0	19.2		ug/L		96	80 - 120	2	30
Chlorodibromomethane			20.0	17.0		ug/L		85	73 - 120	3	30
Chloroethane			20.0	19.0		ug/L		95	52 - 150	2	30
Chloroform			20.0	19.6		ug/L		98	80 - 120	3	30
Chloromethane			20.0	15.8		ug/L		79	56 - 131	3	30
cis-1,2-Dichloroethene			20.0	19.0		ug/L		95	80 - 120	1	30
cis-1,3-Dichloropropene			20.0	18.6		ug/L		93	77 - 120	4	30
Cyclohexane			20.0	18.6		ug/L		93	56 - 150	2	30
Dichlorobromomethane			20.0	19.4		ug/L		97	76 - 120	1	30
Dichlorodifluoromethane			20.0	18.4		ug/L		92	50 - 131	2	30
Ethylbenzene			20.0	19.1		ug/L		96	80 - 120	3	30
Ethylene Dibromide			20.0	19.0		ug/L		95	80 - 120	1	30
Isopropylbenzene			20.0	20.6		ug/L		103	80 - 123	1	30
Methyl acetate			40.0	36.7		ug/L		92	66 - 144	8	30
Methyl tert-butyl ether			20.0	18.3		ug/L		92	79 - 122	2	30
Methylcyclohexane			20.0	19.1		ug/L		96	61 - 145	2	30

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

Lab Sample ID: LCSD 460-612254/5
Matrix: Water
Analysis Batch: 612254

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methylene Chloride	20.0	18.0		ug/L		90	77 - 123	2	30
Styrene	20.0	19.2		ug/L		96	80 - 120	2	30
Tetrachloroethene	20.0	19.5		ug/L		98	78 - 122	1	30
Toluene	20.0	20.1		ug/L		100	80 - 120	1	30
trans-1,2-Dichloroethene	20.0	17.5		ug/L		87	79 - 120	5	30
trans-1,3-Dichloropropene	20.0	19.1		ug/L		95	76 - 120	0	30
Trichloroethene	20.0	19.9		ug/L		99	77 - 120	1	30
Trichlorofluoromethane	20.0	19.2		ug/L		96	71 - 143	3	30
Vinyl chloride	20.0	16.4		ug/L		82	62 - 138	3	30
Xylenes, Total	40.0	38.7		ug/L		97	80 - 120	1	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*74 - 132*
4-Bromofluorobenzene	*100*		*77 - 124*
Dibromofluoromethane (Surr)	*99*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-143001/4
Matrix: Water
Analysis Batch: 143001

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			05/14/19 13:50	1

Lab Sample ID: LCS 200-143001/2
Matrix: Water
Analysis Batch: 143001

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon dioxide	40000	39700		ug/L		99	70 - 130

Lab Sample ID: LCSD 200-143001/3
Matrix: Water
Analysis Batch: 143001

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	41900		ug/L		105	70 - 130	5	30

Lab Sample ID: MB 480-474332/6
Matrix: Water
Analysis Batch: 474332

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			05/23/19 11:45	1
Ethene	7.0	U	7.0	1.5	ug/L			05/23/19 11:45	1
Methane	4.0	U	4.0	1.0	ug/L			05/23/19 11:45	1

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

Lab Sample ID: LCS 480-474332/7
Matrix: Water
Analysis Batch: 474332

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	13.1		ug/L		90	79 - 120
Ethene	13.5	12.2		ug/L		90	85 - 120
Methane	7.67	6.95		ug/L		91	85 - 120

Lab Sample ID: LCSD 480-474332/8
Matrix: Water
Analysis Batch: 474332

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	3	50
Ethene	13.5	12.8		ug/L		95	85 - 120	5	50
Methane	7.67	7.20		ug/L		94	85 - 120	3	50

Lab Sample ID: MB 480-475930/2
Matrix: Water
Analysis Batch: 475930

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			06/03/19 15:03	1
Ethene	7.0	U	7.0	1.5	ug/L			06/03/19 15:03	1
Methane	4.0	U	4.0	1.0	ug/L			06/03/19 15:03	1

Lab Sample ID: LCS 480-475930/3
Matrix: Water
Analysis Batch: 475930

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	36.2	34.0		ug/L		94	79 - 120
Ethene	33.8	31.5		ug/L		93	85 - 120
Methane	19.2	18.0		ug/L		94	85 - 120

Lab Sample ID: LCSD 480-475930/4
Matrix: Water
Analysis Batch: 475930

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	36.2	33.7		ug/L		93	79 - 120	1	50
Ethene	33.8	30.3		ug/L		90	85 - 120	4	50
Methane	19.2	18.1		ug/L		94	85 - 120	0	50

Lab Sample ID: MB 480-476073/4
Matrix: Water
Analysis Batch: 476073

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			06/04/19 11:07	1
Ethene	7.0	U	7.0	1.5	ug/L			06/04/19 11:07	1
Methane	4.0	U	4.0	1.0	ug/L			06/04/19 11:07	1

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

Lab Sample ID: LCS 480-476073/5
Matrix: Water
Analysis Batch: 476073

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethane			36.2	34.2		ug/L		95	79 - 120		
Ethene			33.8	32.0		ug/L		95	85 - 120		
Methane			19.2	17.9		ug/L		93	85 - 120		

Lab Sample ID: LCSD 480-476073/6
Matrix: Water
Analysis Batch: 476073

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			36.2	33.4		ug/L		92	79 - 120	2	50
Ethene			33.8	30.9		ug/L		91	85 - 120	4	50
Methane			19.2	17.4		ug/L		91	85 - 120	3	50

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 460-611677/3
Matrix: Water
Analysis Batch: 611677

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.12	U	0.12	0.014	mg/L			05/21/19 08:30	1
Sulfate	0.60	U	0.60	0.35	mg/L			05/21/19 08:30	1

Lab Sample ID: LCS 460-611677/5
Matrix: Water
Analysis Batch: 611677

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride			1.50	1.50		mg/L		100	90 - 110		
Sulfate			7.50	7.80		mg/L		104	90 - 110		

Lab Sample ID: LCSD 460-611677/6
Matrix: Water
Analysis Batch: 611677

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
Chloride			1.50	1.54		mg/L		102	90 - 110	2	15
Sulfate			7.50	7.99		mg/L		106	90 - 110	2	15

Lab Sample ID: 460-181703-6 MS
Matrix: Water
Analysis Batch: 611677

Client Sample ID: AMW-7R-W-20190510
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	120	F1	30.0	161	F1	mg/L		139	90 - 110		
Sulfate	82	F1	150	262	F1	mg/L		120	90 - 110		

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: 460-181703-6 MSD
Matrix: Water
Analysis Batch: 611677

Client Sample ID: AMW-7R-W-20190510
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	120	F1	30.0	160	F1	mg/L		137	90 - 110	0	15
Sulfate	82	F1	150	261	F1	mg/L		119	90 - 110	0	15

Lab Sample ID: 460-181703-6 DU
Matrix: Water
Analysis Batch: 611677

Client Sample ID: AMW-7R-W-20190510
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	120	F1	118		mg/L		1	15
Sulfate	82	F1	80.8		mg/L		1	15

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 460-611923/1-A
Matrix: Water
Analysis Batch: 611973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 611923

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		05/22/19 08:50	05/22/19 15:59	1
Manganese	15.0	U	15.0	0.99	ug/L		05/22/19 08:50	05/22/19 15:59	1
Sodium	5000	U	5000	460	ug/L		05/22/19 08:50	05/22/19 15:59	1

Lab Sample ID: LCS 460-611923/2-A
Matrix: Water
Analysis Batch: 611973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 611923

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	1007		ug/L		101	80 - 120
Manganese	500	507.5		ug/L		102	80 - 120
Sodium	20000	19890		ug/L		99	80 - 120

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 460-609343/11
Matrix: Water
Analysis Batch: 609343

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	0.10	U	0.10	0.0030	mg/L			05/11/19 18:47	1
Nitrate as N	0.10	U	0.10	0.010	mg/L			05/11/19 18:47	1

Lab Sample ID: LCSSRM 460-609343/13
Matrix: Water
Analysis Batch: 609343

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrite as N	0.803	0.721		mg/L		89.8	79.1 - 120.4

Method: 353.2 - Nitrogen, Nitrate-Nitrite (Continued)

Lab Sample ID: 460-181703-1 MS — **Client Sample ID: MW-27-D1R-W-20190510**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 609343

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Nitrite as N	0.010	J	0.500	0.477		mg/L		93	85 - 117		
Nitrate as N	0.019	J	0.500	0.533		mg/L		103	85 - 115		

Lab Sample ID: 460-181703-1 MSD — **Client Sample ID: MW-27-D1R-W-20190510**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 609343

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrite as N	0.010	J	0.500	0.467		mg/L		91	85 - 117	2	10
Nitrate as N	0.019	J	0.500	0.521		mg/L		100	85 - 115	2	17

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

Lab Sample ID: MB 460-611930/3 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 611930

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.35	mg/L			05/21/19 11:12	1

Lab Sample ID: LCSSRM 460-611930/4 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 611930

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Total Organic Carbon	36.0	35.86		mg/L		99.6	82.5 - 116.7		

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-611315/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 611315

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity	5.0	U	5.0	5.0	mg/L			05/17/19 13:38	1

Lab Sample ID: LCSSRM 460-611315/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 611315

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Alkalinity	168	160.4		mg/L		95.5	84.5 - 114.9		

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

Lab Sample ID: MB 460-610004/3
Matrix: Water
Analysis Batch: 610004

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	0.055	mg/L			05/14/19 17:14	1

Lab Sample ID: LCS 460-610004/4
Matrix: Water
Analysis Batch: 610004

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.500	0.475		mg/L		95	84 - 119

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 460-610568/1
Matrix: Water
Analysis Batch: 610568

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	0.58	mg/L			05/16/19 15:22	1

Lab Sample ID: LCSSRM 460-610568/3
Matrix: Water
Analysis Batch: 610568

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	4.52	3.37		mg/L		74.6	38.9 - 148.7

GC/MS VOA

Analysis Batch: 612063

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	8260C	
460-181703-3	BD-W-20190510	Total/NA	Water	8260C	
460-181703-4	TB-W-20190510	Total/NA	Water	8260C	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	8260C	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	8260C	
MB 460-612063/7	Method Blank	Total/NA	Water	8260C	
LCS 460-612063/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-612063/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 612254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	8260C	
MB 460-612254/9	Method Blank	Total/NA	Water	8260C	
LCS 460-612254/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-612254/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 143001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	RSK-175	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	RSK-175	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	RSK-175	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	RSK-175	
MB 200-143001/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-143001/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-143001/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 474332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	RSK-175	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	RSK-175	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	RSK-175	
MB 480-474332/6	Method Blank	Total/NA	Water	RSK-175	
LCS 480-474332/7	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-474332/8	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 475930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-2 - DL	MW-29-D1-W-20190510	Total/NA	Water	RSK-175	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	RSK-175	
MB 480-475930/2	Method Blank	Total/NA	Water	RSK-175	
LCS 480-475930/3	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-475930/4	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 476073

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-6 - RA	AMW-7R-W-20190510	Total/NA	Water	RSK-175	
MB 480-476073/4	Method Blank	Total/NA	Water	RSK-175	
LCS 480-476073/5	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 480-476073/6	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 611677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	300.0	
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	300.0	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	300.0	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	300.0	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	300.0	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	300.0	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	300.0	
MB 460-611677/3	Method Blank	Total/NA	Water	300.0	
LCS 460-611677/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-611677/6	Lab Control Sample Dup	Total/NA	Water	300.0	
460-181703-6 MS	AMW-7R-W-20190510	Total/NA	Water	300.0	
460-181703-6 MSD	AMW-7R-W-20190510	Total/NA	Water	300.0	
460-181703-6 DU	AMW-7R-W-20190510	Total/NA	Water	300.0	

Metals

Prep Batch: 611923

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	3010A	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	3010A	
460-181703-3	BD-W-20190510	Total/NA	Water	3010A	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	3010A	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	3010A	
MB 460-611923/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-611923/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 611973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	6010D	611923
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	6010D	611923
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	6010D	611923
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	6010D	611923
460-181703-3	BD-W-20190510	Total/NA	Water	6010D	611923
460-181703-3	BD-W-20190510	Total/NA	Water	6010D	611923
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	6010D	611923
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	6010D	611923
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	6010D	611923
MB 460-611923/1-A	Method Blank	Total/NA	Water	6010D	611923
LCS 460-611923/2-A	Lab Control Sample	Total/NA	Water	6010D	611923

General Chemistry

Analysis Batch: 609343

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	353.2	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	353.2	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	353.2	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	353.2	
MB 460-609343/11	Method Blank	Total/NA	Water	353.2	
LCSSRM 460-609343/13	Lab Control Sample	Total/NA	Water	353.2	
460-181703-1 MS	MW-27-D1R-W-20190510	Total/NA	Water	353.2	
460-181703-1 MSD	MW-27-D1R-W-20190510	Total/NA	Water	353.2	

General Chemistry

Analysis Batch: 610004

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	SM 3500 FE D	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	SM 3500 FE D	
MB 460-610004/3	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 460-610004/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 610116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	SM 3500	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	SM 3500	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	SM 3500	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	SM 3500	

Analysis Batch: 610568

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	SM 4500 S2 F	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	SM 4500 S2 F	
MB 460-610568/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCSSRM 460-610568/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 611315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	SM 2320B	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	SM 2320B	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	SM 2320B	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	SM 2320B	
MB 460-611315/2	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-611315/3	Lab Control Sample	Total/NA	Water	SM 2320B	

Analysis Batch: 611930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-181703-1	MW-27-D1R-W-20190510	Total/NA	Water	9060A	
460-181703-2	MW-29-D1-W-20190510	Total/NA	Water	9060A	
460-181703-5	MW-27-D2-W-20190510	Total/NA	Water	9060A	
460-181703-6	AMW-7R-W-20190510	Total/NA	Water	9060A	
MB 460-611930/3	Method Blank	Total/NA	Water	9060A	
LCSSRM 460-611930/4	Lab Control Sample	Total/NA	Water	9060A	

Lab Chronicle

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

Job ID: 460-181703-1

Client Sample ID: MW-27-D1R-W-20190510

Lab Sample ID: 460-181703-1

Date Collected: 05/10/19 20:40

Matrix: Water

Date Received: 05/11/19 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612254	05/23/19 15:10	MZS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 14:42	MLT	TAL BUR
Total/NA	Analysis	RSK-175		11	474332	05/23/19 14:45	CAM	TAL BUF
Total/NA	Analysis	300.0		20	611677	05/21/19 13:42	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	611677	05/21/19 21:36	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:15	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 22:59	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609343	05/11/19 18:57	EMS	TAL EDI
Total/NA	Analysis	9060A		1	611930	05/21/19 13:17	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 16:38	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:22	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: MW-29-D1-W-20190510

Lab Sample ID: 460-181703-2

Date Collected: 05/10/19 21:55

Matrix: Water

Date Received: 05/11/19 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 01:02	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 14:51	MLT	TAL BUR
Total/NA	Analysis	RSK-175		11	474332	05/23/19 15:02	CAM	TAL BUF
Total/NA	Analysis	RSK-175	DL	88	475930	06/03/19 19:00	DSC	TAL BUF
Total/NA	Analysis	300.0		20	611677	05/21/19 14:04	VMI	TAL EDI
Total/NA	Analysis	300.0		500	611677	05/21/19 21:50	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:19	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		3	611973	05/22/19 23:11	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609343	05/11/19 19:01	EMS	TAL EDI
Total/NA	Analysis	9060A		1	611930	05/21/19 13:42	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 16:49	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:22	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: BD-W-20190510

Lab Sample ID: 460-181703-3

Date Collected: 05/10/19 00:00

Matrix: Water

Date Received: 05/11/19 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 01:27	DAS	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:23	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		10	611973	05/22/19 23:15	CDC	TAL EDI

Client Sample ID: TB-W-20190510

Lab Sample ID: 460-181703-4

Date Collected: 05/10/19 20:15

Matrix: Water

Date Received: 05/11/19 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/22/19 22:54	DAS	TAL EDI

Client Sample ID: MW-27-D2-W-20190510

Lab Sample ID: 460-181703-5

Date Collected: 05/10/19 20:30

Matrix: Water

Date Received: 05/11/19 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 01:52	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 15:00	MLT	TAL BUR
Total/NA	Analysis	RSK-175		22	474332	05/23/19 15:20	CAM	TAL BUF
Total/NA	Analysis	300.0		20	611677	05/21/19 14:19	VMI	TAL EDI
Total/NA	Analysis	300.0		2000	611677	05/21/19 22:35	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:35	CDC	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		3	611973	05/22/19 23:19	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609343	05/11/19 19:06	EMS	TAL EDI
Total/NA	Analysis	9060A		1	611930	05/21/19 14:07	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 16:59	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:22	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Client Sample ID: AMW-7R-W-20190510

Lab Sample ID: 460-181703-6

Date Collected: 05/10/19 21:00

Matrix: Water

Date Received: 05/11/19 10:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	612063	05/23/19 02:17	DAS	TAL EDI
Total/NA	Analysis	RSK-175		1	143001	05/14/19 15:08	MLT	TAL BUR
Total/NA	Analysis	RSK-175		1	475930	06/03/19 19:18	DSC	TAL BUF
Total/NA	Analysis	RSK-175	RA	44	476073	06/04/19 14:01	DSC	TAL BUF

Lab Chronicle

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

Job ID: 460-181703-1

Client Sample ID: AMW-7R-W-20190510

Date Collected: 05/10/19 21:00
Date Received: 05/11/19 10:20

Lab Sample ID: 460-181703-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		40	611677	05/21/19 16:54	VMI	TAL EDI
Total/NA	Prep	3010A			611923	05/22/19 08:50	QZY	TAL EDI
Total/NA	Analysis	6010D		1	611973	05/22/19 17:39	CDC	TAL EDI
Total/NA	Analysis	353.2		1	609343	05/11/19 19:07	EMS	TAL EDI
Total/NA	Analysis	9060A		1	611930	05/21/19 14:32	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	611315	05/17/19 17:10	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	610116	05/23/19 06:00	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	610004	05/14/19 17:22	HTV	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	610568	05/16/19 15:22	YAH	TAL EDI

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600
TAL BUR = Eurofins TestAmerica, Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990
TAL EDI = Eurofins TestAmerica, Edison, 777 New Durham Road, Edison, NJ 08817, TEL (732)549-3900

Accreditation/Certification Summary

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

Job ID: 460-181703-1

Laboratory: Eurofins 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	04-01-20
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: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

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

Laboratory: Eurofins 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		Water	Carbon dioxide

Method Summary

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

Job ID: 460-181703-1

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
300.0	Anions, Ion Chromatography	MCAWW	TAL EDI
6010D	Metals (ICP)	SW846	TAL EDI
353.2	Nitrogen, Nitrate-Nitrite	MCAWW	TAL EDI
9060A	Organic Carbon, Total (TOC)	SW846	TAL EDI
SM 2320B	Alkalinity	SM	TAL EDI
SM 3500	Iron, Ferric	SM	TAL EDI
SM 3500 FE D	Iron, Ferrous and Ferric	SM	TAL EDI
SM 4500 S2 F	Sulfide, Total	SM	TAL EDI
3010A	Preparation, Total Metals	SW846	TAL EDI
5030C	Purge and Trap	SW846	TAL EDI

Protocol References:

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

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

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

Sample Summary

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

Job ID: 460-181703-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-181703-1	MW-27-D1R-W-20190510	Water	05/10/19 20:40	05/11/19 10:20	
460-181703-2	MW-29-D1-W-20190510	Water	05/10/19 21:55	05/11/19 10:20	
460-181703-3	BD-W-20190510	Water	05/10/19 00:00	05/11/19 10:20	
460-181703-4	TB-W-20190510	Water	05/10/19 20:15	05/11/19 10:20	
460-181703-5	MW-27-D2-W-20190510	Water	05/10/19 20:30	05/11/19 10:20	
460-181703-6	AMW-7R-W-20190510	Water	05/10/19 21:00	05/11/19 10:20	

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

Chain of Custody Recor

460-181703 Chain of Custody

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Client Information

Client Contact: Loretta Kwong	Sampler:	Lab PM: Schove, John	COC No: 480-129780-26696.2
Company: ARCADIS U.S. Inc	Phone:	E-Mail: john.schove@testamericainc.com	Page: Page 1 of 2
Address: 655 Third Avenue 12th Floor	Due Date Requested:		Job #: 180703
City: New York City	TAT Requested (days):		
State, Zip: NY, 10017-9118			
Phone: 646-760-0584(Tel)	PO #: ASRTM0RS.8040.00001		
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02		
Project Name: MNA Analysis	Project #: 48016199		
Site: New York	SSOW#:		

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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)	SM4500_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:
			Preservation Code:				N	N	D	A	A	A	CB	N	N	N		
AMW-15-D2-W-				Water														
AMW-15-D3-W-				Water														
MW-23-D1R-W-				Water														
AMW-15-D1-W-				Water														
MW-27-D1R-W- 20190510	5/10/19	2040	G	Water			X	X	X	X	X	X	X	X	X	X		1
MW-26-D1-W-				Water														
MW-29-D1-W- 20190510	5/10/19	2155	G	Water			X	X	X	X	X	X	X	X	X	X	12	Sampling time 2155 2
AMW-14-D1-W-				Water														
MW-24-D1R-W-				Water														
BD-W-20190510	5/10/19	—	G	Water					X		X						4	3
TB-W-20190510	5/10/19	2015	G	Water							X						1	4

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Felix Conde	Date/Time: 5/10/19 1020 am	Company	Received by: dSarah D	Date/Time: 5-10-19	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		

VOCs IR9 5.3°C

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6/6/2019

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

Chain of Custody Record

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Client Information	Sampler:	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-129780-26696.1
Client Contact: Loretta Kwong	Phone:	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S. Inc				Job #: 181703
Address: 655 Third Avenue 12th Floor	Due Date Requested:			
City: New York City	TAT Requested (days):			
State, Zip: NY, 10017-9118				
Phone: 646-760-0584(Tel)	PO #: ASRTM0RS.8040.00001			
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02			
Project Name: MNA Analysis	Project #: 48016199			
Site: New York	SSOW#:			

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	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)	SM4500_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:
			Preservation Code:				N	N	D	A	A	A	CB	N	N	N					
MW-27-D2-W- 20190510	5/10/19	2030	G	Water			X	X	X	X	X	X	X	X	X	X				18	J
MW-28-D2R-W-				Water																	
MW-24-D2-W-				Water																	
MW-24-VDR-W-				Water																	
AMW-15-VD-W-				Water																	
AMW-7R-W- 20190510	5/10/19	2100	G	Water			X	X	X	X	X	X	X	X	X	X				4	
AMW-14-VD-W-				Water																	
AMW-14-D2-W-				Water																	
MW-28-D1-W-				Water																	
MW-26-D2-W-				Water																	
MW-23-D2R-W-				Water																	

SHORT HOLD

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

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

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Felix Congo	Date/Time: 5/10/19 10:20am	Company ARCADIS	Received by: JDavah D
Relinquished by:	Date/Time:	Company	Received by:
Relinquished by:	Date/Time:	Company	Received by:

Date/Time:	Company
5/10/19 1070am	TA
Date/Time:	Company
Date/Time:	Company

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

NOCS ~~~ IR9 53°C

6/6/2019

TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 181703

Number of Coolers: 1 IR Gun #: 9

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	5.3 °C	°C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	°C	°C	Cooler #5:	°C	°C	Cooler #8:	°C	°C
Cooler #3:	°C	°C	Cooler #6:	°C	°C	Cooler #9:	°C	°C

TALS Sample Number	Ammonia (pH<2)	COD (pH<2)	Nitrate Nitrite (pH<2)	Metals* (pH<2)	Hardness (pH<2)	Pest (pH 5-9)	EPH or QAM (pH<2)	Phenols (pH<2)	Sulfide (pH>9)	TKN (pH<2)	TOC (pH<2)	Total Cyanide (pH>12)	Total Phos (pH<2)	Other	Other
1			<2	<2							<2				
2			<2	<2							<2				
3			1	<2											
5			<2	<2							<2				
6			<2	<2							<2				

If pH adjustments are required record the information below:

Sample No(s). adjusted: _____

Preservative Name/Conc.: _____ Volume of Preservative used (ml): _____

Lot # of Preservative(s): _____ Expiration Date: _____

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

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

Initials: _____ Date: 5/10/19

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

Chain of Custody Record

460-181703 Chain of Custody

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Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R		COC No: 460-54796.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	State of Origin: New York	Page: Page 1 of 1
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York		Job #: 460-181703-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 5/22/2019			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: MNA Analysis	Project #: 48016199			
Site: Chevron Oceanside - CVX# 6518040	SSOW#:			

Analysis Requested

Preservation Codes:

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

Other:

Sample Identification - Client ID (Lab ID)	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	RSK_175_CO2/ Dissolved Gases - CO2	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
MW-27-D1R-W-20190510 (460-181703-1)	5/10/19	20:40 Eastern		Water			X	3	
MW-29-D1-W-20190510 (460-181703-2)	5/10/19	21:55 Eastern		Water			X	3	
MW-27-D2-W-20190510 (460-181703-5)	5/10/19	20:30 Eastern		Water			X	3	
AMW-7R-W-20190510 (460-181703-6)	5/10/19	21:00 Eastern		Water			X	3	

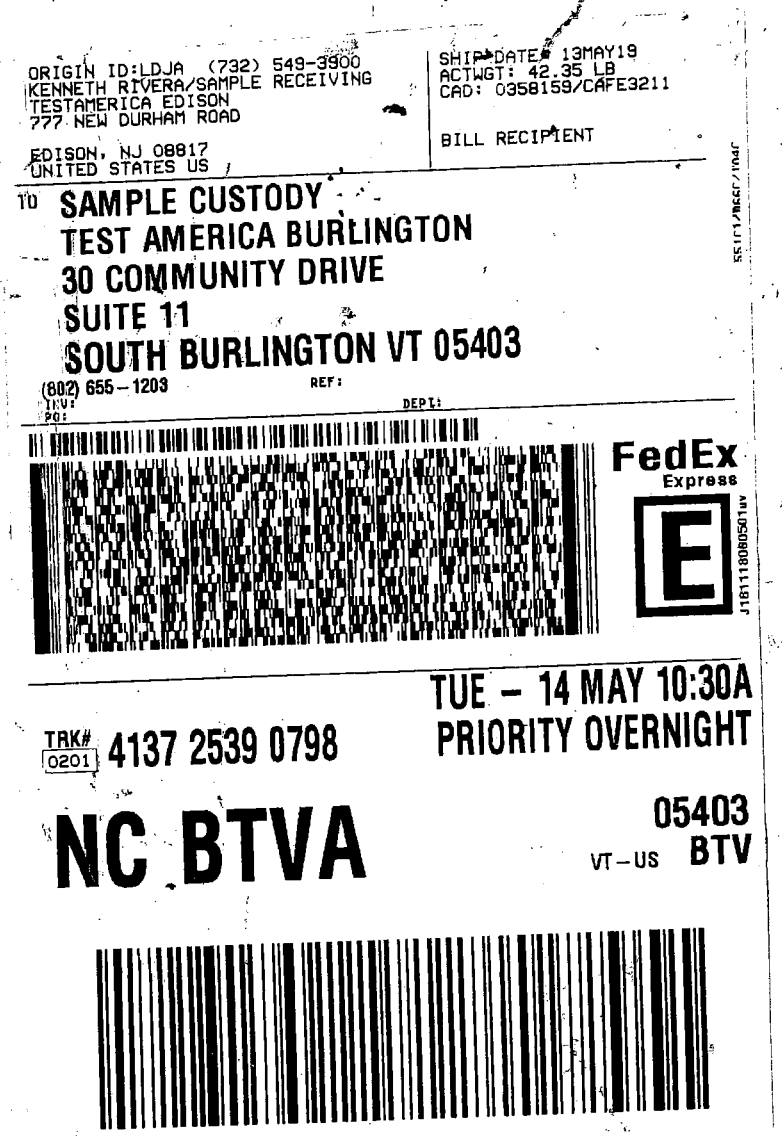
Note: Since laboratory accreditations are subject to change, TestAmerica Laboratories, Inc. places the ownership of method, analyte & accreditation compliance upon out subcontract laboratories. This sample shipment is forwarded under chain-of-custody. If the laboratory does not currently maintain accreditation in the State of Origin listed above for analysis/tests/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 complicance to TestAmerica Laboratories, Inc.

Possible Hazard Identification *Unconfirmed*	***Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)*** ☐ *Return To Client* ☐ *Disposal By Lab* ☐ *Archive For* _____ *Months*
Deliverable Requested: I, II, III, IV, Other (specify) Primary Deliverable Rank: 2	Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:	Time:	Method of Shipment:	
Relinquished by: Ken Thomas	Date/Time: 5/13/19 18:10	Company TAL	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

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

Ver: 01/16/2019



ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA/SAMPLE RECEIVING
TESTAMERICA EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 13MAY19
ACTWGT: 42.35 LB
CAD: 0358159/CAFE3211

BILL RECIPIENT

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

(802) 655-1203 REF:

INV: PO: DEPT:

FedEx Express

TUE - 14 MAY 10:30A
PRIORITY OVERNIGHT

TRK# 0201 4137 2539 0798

NC BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-181703-1

Login Number: 181703
List Number: 1
Creator: Cabaron, Christopher V

List Source: Eurofins TestAmerica, Edison

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
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.	False	Refer to job narrative for details
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	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-181703-1

Login Number: 181703
List Number: 3
Creator: Rudz, Gary S

List Source: Eurofins TestAmerica, Buffalo
List Creation: 05/21/19 03:28 PM

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
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	
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: 460-181703-1

Login Number: 181703
List Number: 2
Creator: McNabb, Robert W

List Source: Eurofins TestAmerica, Burlington
List Creation: 05/14/19 12:50 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.1ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	