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

ENVIRONMENT

Date:
February 21, 2020

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Dear Mr. Mustico:

On behalf of Chevron Environmental Management Company (CEMC), Arcadis of New York, Inc. (Arcadis) has prepared this Fourth 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 December 4 and 5, 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 December 4 and 5, 2019, 35 monitoring wells (AMW-3, AMW-7R, AMW-13-D1, AMW-13-D2, AMW-13-VD, AMW-14-D1, AMW-14-D2, AMW-14-VD, AMW-15-D1, AMW-15-D2, AMW-15-VD, AMW-15-D3, MW-18R 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 5.21 feet below top of inner casing (btic) in MW-29-D1 to 9.95 feet btic in MW-26-D1. Measured depth-to-groundwater in the D2 horizon ranged from 5.38 feet btic in MW-29-D2 to 10.52 feet btic in MW-23-D2R. Measured depth-to-groundwater in the VD horizon ranged from 5.27 feet btic in MW-29-VD to 9.99 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 horizon is to the southwest, for the D2 horizon is to the southwest and for the VD horizon to the northeast. The groundwater flow directions during the fourth 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 December 4 and 5, 2019, groundwater samples were collected from HydraSleeves that were deployed in 21 monitoring wells (AMW-7R, AMW-14-D1, AMW-14-D2, AMW-14-VD, AMW-15-D1, AMW-15-D2, AMW-15-VD, AMW-15-D3, MW-23-D1R, MW-23-D2R, MW-24-D1R, MW-24-D2, MW-24-VDR, MW-26-D1, MW-26-D2, MW-27-D1R, MW-27-D2, MW-28-D1, MW-28-D2R, MW-29-D1, and MW-18R). 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 Edison, New Jersey (New York Certification #11452), 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 NYSDEC Technical and Operational Guidance Series (TOGS) in the samples collected for the December 4 and 5, 2019 sampling event:

- Benzene exceeded the TOGS Water Guidance value of (1 microgram per Liter [µg/L]) at monitoring wells AMW-14-D1 (1.8 µg/L), AMW-15-D1 (6.6 µg/L), MW-18R (74 µg/L), MW-23-D1R (1.4 µg/L), MW-23-D2R (1.8 µg/L), MW-24-D1R (5.7 µg/L), MW-24-D2 (1.4 µg/L), MW-24-VDR (7.2 µg/L), MW-26-D1 (6.2 µg/L), MW-27-D1R (6.4 µg/L), and MW-28-D1 (11 µg/L).
- Total xylenes exceeded the TOGS Water Guidance value of 5 µg/L at monitoring wells AMW-15-D1 (5.8 µg/L), MW-18R (5.2 µg/L), and MW-24-D1R (11 µg/L).
- Methyl tert-butyl ether (MTBE) exceeded the TOGS Water Guidance value of 10 µg/L at monitoring wells AMW-14-D1 (94 µg/L), AMW-14-D2 (29 µg/L), AMW-15-D1 (120 µg/L), AMW-15-D2 (96 µg/L),

MW-18R (14 µg/L), MW-23-D1R (83 µg/L), MW-23-D2R (14 µg/L) MW-24-D1R (180 µg/L), MW-24-D2R (13 µg/L), MW-26-D1 (77 µg/L), MW-26-D2 (29 µg/L), MW-27-D1R (39 µg/L), MW-28-D1 (21 µg/L), and MW-29-D1 (12 µg/L).

- Vinyl chloride exceeds the TOGS Water Guidance value of 2 µg/L at monitoring wells AMW-14-D1 (22 µg/L), AMW-15-D1 (2.2 µg/L), MW-24-D1R (3.4 µg/L), MW-26-D1 (12 µg/L), and MW-27-1R (61 µg/L).
- Trans-1,2-dichloroethene exceeds the TOGS Water Guidance Value of 5 µg/L at monitoring well AMW-14-D1 (9.0 µg/L), AMW-15-D1 (7.1 µg/L) and MW-24-D1R (7 µg/L).

A blind duplicate sample was collected from monitoring well MW-24-D1R. Duplicate sample results were within acceptable ranges of the parent sample. The analytical results are summarized in **Table 2** and are illustrated on **Figure 6.** A copy of the laboratory analytical report is included in **Attachment 2**. Historical groundwater analytical results are presented in **Table 3.** Following groundwater sampling, HydraSleeves were deployed in 21 monitoring wells.

FUTURE SITE ACTIVITIES

. The next quarterly sampling event is scheduled for February 2020. Additionally, Arcadis will address the NYSDEC letter dated January 17, 2020. 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.

Arcadis of New York, Inc.

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Enclosures:

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Attachments

1 Groundwater Gauging and Sampling Logs
2 Laboratory Analytical Report

TABLES

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

Monitoring Well ID	Date	Well Diameter (in)	Well Depth (feet below TOC)	TOC Elevation (feet 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	12/04/19	2	12.35	9.05	ND	6.68	2.37
AMW-7R	12/04/19	2	13.85	9.95	ND	8.04	1.91
MW-18R	12/04/19	2	9.70	7.98	ND	4.70	3.28
D1 Horizon Monitoring Wells							
AMW-13-D1	12/04/19	2	32.93	9.87	ND	9.88	-0.01
AMW-14-D1	12/04/19	2	32.80	9.38	ND	9.40	-0.02
AMW-15-D1	12/04/19	2	35.80	9.74	ND	9.56	0.18
MW-23-D1R	12/04/19	2	25.15	9.84	ND	9.58	0.26
MW-24-D1R	12/04/19	2	31.55	9.82	ND	9.50	0.32
MW-26-D1	12/04/19	2	26.10	9.95	ND	10.01	-0.06
MW-27-D1R	12/04/19	2	32.05	9.01	ND	8.96	0.05
MW-28-D1	12/04/19	2	30.28	8.25	ND	8.33	-0.08
MW-29-D1	12/04/19	2	23.40	5.21	ND	5.18	0.03
MW-30-D1	12/04/19	2	29.85	8.74	ND	8.46	0.28
MW-31-D1R	12/04/19	2	29.96	8.39	ND	8.41	-0.02
MW-32D	12/04/19	2	36.53	8.85	ND	8.74	0.11
OW-2-D1	12/04/19	2	33.62	9.94	ND	9.68	0.26
D2 Horizon Monitoring Wells							
AMW-13-D2	12/04/19	2	42.79	9.76	ND	9.80	-0.04
AMW-14-D2	12/04/19	2	42.52	9.37	ND	9.38	-0.01
AMW-15-D2	12/04/19	2	41.28	9.71	ND	9.44	0.27
MW-23-D2R	12/04/19	2	45.50	10.52	ND	8.63	1.89
MW-24-D2	12/04/19	2	41.68	10.00	ND	9.71	0.29
MW-26-D2	12/04/19	2	45.20	9.40	ND	9.49	-0.09
MW-27-D2	12/04/19	2	46.40	9.09	ND	9.04	0.05
MW-28-D2R	12/04/19	2	46.40	8.40	ND	8.44	-0.04
MW-29-D2	12/04/19	2	37.62	5.38	ND	5.28	0.10
MW-30-D2	12/04/19	2	40.16	8.72	ND	8.62	0.10
MW-31-D2R	12/04/19	2	44.80	8.35	ND	8.32	0.03
D3 Horizon Monitoring Wells							
AMW-15-D3	12/04/19	2	48.00	9.81	ND	9.57	0.24
VD Horizon Monitoring Wells							
AMW-13-VD	12/04/19	2	70.35	9.77	ND	9.33	0.44
AMW-14-VD	12/04/19	2	74.40	9.25	ND	9.11	0.14
AMW-15-VD	12/04/19	2	71.00	9.82	ND	9.25	0.57
MW-24-VDR	12/04/19	2	71.63	9.72	ND	8.74	0.98
MW-26-VD	12/04/19	2	67.63	9.99	ND	9.44	0.55
MW-29-VD	12/04/19	2	59.73	5.27	ND	5.26	0.01
MW-30-VD	12/04/19	2	82.49	8.70	ND	7.98	0.72

Notes:
*Top of casing elevations were surveyed by Borbas Surveying & Mapping , LLC, September 18, 2017 and re-drilled wells on June 1, 2018.
in = Inches
MSL = Mean Sea Level
LNAPL = Light Non Aqueous Phase Liquid
TOC = Top of Casing
ND = Not Detected

Table 2
Summary of Analytical Groundwater Results - December 4 and 5, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside Township of Hempstead, NY

ARCADIS Design & Consultancy for natural and built assets

Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-D1 12/05/2019	AMW-14-D2 12/05/2019	AMW-14-VD 12/05/2019	AMW-15-D1 12/05/2019	AMW-15-D2 12/05/2019	AMW-15-D3 12/05/2019	AMW-15-VD 12/05/2019	AMW-7R 12/06/2019	MW-18R 12/05/2019	MW-23-D1R 12/05/2019	MW-23-D2R 12/05/2019
Volatile Organics													
1,1 Dichloroethene	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	1.0 U
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	1.0 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	1.0 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	1.0 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	1.0 U
1,1-Dichloroethane	5	ug/L	**0.36 J**	1.0 U	1.0 U	**0.87 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	5	ug/L	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	1.0 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	1.0 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	1.0 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	1.0 U
1,2-Dichloroethane	0.6	ug/L	1.0 U	1.0 U	**0.45 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
1,2-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	1.0 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	1.0 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	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	**33**	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	**3.7 J**	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	**2.9 J**	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	**130**	5.0 U	5.0 U
Benzene	1	ug/L	**1.8**	1.0 U	1.0 U	**6.6**	1.0 U	1.0 U	1.0 U	**0.89 J**	**74**	**1.4**	**1.8**
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	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	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	1.0 U
Carbon disulfide	60	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	**2**	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	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	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*	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	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	1.0 U
cis-1,2-Dichloroethene	5	ug/L	1.0 U	1.0 U	1.0 U	**0.63 J**	1.0 U	1.0 U	1.0 U	1.0 U	**0.28 J**	**0.72 J**	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	1.0 U
Cyclohexane	NE	ug/L	1.0 U	1.0 U	1.0 U	**0.77 J**	1.0 U	1.0 U	1.0 U	**11**	**7.2**	**0.41 J**	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	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	1.0 U
Ethylbenzene	5	ug/L	**1.5**	1.0 U	1.0 U	**2.8**	1.0 U	1.0 U	1.0 U	**0.49 J**	**1.6**	1.0 U	1.0 U
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	**1.9**	**4.8**	**0.44 J**	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	5.0 U	5.0 U
Methyl-t-butyl ether	10	ug/L	**94**	**29**	1.0 U	**120**	**96**	**7.7**	**1.1**	1.0 U	**14**	**83**	**14**
Methylcyclohexane	NE	ug/L	**0.74 J**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	**7.7**	**3.3**	1.0 U	1.0 U
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U	1.0 U	1.0 U	**0.41 J**	1.0 U	**0.32 J**	1.0 U	1.0 U	**0.62 J**	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	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	1.0 U
Toluene	5	ug/L	1.0 U	1.0 U	1.0 U	**0.43 J**	1.0 U	1.0 U	1.0 U	1.0 U	**4.8**	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	ug/L	**9.0**	1.0 U	1.0 U	**7.1**	1.0 U	1.0 U	1.0 U	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	1.0 U
Trichloroethene (Trichloroethylene)	5	ug/L	**0.44 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	1.0 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	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	**22**	**0.33 J**	1.0 U	**2.2**	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Xylene (total)	5	ug/L	**1.8 J**	2.0 U	2.0 U	**5.8**	2.0 U	2.0 U	2.0 U	**0.73 J**	**5.2**	2.0 U	2.0 U

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - December 4 and 5, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside Township of Hempstead, NY

Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	AMW-14-D1 12/05/2019	AMW-14-D2 12/05/2019	AMW-14-VD 12/05/2019	AMW-15-D1 12/05/2019	AMW-15-D2 12/05/2019	AMW-15-D3 12/05/2019	AMW-15-VD 12/05/2019	AMW-7R 12/06/2019	MW-18R 12/05/2019	MW-23-D1R 12/05/2019	MW-23-D2R 12/05/2019
GC Volatiles - RSK-175													
Carbon Dioxide	NE	mg/L	**160**	**170**	**130**	**39**	**120**	**100**	**22**	**47**	**3 J**	**660**	**69**
Ethane	NE	ug/L	**13**	**0.74 J**	4 U	**490**	**1.3 J**	4 U	4 U	**1.6 J**	**21**	**8.2**	**2.9 J**
Ethene	NE	ug/L	**210**	3 U	3 U	**550**	3 U	3 U	3 U	3 U	**0.81 J**	3 U	3 U
Methane	NE	ug/L	**3,800**	**2,200**	**33**	**6,200**	**800**	**1,400**	**51**	**6,200**	**16,000**	**2,100**	**1,500**
Inorganics													
Iron	300	ug/L	**6,940**	**6,830**	**18,800**	**3,550**	**739**	**349**	**5,150**	**4,790**	**3,100**	**2,020**	**26,100**
Manganese	300	ug/L	**59**	**135**	**432**	**243**	**62.7**	**97.4**	**220**	**1,420**	**30.8**	**852**	**2,120**
Sodium	20,000	ug/L	**1,100,000**	**2,380,000**	**8,960,000**	**1,200,000**	**1,870,000**	**1,550,000**	**6,360,000**	**93,300**	**323,000**	**389,000**	**1,410,000**
General Chemistry													
Alkalinity, Total as CaCO3	NE	ug/L	**582,000**	**727,000**	**493,000**	**424,000**	**636,000**	**594,000**	**478,000**	**462,000**	**225,000**	**309,000**	**349,000**
Chloride	250	mg/L	**2,100**	**4,200**	**17,000**	**2,000**	**4,000**	**5,300**	**17,000**	**80**	**400**	**1,300**	**2,400**
Ferric Iron	NE	mg/L	**6.9**	**6.5**	**18.7**	**3.2**	**0.46**	**0.35**	**5**	**4.7**	**2.8**	**1.8**	**26.1**
Ferrous Iron	NE	ug/L	100 U HF	**290 HF**	**130 HF**	**340 HF**	**280 HF**	100 U HF	**130 HF**	**100 HF**	**0.28 HF**	**260 HF**	100 U HF
Nitrate as Nitrogen	10	ug/L	100 U	100 U	100 U	100 U	100 U	100 U	100 U F1	**25 JB**	**30 JB**	**37 JB**	**69 JB**
Nitrite as Nitrogen	1	mg/L	0.10 U	0.10 U	**0.020 JB**	0.10 U	0.10 U	0.10 U	**0.019 JB**	**0.017 J**	**0.029 J**	**0.018 J**	**0.051 J**
Sulfide	NE	ug/L	**62,600**	**51,200**	**1,200**	**30,700**	**58,800**	**58,800**	1,000 U	**1,900**	**15,900**	**3,500**	**3,800**
Total Organic Carbon (TOC)	NE	ug/L	**21,100**	**18,300**	**9,300**	**40,800**	**15,800**	**12,300**	**7,700**	**88,400**	**123,000**	**22,300**	**18,900**
Sulfate (SO4)	NE	ug/L	**130,000**	**260,000**	**2,800,000**	**180,000**	**280,000**	**470,000**	**2,800,000**	**84,000**	**74,000**	**130,000**	**160,000**

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - December 4 and 5, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside Township of Hempstead, NY

Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-D1R 12/05/2019	MW-24-D2 12/05/2019	MW-24-VDR 12/05/2019	MW-26-D1 12/06/2019	MW-26-D2 12/06/2019	MW-27-D1R 12/05/2019	MW-27-D2 12/05/2019	MW-28-D1 12/05/2019	MW-28-D2R 12/06/2019	MW-29-D1 12/06/2019
Volatile Organics												
1,1 Dichloroethene	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	1.0 U
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	1.0 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	1.0 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	1.0 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	1.0 U
1,1-Dichloroethane	5	ug/L	**0.36 J [0.71 J]**	1.0 U	1.0 U	1.0 U	1.0 U	**0.36 J**	**0.38 J**	**0.4 J**	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	1.0 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	1.0 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	1.0 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	1.0 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	1.0 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	1.0 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	1.0 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	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	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	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	5.0 U
Acetone	50	ug/L	**9.4** [5.0 U]	**5.2**	**5.5**	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	**5.7 [11]**	**1.4**	**7.2**	**6.2**	1.0 U	**6.4**	1.0 U	**11.0**	1.0 U	1.0 U
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	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	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	1.0 U
Carbon disulfide	60	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	1.0 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	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	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*	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	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	1.0 U
cis-1,2-Dichloroethene	5	ug/L	1.0 U [1.0 U]	1.0 U	1.0 U	**0.75 J**	1.0 U	**0.95 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	1.0 U
Cyclohexane	NE	ug/L	1.0 U **[0.99 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	**0.47 J**
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	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	1.0 U
Ethylbenzene	5	ug/L	**2.4 [7.2]**	1.0 U	1.0 U	**1.2**	1.0 U	**0.48 J**	1.0 U	**1.1**	1.0 U	1.0 U
Isopropylbenzene	5	ug/L	1.0 U **[0.86 J]**	1.0 U	1.0 U	**0.56 J**	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	5.0 U	5.0 U
Methyl-t-butyl ether	10	ug/L	**180 [210]**	**13**	1.0 U	**77**	**29**	**39**	**4.9**	**21**	1.0 U	**12**
Methylcyclohexane	NE	ug/L	1.0 U **[0.56 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	1.0 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	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	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	1.0 U
Toluene	5	ug/L	**1.4 [2.3]**	1.0 U	1.0 U	**0.4 J**	1.0 U	**1.7**	1.0 U	**0.53 J**	1.0 U	1.0 U
trans-1,2-Dichloroethene	5	ug/L	**7.0 [16]**	1.0 U	1.0 U	**0.74 J**	1.0 U	**3.6**	1.0 U	**0.25 J**	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	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	**0.37 J**	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	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	**3.4 [5.4]**	1.0 U	1.0 U	**12**	1.0 U	**61**	1.0 U	**0.68 J**	1.0 U	1.0 U
Xylene (total)	5	ug/L	**11 [29]**	2.0 U	2.0 U	2.0 U	2.0 U	**1.6 J**	2.0 U	**1.9 J**	2.0 U	2.0 U

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - December 4 and 5, 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside Township of Hempstead, NY

Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-D1R 12/05/2019	MW-24-D2 12/05/2019	MW-24-VDR 12/05/2019	MW-26-D1 12/06/2019	MW-26-D2 12/06/2019	MW-27-D1R 12/05/2019	MW-27-D2 12/05/2019	MW-28-D1 12/05/2019	MW-28-D2R 12/06/2019	MW-29-D1 12/06/2019
GC Volatiles - RSK-175												
Carbon Dioxide	NE	mg/L	**30 [60]**	**26**	**3.8 J**	**64**	**140**	**170**	**150**	**75**	**160**	**28**
Ethane	NE	ug/L	**320 [880]**	**1.5 J**	4 U	**5.3**	**1.1 J**	**5.5**	4 U	**33**	4 U	**1 J**
Ethene	NE	ug/L	**88 [280]**	**0.57 J**	**1.7 J**	**21**	3 U	**40**	3 U	**15**	3 U	3 U
Methane	NE	ug/L	**2,400 [8,400]**	**270**	**28**	**2,400**	**1,300**	**2,600**	**1,600**	**2,500**	**310**	**1,100**
Inorganics												
Iron	300	ug/L	**1,540 [1,410]**	**2,090**	**36,500**	**364**	**54.4 J**	**1,310**	**1,190**	**169**	**463**	**673**
Manganese	300	ug/L	**40.6 [38.3]**	**58.7**	**694**	**18**	**59.8**	**51.9**	**174**	**10.4 J**	**989**	**32.1**
Sodium	20,000	ug/L	**1,340,000 [1,170,000]**	**366,000**	**9,030,000**	**1,260,000**	**2,340,000**	**1,920,000**	**1,620,000**	**874,000**	**4,430,000**	**75,900**
General Chemistry												
Alkalinity, Total as CaCO3	NE	ug/L	**301,000 [514,000]**	**190,000**	**446,000**	**405,000**	**628,000**	**762,000**	**526,000**	**337,000**	**349,000**	**63,500**
Chloride	250	mg/L	**1,900 [2,000]**	**550**	**17,000**	**2,000**	**4,000**	**3,800**	**3,600**	**1,800**	**7,400**	**130**
Ferric Iron	NE	mg/L	**1.3 [1.3]**	**1.9**	**36.5**	**0.25**	0.10 U	**1.3**	**1.1**	0.10 U	**0.3**	**0.67**
Ferrous Iron	NE	ug/L	**290 HF [110 HF]**	**180 HF**	100 U HF	**110 HF**	**270 HF**	100 U HF	**120 HF**	**100 HF**	**160 HF**	100 U HF
Nitrate as Nitrogen	10	ug/L	**150 B** [100 U]	100 U	100 U	**30 JB**	100 U	**45 JB**	100 U	**21 JB**	**25 JB**	**53 JB**
Nitrite as Nitrogen	1	mg/L	**0.17 B** [0.10 U]	0.10 U	0.10 U	**0.010 J**	0.10 U	0.10 U	**0.011 J**	**0.017 J**	**0.015 J**	**0.036 J**
Sulfide	NE	ug/L	**22,400 [92,800]**	**12,100**	1,000 U	**21,000**	**45,600**	**45,600**	**22,000**	**1,600**	**5,000**	1,000 U
Total Organic Carbon (TOC)	NE	ug/L	**50,900 [25,900]**	**59,700**	**4,800**	**31,600**	**13,700**	**16,600**	**12,000**	**17,300**	**6,600**	**29,500**
Sulfate (SO4)	NE	ug/L	**350,000 [130,000]**	**55,000**	**3,100,000**	**230,000**	**280,000**	**200,000**	**280,000**	**280,000**	**850,000**	**16,000**

See Notes on Page 5.

Table 2
Summary of Analytical Groundwater Results - December 4 and 5, 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 rang
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 2019
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											
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**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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	**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
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 2019
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-D1 460-191318-7 09/13/2019	AMW-14-D1 460-198100-9 12/05/2019	AMW-14-D2 06/23/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 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 U	< 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 U	< 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 U	< 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 U	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	**0.62 J**	< 1.0	**0.36 J**	< 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 U	< 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 U	< 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 U	< 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 U	< 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 U	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 40	< 20	< 80	< 50	<5.0	<5.0	5.0 U	< 10
2-Hexanone	50	ug/L	< 20	< 20	< 10	< 40	< 10	<5.0	<5.0	5.0 U	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 20	< 10	< 40	< 10	<5.0	<5.0	5.0 U	**3.2 J**
Acetone	50	ug/L	< 40	< 40	< 20	< 80	< 25	<5.0	<5.0	5.0 U	**3.3 J**
Benzene	1	ug/L	**2.0 J**	< 4.0	**4.7**	**5.3 J**	**0.98 J**	**7.0**	**0.64 J**	**1.8**	< 1.0
Bromodichloromethane	50	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	**0.99 J**
Bromoform	50	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	**4.6**
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Carbon disulfide	60	ug/L	< 4.0	< 4.0	**1.3 J**	< 8.0	< 1.0	**0.79 J**	< 1.0	1.0 U	**5.5**
Carbon Tetrachloride	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Chloroethane	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 1.0
Chloroform	7	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 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 U	< 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 U	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 4.0	**3**	< 8.0	< 5.0	**2.1**	< 1.0	1.0 U	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	**2.6**
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Ethylbenzene	5	ug/L	< 4.0	< 4.0	**7.2**	**7.5 J**	**1**	**5.9**	**0.43 J**	**1.5**	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	**1.0**	< 1.0	1.0 U	< 1.0
Methyl acetate	NE	ug/L	< 10	< 10	< 5.0	< 20	< 10	<5.0	<5.0	5.0 U	< 2.5
Methyl-t-butyl ether	10	ug/L	**170**	**170**	**170**	**160**	**120**	**250**	**50**	**94**	**3.1**
Methylcyclohexane	NE	ug/L	< 4.0	< 4.0	**2.4**	**1.7 J**	**0.40 J**	**3.0**	< 1.0	**0.74 J**	< 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 U	< 1.0
Styrene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Toluene	5	ug/L	< 4.0	< 4.0	**1.0 J**	< 8.0	**0.27 J**	**0.84 J**	< 1.0	1.0 U	**0.81 J**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-D1 460-191318-7 09/13/2019	AMW-14-D1 460-198100-9 12/05/2019	AMW-14-D2 06/23/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	**13**	**8.6**	< 1.0	**11**	**3.5**	**9.0**	< 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 U	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0	< 1.0	**0.44 J**	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 4.0	< 2.0	< 8.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**78**	**7.6**	**3.2**	< 8.0	**32**	**2.1**	**9**	**22**	< 1.0
Xylene (total)	5	ug/L	**3.2 J**	< 8.0	**20**	**16**	**1.6 J**	**16**	< 2.0	**1.8 J**	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**130**	**79**	**23**	**42**	**120 B**	**73**	**150**	**160**	NA
Ethane	NE	ug/L	< 150	< 330	< 170	< 660	< 330	**150 J**	<83	**13**	NA
Ethene	NE	ug/L	< 140	**200 J**	**190**	**260 J**	< 310	**440**	<77	**210**	NA
Methane	NE	ug/L	**1,100**	**550**	**580**	**2,000**	**1,600**	**1,900**	**3,600**	**3,800**	NA
Inorganics											
Iron	300	ug/L	**4,700**	**5,200**	**4,400**	**1,600**	**5,000**	**5,780**	**3,630**	**6,940**	**6,600**
Manganese	300	ug/L	**48**	**49 B**	**48 B**	**14 B**	**55 B**	**94.9**	**70.2**	**59**	**510 B**
Sodium	20,000	ug/L	**1,690,000 ^**	**1,730,000**	**1,590,000**	**975,000**	**1,560,000**	**1,740,000**	**1,680,000**	**1,100,000**	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	**740 B**
Alkalinity, Total as CaCO3	NE	ug/L	**716,000 B**	**563,000 B**	**563,000**	**623,000 B**	**673,000**	**805,000**	**779,000**	**582,000**	**740,000 B**
Chloride	250	mg/L	**3,060**	**3,130**	**1,860**	**2,970**	**3,620**	**3,700**	**3,000**	**2,100**	NA
Ferric Iron	NE	mg/L	**4.5**	**5.2**	**4.4**	**1.5**	**4.7**	**5.8**	**3.1**	**6.9**	NA
Ferrous Iron	NE	ug/L	**170 HF**	< 100	< 100	**120 HF**	**260 HF**	< 100 HF	570 HF	100 U HF	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	< 50	**80 J**	**14 J B**	100 U	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	<0.10	<0.10	0.10 U	NA
Sulfate (SO4)	NE	ug/L	**140,000**	**251,000**	**124,000 B**	**172,000**	**198,000 B**	**98,000**	**240,000**	**130,000**	**263,000**
Sulfide	NE	ug/L	**38,000**	**56,400**	**50,400**	**50,800**	**48,400**	**52,700**	**64,600**	**62,600**	**22,500**
Total Organic Carbon (TOC)	NE	ug/L	**13,100 B**	**10,600 B**	**23,600 B**	NA	NA	**45,400 B**	**22,100**	**21,100**	NA

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 07/26/2016	AMW-14-D2 07/27/2016	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-D2 460-191318-8 09/13/2019	AMW-14-D2 460-198100-10 12/05/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 10	< 1.0	< 1.0	1.0 U
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 10	< 20	< 50	<5.0	<5.0	5.0 U
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	<5.0	<5.0	5.0 U
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 10	< 10	<5.0	<5.0	5.0 U
Acetone	50	ug/L	**3.1 J**	**9.6 J**	< 10	< 10	< 20	< 25	<5.0	<5.0	5.0 U
Benzene	1	ug/L	**0.88 J**	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Bromoform	50	ug/L	**1.3**	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Carbon disulfide	60	ug/L	**12**	**8.4**	**2.7**	**0.94 J**	< 2.0	< 1.0	**0.32 J**	< 1.0	1.0 U
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U*
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0*	< 1.0	1.0 U
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	**0.35 J**	< 1.0	1.0 U
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U
Dibromochloromethane	50	ug/L	**0.79 J**	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0*	< 1.0	1.0 U
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 2.5	< 5.0	< 10	<5.0	<5.0	5.0 U
Methyl-t-butyl ether	10	ug/L	**24**	**0.58 J**	**14**	**48**	**62**	**44**	**33**	**37**	**29**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	**0.27 J**	< 1.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 5.0	< 1.0	**0.59 J**	1.0 U
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Tetrachloroethene	5	ug/L	< 1.0	**0.38 J**	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Toluene	5	ug/L	**0.64 J**	**7.7**	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 07/26/2016	AMW-14-D2 07/27/2016	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-D2 460-191318-8 09/13/2019	AMW-14-D2 460-198100-10 12/05/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**0.90 J**	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	**0.85 J**	**0.52 J**	1.0 U
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U
Vinyl chloride (Chloroethene)	2	ug/L	**3.6**	< 1.0	< 1.0	< 1.0	< 2.0	< 1.0	**0.32 J**	**0.65 J**	**0.33 J**
Xylene (total)	5	ug/L	< 2.0	< 2.0	< 2.0	< 2.0	< 4.0	< 3.0	<2.0	<2.0	2.0 U
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	**18**	**100**	**120**	**150 B**	**150**	**160**	**170**
Ethane	NE	ug/L	NA	NA	< 83	< 170	< 330	< 330	< 330	<83	**0.74 J**
Ethene	NE	ug/L	NA	NA	< 77	< 150	< 310	< 310	< 310	<77	3 U
Methane	NE	ug/L	NA	NA	**210**	**1,200**	**970**	**2,200**	**1,900**	**2,600**	**2,200**
Inorganics											
Iron	300	ug/L	NA	NA	**34 J**	**17,300**	**2,500**	**2,700**	**548**	**1,870**	**6,830**
Manganese	300	ug/L	NA	NA	**16 B**	**760 B**	**78 B**	**100 B**	**80.1**	**86.3**	**135**
Sodium	20,000	ug/L	NA	NA	**13,500**	**3,260,000**	**2,210,000**	**2,230,000**	**2,080,000**	**2,070,000**	**2,380,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	NA	**NA**	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	NA	**439,000 B**	**830,000**	**785,000 B**	**485,000 B**	**822,000**	**823,000**	**727,000**
Chloride	250	mg/L	NA	NA	**4,930**	**4,070**	**4,380**	**4,510**	**4,200**	**3,400**	**4,200**
Ferric Iron	NE	mg/L	NA	NA	< 0.10	**17.3**	**2.5**	**2.7**	<0.10	**1.3**	**6.5**
Ferrous Iron	NE	ug/L	NA	NA	< 100	< 100	< 100	< 100	**1,100 HF**	**550 HF**	**290 HF**
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	< 50	< 50	< 50	< 50	**49 J**	<100	100 U
Nitrogen, Nitrite	1	mg/L	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	<0.10	**0.0092 J B**	0.10 U
Sulfate (SO4)	NE	ug/L	NA	NA	**507,000**	**210,000 B**	**315,000**	**327,000 B**	**84,000**	**120,000**	**260,000**
Sulfide	NE	ug/L	NA	NA	**4,200**	**27,200**	**56,000**	**58,800**	**71,600**	**60,800**	**51,200**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	**7,800 B**	**11,600 B**	NA	NA	**18,500 B**	**19,200**	**18,300**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 06/23/2016	AMW-14-VD 07/27/2016	AMW-14-VD 07/05/2017	AMW-14-VD 08/27/2017	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-14-VD 460-191318-9 09/13/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 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	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	<1.0	<1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	**0.43 J**
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	**3.9 J**	< 10	< 10	< 10	< 10	< 10	< 50	<5.0	<5.0
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	<5.0	<5.0
4-Methyl-2-pentanone	NE	ug/L	**2.1 J**	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 10	<5.0	<5.0
Acetone	50	ug/L	**22**	**8.9 J**	**3.7 J**	< 10	< 10	< 10	< 25	<5.0	<5.0
Benzene	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Bromodichloromethane	50	ug/L	**0.87 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Bromoform	50	ug/L	**3**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Carbon disulfide	60	ug/L	**0.63 J**	**9.9**	**0.25 J**	< 1.0	**1.6**	< 1.0	< 1.0	<1.0	<1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Chloroform	7	ug/L	< 1.0	**0.37 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0*	<1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Cyclohexane	NE	ug/L	**0.32 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	<1.0	<1.0
Dibromochloromethane	50	ug/L	**2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0*	<1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 10	<5.0	<5.0
Methyl-t-butyl ether	10	ug/L	**0.91 J**	**0.59 J**	**0.51 J**	**0.42 J**	**0.65 J**	**0.49 J**	< 1.0	<1.0	**0.54 J**
Methylcyclohexane	NE	ug/L	**0.36 J**	< 1.0	< 1.0	< 1.0	**0.58 J**	< 1.0	< 5.0	<1.0	<1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	<1.0	**0.36 J**
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Tetrachloroethene	5	ug/L	**0.59 J**	**0.41 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Toluene	5	ug/L	**10**	**8.2**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 06/23/2016	AMW-14-VD 07/27/2016	AMW-14-VD 07/05/2017	AMW-14-VD 08/27/2017	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-14-VD 460-191318-9 09/13/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	<1.0	<1.0
Xylene (total)	5	ug/L	**0.79 J**	< 2.0	< 2.0	< 2.0	**3.2**	< 2.0	< 3.0	<2.0	<2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	**120**	**100**	**82**	**120**	**110 B**	**130**	**140**
Ethane	NE	ug/L	NA	NA	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	<7.5 H	<7.5
Ethene	NE	ug/L	NA	NA	< 7.0	< 7.0	< 7.0	< 7.0	< 7.0	<7.0 H	<7.0
Methane	NE	ug/L	NA	NA	**20**	**18**	**48**	**27**	**24**	**12 H**	**20**
Inorganics											
Iron	300	ug/L	**37,800**	NA	**11,300**	**17,000**	**16,400**	**18,400**	**18,500**	**14,700**	**15,200**
Manganese	300	ug/L	**720 B**	NA	**300**	**420 B**	**390 B**	**410 B**	**390 B**	**387**	**376**
Sodium	20,000	ug/L	NA	NA	**4,800,000 ^**	**9,160,000**	**8,680,000**	**8,660,000**	**9,100,000**	**7,150,000 B**	**6,810,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**427**	NA	NA	NA	NA	NA	NA		NA
Alkalinity, Total as CaCO3	NE	ug/L	**427,000**	NA	**440,000 B**	**415,000 B**	**454,000**	**472,000 B**	**409,000 B**	**493,000**	**493,000**
Chloride	250	mg/L	NA	NA	**15,200**	**15,400**	**16,200**	**19,400**	**16,300**	**110,000**	**14,000**
Ferric Iron	NE	mg/L	NA	NA	**11.3**	**12.3**	**14.8**	**18.4**	**18.5**	**14.4**	**13.8**
Ferrous Iron	NE	ug/L	NA	NA	< 100	**4,700 HF**	**1,600 HF**	< 100	< 100	**300 HF**	**1,400 HF**
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	< 50	< 50	< 50	< 50	< 50	**94 J**	**35 J B**
Nitrogen, Nitrite	1	mg/L	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.076 J**	**0.027 J B**
Sulfate (SO4)	NE	ug/L	**1,780,000**	NA	**1,830,000**	**2,000,000**	**1,890,000**	**1,870,000**	**1,920,000 B**	**2,000,000**	**1,700,000**
Sulfide	NE	ug/L	< 100	NA	**800 J**	< 1,000	**800 J**	**5,200 F1**	< 1,000	<1,000	**830 J**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	**3,400 B**	**4,000 B**	**4,500 B**	NA	NA	**18,300 B**	**8,500**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID:	NYSDEC		AMW-14-VD	AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D1
Lab Sample ID:			460-198100-8								
Date Sampled:	TOGS 1.1.1	Units	12/05/2019	06/23/2016	07/27/2016	10/26/2016	10/26/2016	07/05/2017	08/27/2017	10/11/2017	10/17/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,1,1-Trichloroethane	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,1,2-Trichloroethane	1	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,1-Dichloroethane	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	**1.5 J**
1,2,4-Trichlorobenzene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 50
1,2-Dibromoethane	0.0006	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,2-Dichloroethane	0.6	ug/L	**0.45 J**	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,2-Dichloropropane	1	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,3-Dichlorobenzene	3	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
1,4-Dichlorobenzene	3	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	5.0 U	< 10	< 50	< 100	< 40	< 40	< 40	< 20	< 250
2-Hexanone	50	ug/L	5.0 U	< 5.0	< 25	< 50	< 20	< 20	< 20	< 10	< 50
4-Methyl-2-pentanone	NE	ug/L	5.0 U	**2.1 J**	< 25	< 50	< 20	< 20	< 20	< 10	< 50
Acetone	50	ug/L	5.0 U	**4.2 J**	< 50	< 100	< 40	< 40	< 40	< 20	< 130
Benzene	1	ug/L	1.0 U	**0.48 J**	**3.9 J**	**11**	**5.1**	< 4.0	**12**	**11**	**12**
Bromodichloromethane	50	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Bromoform	50	ug/L	1.0 U	**2.2**	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Carbon disulfide	60	ug/L	1.0 U	**0.46 J**	< 5.0	< 10	**1.7 J**	< 4.0	**2.7 J**	**2**	**1.7 J**
Carbon Tetrachloride	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Chlorobenzene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Chloroethane	5	ug/L	1.0 U*	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Chloroform	7	ug/L	1.0 U	**0.51 J**	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
cis-1,2-Dichloroethene	5	ug/L	1.0 U	**20**	**220**	**81**	**38**	< 4.0	**5.1**	**1.6 J**	< 5.0
cis-1,3-Dichloropropene	0.4	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Cyclohexane	NE	ug/L	1.0 U	< 1.0	< 5.0	< 10	**2.0 J**	< 4.0	< 4.0	< 2.0	**2.8 J**
Dibromochloromethane	50	ug/L	1.0 U	**1.1**	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Ethylbenzene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	**4.1**	**4.3**	**5**
Isopropylbenzene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Methyl acetate	NE	ug/L	5.0 U	< 2.5	< 13	< 25	< 10	< 10	< 10	< 5.0	< 50
Methyl-t-butyl ether	10	ug/L	1.0 U	**29**	**51**	**110**	**180**	**170**	**200**	**300 E**	**170**
Methylcyclohexane	NE	ug/L	1.0 U	< 1.0	< 5.0	**3.3 J**	**0.87 J**	< 4.0	< 4.0	< 2.0	**1.2 J**
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U	**9.9**	**140**	**8.9 J**	**4.1**	< 4.0	**2.2 J**	< 2.0	< 25
Styrene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Tetrachloroethene	5	ug/L	1.0 U	**0.43 J**	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Toluene	5	ug/L	1.0 U	**3**	**7.5**	**18**	**6.6**	< 4.0	**17**	**5.9**	**1.5 J**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 460-198100-8 12/05/2019	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	AMW-15-D1 08/27/2017	AMW-15-D1 10/11/2017	AMW-15-D1 10/17/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	**28**	**13**	**21**
trans-1,3-Dichloropropene	0.4	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Trichloroethene (Trichloroethylene)	5	ug/L	1.0 U	**5.5**	**73**	**48**	**18**	< 4.0	< 4.0	< 2.0	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	1.0 U	< 1.0	< 5.0	< 10	< 4.0	< 4.0	< 4.0	< 2.0	< 5.0
Vinyl chloride (Chloroethene)	2	ug/L	1.0 U	**70**	**410**	**600 F1**	**240**	**10**	**76**	**24**	< 5.0
Xylene (total)	5	ug/L	2.0 U	< 2.0	**6.5 J**	**15 J**	**5.5 J**	< 8.0	**17**	**12**	**19**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**130**	NA	NA	NA	NA	**110**	**27**	**34**	**40**
Ethane	NE	ug/L	4 U	NA	NA	NA	NA	< 150	**92 J**	< 330	< 660
Ethene	NE	ug/L	3 U	NA	NA	NA	NA	< 140	**830**	**470**	< 620
Methane	NE	ug/L	**33**	NA	NA	NA	NA	**400**	**4,000**	**2,400**	**5,100**
Inorganics											
Iron	300	ug/L	**18,800**	**2,200**	NA	**1,900 B**	**95 B**	**2,100**	**12,400**	**6,900**	**3,900**
Manganese	300	ug/L	**432**	**500 B**	NA	**70 B**	**110 B**	**84**	**170 B**	**100 B**	**320**
Sodium	20,000	ug/L	**8,960,000**	NA	NA	NA	NA	**1,750,000 ^**	**1,520,000**	**1,710,000 ^**	**989,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	**602**	NA	**130**	**528**	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**493,000**	**602,000**	NA	**130,000**	**528,000**	**597,000**	**471,000 B**	**641,000**	**442,000**
Chloride	250	mg/L	**17,000**	NA	NA	NA	NA	**73.2**	**2,480**	**2,760**	**1,910**
Ferric Iron	NE	mg/L	**18.7**	NA	NA	NA	NA	**2.1**	**12.4**	**6.9**	**3.8**
Ferrous Iron	NE	ug/L	**130 HF**	NA	NA	NA	NA	< 100	< 500	< 200	**120 HF**
Nitrogen, Nitrate as N	10,000	ug/L	100 U	NA	NA	NA	NA	< 50	< 50	< 50	**79**
Nitrogen, Nitrite	1	mg/L	**0.020 JB**	NA	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**2,800,000**	**166,000**	NA	**63,100**	**164,000**	**1,640,000**	**156,000**	**189,000 B**	**188,000**
Sulfide	NE	ug/L	**1,200**	**20,500**	NA	**8,000**	**36,000**	**42,000**	**53,200**	**41,600**	**56,000**
Total Organic Carbon (TOC)	NE	ug/L	**9,300**	NA	NA	NA	NA	**9400 B**	**53,400 B**	**36,200 B**	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID:	NYSDEC		AMW-15-D1	AMW-15-D1	AMW-15-D1	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2	AMW-15-D2
Lab Sample ID:			460-181653-12	460-191306-7	460-198100-7						
Date Sampled:	TOGS 1.1.1	Units	05/09/2019	09/13/2019	12/05/2019	06/23/2016	06/23/2016	07/27/2016	10/26/2016	10/26/2016	07/05/2017
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,1-Dichloroethane	5	ug/L	**0.89 J**	**0.75 J**	**0.87 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	<5.0	<5.0	5.0 U	< 10	**1.3 J**	< 10	< 10	< 10	< 40
2-Hexanone	50	ug/L	<5.0	<5.0	5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 20
4-Methyl-2-pentanone	NE	ug/L	<5.0	<5.0	5.0 U	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 20
Acetone	50	ug/L	<5.0	<5.0	5.0 U	**9.3 J**	**11**	**3.8 J**	**13**	**5.1 J**	< 40
Benzene	1	ug/L	**6.3**	**6.2**	**6.6**	< 1.0	< 1.0	< 1.0	< 1.0	**0.47 J**	< 4.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Bromoform	50	ug/L	< 1.0	< 1.0 *	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Carbon disulfide	60	ug/L	**1.3**	< 1.0	1.0 U	**1.8**	**1.6**	**0.42 J**	**0.75 J**	**0.42 J**	< 4.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chloroethane	5	ug/L	< 1.0	< 1.0	1.0 U*	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chloroform	7	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	**0.36 J**	**0.63 J**	**3.3**	**3**	**1.7**	**0.86 J**	**1.6**	< 4.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Cyclohexane	NE	ug/L	**0.79 J**	**0.66 J**	**0.77 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Ethylbenzene	5	ug/L	**2.6**	**2.3**	**2.8**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Methyl acetate	NE	ug/L	<5.0	<5.0	5.0 U	< 2.5	< 2.5	< 2.5	< 2.5	< 2.5	< 10
Methyl-t-butyl ether	10	ug/L	**120**	**100**	**120**	**68**	**66**	**43**	**42**	**110 E**	**120**
Methylcyclohexane	NE	ug/L	**0.50 J**	**0.51 J**	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	**0.41 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Styrene	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Toluene	5	ug/L	< 1.0	< 1.0	**0.43 J**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 460-181653-12 05/09/2019	AMW-15-D1 460-191306-7 09/13/2019	AMW-15-D1 460-198100-7 12/05/2019	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	AMW-15-D2 07/05/2017
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**7.4**	**6.7**	**7.1**	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 4.0
Vinyl chloride (Chloroethene)	2	ug/L	**1.1**	**2**	**2.2**	**1.8**	**1.7**	**3.5**	**4.7**	**30**	< 4.0
Xylene (total)	5	ug/L	**6.3**	**5.1**	**5.8**	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0	< 8.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**52**	**47**	**39**	NA	NA	NA	NA	NA	**98**
Ethane	NE	ug/L	<830	**290 J**	**490**	NA	NA	NA	NA	NA	< 150
Ethene	NE	ug/L	<770	**150 J**	**550**	NA	NA	NA	NA	NA	< 140
Methane	NE	ug/L	**3,200**	**4,000**	**6,200**	NA	NA	NA	NA	NA	**430**
Inorganics											
Iron	300	ug/L	**3,340**	**3,740**	**3,550**	**110**	**120**	NA	**50 B**	< 50	**700**
Manganese	300	ug/L	**335**	**311**	**243**	**5.8 B**	**6.3 B**	NA	**85 B**	**98 B**	**110**
Sodium	20,000	ug/L	**1,170,000**	**1,160,000**	**1,200,000**	NA	NA	NA	NA	NA	**2,090,000 ^**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L		NA	NA	**181 B**	**185**	NA	**99.9**	**600**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**422,000**	**254,000**	**424,000**	**181,000 B**	**185,000**	NA	**99,900**	**600,000**	**687,000**
Chloride	250	mg/L	**2,500**	**1,700**	**2,000**	NA	NA	NA	NA	NA	**3,700**
Ferric Iron	NE	mg/L	**3.3**	**1.5**	**3.2**	NA	NA	NA	NA	NA	**0.53**
Ferrous Iron	NE	ug/L	<100 HF	**2,200 HF**	**340 HF**	NA	NA	NA	NA	NA	**170 HF**
Nitrogen, Nitrate as N	10,000	ug/L	**430 J**	< 100	100 U	NA	NA	NA	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	**0.38 J**	**0.029 J**	0.10 U	NA	NA	NA	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	**200,000**	**380,000**	**180,000**	**166,000**	**165,000**	NA	**243,000**	**216,000**	**269,000**
Sulfide	NE	ug/L	**41,400**	**31,100**	**30,700**	**1,800**	**1,900 F1**	NA	**12,800**	**36,000**	**34,000**
Total Organic Carbon (TOC)	NE	ug/L	**36,800 B**	**38,500**	**40,800**	NA	NA	NA	NA	NA	**10,300 B**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 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-D2 460-191306-5 09/13/2019	AMW-15-D2 460-198100-4 12/05/2019	AMW-15-D3 06/23/2016	AMW-15-D3 06/23/2016	AMW-15-D3 07/27/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 4.0	< 10	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 40	< 50	< 5.0	< 5.0	5.0 U	< 10	< 10	< 10
2-Hexanone	50	ug/L	< 20	< 20	< 10	< 5.0	< 5.0	5.0 U	< 5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 20	< 10	< 5.0	< 5.0	5.0 U	< 5.0	< 5.0	< 5.0
Acetone	50	ug/L	< 40	< 40	< 25	< 5.0	< 5.0	5.0 U	**6.9 J**	**7.3 J**	**3.6 J**
Benzene	1	ug/L	**9.8**	**2.7 J**	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0 *	1.0 U	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 4.0	< 4.0	**0.34 J**	< 1.0	< 1.0	1.0 U	**4.4**	**4.6**	**1.4**
Carbon Tetrachloride	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	**0.26 J**	< 1.0	**0.34 J**	1.0 U	< 1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	**5.1**	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 10	< 10	< 5.0	< 5.0	5.0 U	< 2.5	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**350**	**160**	**120**	**61**	**100**	**96**	**2.4**	**2.6**	**23**
Methylcyclohexane	NE	ug/L	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 4.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Styrene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	**7.8**	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 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-D2 460-191306-5 09/13/2019	AMW-15-D2 460-198100-4 12/05/2019	AMW-15-D3 06/23/2016	AMW-15-D3 06/23/2016	AMW-15-D3 07/27/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**5.5**	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**300**	**25**	< 1.0	< 1.0	**0.39 J**	1.0 U	< 1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	**12**	< 8.0	< 3.0	<2.0	<2.0	2.0 U	< 2.0	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**94**	**68**	**110**	**130**	**140**	**120**	NA	NA	NA
Ethane	NE	ug/L	< 170	< 170	< 330	<170	<170	**1.3 J**	NA	NA	NA
Ethene	NE	ug/L	**37 J**	< 150	< 310	<150	<150	3 U	NA	NA	NA
Methane	NE	ug/L	**880**	**280**	**560**	**520**	**680**	**800**	NA	NA	NA
Inorganics											
Iron	300	ug/L	**3,500**	**4,500**	**750**	**328**	**493**	**739**	**98**	**120**	NA
Manganese	300	ug/L	**140 B**	**130 B**	**55**	**72**	**54.6**	**62.7**	**250 B**	**240 B**	NA
Sodium	20,000	ug/L	**2,200,000**	**2,150,000 ^**	**2,130,000**	**2,030,000**	**2,030,000**	**1,870,000**	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	**NA**	NA	NA	**617 B**	**12.2 B**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**673,000 B**	**811,000**	**461,000**	**672,000**	**649,000**	**636,000**	**617,000 B**	**12,200 B**	NA
Chloride	250	mg/L	**3,650**	**3,710 F1**	**3,790**	**4,200**	**3,800**	**4,000**	NA	NA	NA
Ferric Iron	NE	mg/L	**3.5**	**4.5**	**0.75**	**0.24**	**0.35**	**0.46**	NA	NA	NA
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	**85 J HF**	**140 HF**	**280 HF**	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	**47 J**	< 100	100 U	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	**0.0070 J**	<0.10	0.10 U	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**237,000**	**254,000 B**	**262,000 B**	**220,000**	**330,000**	**280,000**	**1,790,000**	**784,000**	NA
Sulfide	NE	ug/L	**58,000**	**45,200**	**48,000**	**50,800**	**55,100**	**58,800**	NA	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	**10,900 B**	**9,800 B**	NA	**14,200 B**	**14,800**	**15,800**	NA	NA	NA

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-15-D3 08/27/2017	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-D3 460-191306-4 09/13/2019	AMW-15-D3 460-198100-6 12/05/2019	AMW-15-VD 06/23/2016	AMW-15-VD 07/27/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 2.0	< 2.0	< 10	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 20	< 20	< 50	<5.0	<5.0	5.0 U	< 10	< 10
2-Hexanone	50	ug/L	< 20	< 10	< 10	< 10	<5.0	<5.0	5.0 U	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 20	< 10	< 10	< 10	<5.0	<5.0	5.0 U	< 5.0	< 5.0
Acetone	50	ug/L	**36 J**	< 20	**16 J**	< 25	<5.0	<5.0	5.0 U	**3.2 J**	**8.3 J**
Benzene	1	ug/L	**3.7 J**	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Bromoform	50	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0 *	1.0 U	< 1.0	**2.4**
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**1.8 J**	< 2.0	**0.70 J**	**0.42 J**	**0.29 J**	< 1.0	1.0 U	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Chloroethane	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 1.0	< 1.0
Chloroform	7	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	**0.74 J**
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	**19**	< 2.0	**3.1**	**0.44 J**	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	**1**
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Ethylbenzene	5	ug/L	**3.4 J**	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 10	< 5.0	< 5.0	< 10	<5.0	<5.0	5.0 U	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**64**	< 2.0	**22**	**10**	**16**	**14**	**7.7**	**1.1**	< 1.0
Methylcyclohexane	NE	ug/L	< 4.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	**2.4 J**	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	**0.32 J**	< 1.0	< 1.0
Styrene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Toluene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**0.52 J**	**15**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 08/27/2017	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-D3 460-191306-4 09/13/2019	AMW-15-D3 460-198100-6 12/05/2019	AMW-15-VD 06/23/2016	AMW-15-VD 07/27/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	**140**	< 2.0	**20**	**3.5**	**0.39 J**	**0.54 J**	1.0 U	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**16**	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Xylene (total)	5	ug/L	**17**	< 4.0	< 4.0	< 3.0	<2.0	<2.0	2.0 U	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**5.1**	< 5	**7.6**	**100**	**140**	**130**	**100**	NA	NA
Ethane	NE	ug/L	< 330	< 170	< 330	< 170	<330	< 170	4 U	NA	NA
Ethene	NE	ug/L	< 310	< 150	< 310	< 150	<310	< 150	3 U	NA	NA
Methane	NE	ug/L	**2,400**	**610**	**1,500**	**2,800**	**1,600**	**1,400**	**1,400**	NA	NA
Inorganics											
Iron	300	ug/L	**2,300**	**450**	**3,100**	**260**	**301**	**612**	**349**	**4,200**	NA
Manganese	300	ug/L	**450 B**	**99 B**	**1,100 B**	**200**	**222**	**231**	**97.4**	**200 B**	NA
Sodium	20,000	ug/L	**2,980,000 ^**	**2,500,000 ^**	**3,870,000**	**2,610,000**	**2,730,000**	**2,720,000**	**1,550,000**	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA		NA	NA	**303**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**408,000 B**	**508,000**	**518,000 B**	**108,000**	**616,000**	**646,000**	**594,000**	**303,000**	NA
Chloride	250	mg/L	**4,230**	**7,530**	**4,670**	**7,380**	**8,800**	**4,400**	**5,300**	NA	NA
Ferric Iron	NE	mg/L	**2.3**	**0.45**	**3.1**	**0.26**	**0.30**	**0.40**	**0.35**	NA	NA
Ferrous Iron	NE	ug/L	< 500	< 100	< 100	< 100	<100 U HF	**210 HF**	100 U HF	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	**42 J**	< 100	100 U	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.056 J**	<0.10	0.10 U	NA	NA
Sulfate (SO4)	NE	ug/L	**495,000**	**897,000 B**	**482,000**	**916,000**	**980,000**	**300,000**	**470,000**	**1,810,000**	NA
Sulfide	NE	ug/L	**16,400**	**39,200**	**22,800**	**35,600**	**41,400**	**55,100**	**58,800**	< 100	NA
Total Organic Carbon (TOC)	NE	ug/L	**34,300 B**	**7,200 B**	NA	NA	**14,400 B**	**11,000**	**12,300**	NA	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 08/27/2017	AMW-15-VD 10/11/2017	AMW-15-VD 07/13/2018	AMW-15-VD 10/17/2018	AMW-15-VD 460-181653-4 05/10/2019	AMW-15-VD 460-191306-6 09/13/2019	AMW-15-VD 460-198100-5 12/05/2019	AMW-3 01/13/2016	AMW-3 06/21/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	**4.8 J**	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10	< 10	< 50	< 5.0	< 5.0	5.0 U	< 50	**3.4 J**
2-Hexanone	50	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	5.0 U	< 25	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0	5.0 U	< 25	< 5.0
Acetone	50	ug/L	< 10	**5.0 J**	< 10	< 25	< 5.0	< 5.0	5.0 U	< 50	**21**
Benzene	1	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	**280**	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0 *	1.0 U	< 5.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	**0.51 J**
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 5.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 5.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	1.0 U	**57**	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 5.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	**29**	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	**65**	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5	< 2.5	< 10	< 5.0	< 5.0	5.0 U	< 13	< 2.5
Methyl-t-butyl ether	10	ug/L	**1.2**	**0.94 J**	**0.44 J**	**1.3**	**1.0**	**1.1**	**1.1**	< 5.0	**0.40 J**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	1.0 U	**27**	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	1.0 U	**15**	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	**6.9**	< 1.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 08/27/2017	AMW-15-VD 10/11/2017	AMW-15-VD 07/13/2018	AMW-15-VD 10/17/2018	AMW-15-VD 460-181653-4 05/10/2019	AMW-15-VD 460-191306-6 09/13/2019	AMW-15-VD 460-198100-5 12/05/2019	AMW-3 01/13/2016	AMW-3 06/21/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	**3**	< 2.0	< 3.0	<2.0	<2.0	2.0 U	**20**	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**31**	**40**	**41**	**37**	**17**	**49**	**22**	NA	NA
Ethane	NE	ug/L	< 7.5	< 7.5	< 7.5	< 7.5	<7.5 H	<7.5	4 U	NA	NA
Ethene	NE	ug/L	< 7.0	< 7.0	< 7.0	< 7.0	<7.0 H	<7.0	3 U	NA	NA
Methane	NE	ug/L	**24**	**8**	**37**	**27**	**25 H**	**22**	**51**	NA	NA
Inorganics											
Iron	300	ug/L	**11,800**	**11,700**	**10,600**	**10,700**	**3,600**	**7,650**	**5,150**	NA	**16,200**
Manganese	300	ug/L	**350 B**	**340 B**	**320 B**	**310**	**287**	**192**	**220**	NA	**1,400 B**
Sodium	20,000	ug/L	**8,910,000**	**9,180,000 ^**	**8,290,000**	**8,770,000**	**8,560,000**	**5,240,000**	**6,360,000**	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	**NA**	NA	NA	NA	**351**
Alkalinity, Total as CaCO3	NE	ug/L	**135,000 B**	**329,000**	**357,000 B**	**271,000**	**432,000**	**429,000**	**478,000**	NA	**351,000**
Chloride	250	mg/L	**16,100**	**16,000**	**19,200**	**13,200**	**18,000**	**16,000**	**17,000**	NA	NA
Ferric Iron	NE	mg/L	**11.5**	**11.7**	**10.6**	**10.7**	**3.6**	**7.2**	**5**	NA	NA
Ferrous Iron	NE	ug/L	**280 HF**	< 100	< 100	< 100	< 100*	**500 HF**	**130 HF**	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 50	< 100	< 100	100 U F1	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	< 0.050	**0.035 J**	**0.011 J**	**0.019 JB**	NA	NA
Sulfate (SO4)	NE	ug/L	**2,140,000**	**2070,000 B**	**1,890,000**	**1,530,000 B**	**2,000,000**	**1,800,000**	**2,800,000**	NA	**970,000**
Sulfide	NE	ug/L	< 1,000	< 1,000	**800 J**	< 1,000	<1000	<1,000	1,000 U	NA	**5,300**
Total Organic Carbon (TOC)	NE	ug/L	**3,500 B**	**3,400 B**	NA	NA	**6,800 B**	**6,900**	**7,700**	NA	NA

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID:	NYSDEC		AMW-7	AMW-7	AMW-7	AMW-7	AMW-7R	AMW-7R	AMW-7R	ASB-2	ASB-3
Lab Sample ID:							460-181703-6	460-191318-13	460-198228-10		
Date Sampled:	TOGS 1.1.1	Units	01/12/2016	06/21/2016	07/11/2018	10/17/2018	05/10/2019	09/14/2019	12/06/2019	06/06/2016	06/08/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 10	< 20	< 50	<5.0	<5.0	5.0 U	< 10	< 10
2-Hexanone	50	ug/L	< 25	< 5.0	< 10	< 10	<5.0	<5.0	5.0 U	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 25	< 5.0	< 10	< 10	<5.0	<5.0	5.0 U	**6**	< 5.0
Acetone	50	ug/L	**30 J**	**6.2 J**	< 20	**8.1 J**	<5.0	<5.0	5.0 U	**20**	**5.5 J**
Benzene	1	ug/L	**5.7**	**1.1**	**0.82 J**	**0.78 J**	**0.69 J**	**0.39 J**	**0.89 J**	**1.8**	< 1.0
Bromodichloromethane	50	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**1.9**	**0.75 J**
Bromoform	50	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	**2.4**
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 5.0	**0.43 J**	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**1.1**	**0.27 J**
Carbon Tetrachloride	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Chloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 1.0	< 1.0
Chloroform	7	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**14**	**0.92 J**
Chloromethane (Methyl chloride)	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**5.6**	**2.8**
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 5.0	**18**	**16**	**29**	**19**	**16**	**11**	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**0.35 J**	**1.5**
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 5.0	< 1.0	< 2.0	**0.19 J**	**0.39 J**	< 1.0	**0.49 J**	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 5.0	**2.8**	**7.1**	**4.9**	**4.2**	**4.4**	**1.9**	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 13	< 2.5	< 5.0	< 10	<5.0	<5.0	5.0 U	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**1.4 J**	**0.23 J**	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**55**	**8.5**
Methylcyclohexane	NE	ug/L	**1.5 J**	**9.4**	**29**	**50**	**31**	**29**	**7.7**	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 1.0	**1.1 J**	< 5.0	< 1.0	**0.53 J**	1.0 U	< 1.0	**0.60 J**
Styrene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**1.4**	**1.3**
Toluene	5	ug/L	< 5.0	< 1.0	**1.0 J**	**0.60 J**	< 1.0	< 1.0	1.0 U	**0.87 J**	< 1.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-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	AMW-7R 460-191318-13 09/14/2019	AMW-7R 460-198228-10 12/06/2019	ASB-2 06/06/2016	ASB-3 06/08/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**4.4**	**1.2**
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 5.0	< 1.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	**6**	**81**
Xylene (total)	5	ug/L	< 10	**0.79 J**	< 4.0	**0.61 J**	**1.3 J**	< 2.0	**0.73 J**	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	**82**	**94 B**	**94**	**110**	**47**	NA	NA
Ethane	NE	ug/L	NA	NA	< 330	< 330	< 330 UH	<170	**1.6 J**	NA	NA
Ethene	NE	ug/L	NA	NA	< 310	< 310	< 310 UH	<150	3 U	NA	NA
Methane	NE	ug/L	NA	NA	**3,500**	**5,800**	**3,100 H**	**3,600**	**6,200**	NA	NA
Inorganics											
Iron	300	ug/L	NA	**170**	**20,000**	**12,500**	**8,080**	**6,840**	**4,790**	NA	NA
Manganese	300	ug/L	NA	**74 B**	**2,500 B**	**2,900 B**	**2,770**	**2,770**	**1,420**	NA	NA
Sodium	20,000	ug/L	NA	NA	**199,000**	**168,000**	**105,000**	**95,700**	**93,300**	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	**199 B**	NA	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	NA	**199,000 B**	**881,000 B**	**997,000**	**558,000**	**651,000**	**462,000**	NA	NA
Chloride	250	mg/L	NA	NA	**253**	**192**	**120 F1**	**62**	**80**	NA	NA
Ferric Iron	NE	mg/L	NA	NA	**19.7**	**12.5**	**8.1**	**6**	**4.7**	NA	NA
Ferrous Iron	NE	ug/L	NA	NA	**320 HF**	< 100	< 100 HF	**840 HF**	**100 HF**	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	< 50	< 50	< 100	<100	**25 JB**	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	< 0.050	< 0.050	**0.023 J**	**0.015 J B**	**0.017 J**	NA	NA
Sulfate (SO4)	NE	ug/L	NA	**82,300**	**41,900**	**22,600 B**	**82,000 F1**	**49,000**	**84,000**	NA	NA
Sulfide	NE	ug/L	NA	**5,200**	**3,800**	**1,600**	<1000	**1,200**	**1,900**	NA	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	**19,800**	**20,800**	**88,400**	NA	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID:	NYSDEC		ASB-4	ASB-5	ASB-7	MW-18R	MW-18R	MW-18R	MW-18R 460-191318-12	MW-18R 460-198228-1	MW-23-D1
Lab Sample ID:									09/14/2019	12/05/2019	
Date Sampled:	TOGS 1.1.1	Units	06/07/2016	06/02/2016	06/02/2016	06/22/2016	07/11/2018	10/17/2018			10/26/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	**4.2 J**	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 50	< 1.0	1.0 U	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	**1.4 J**	< 20	< 100	**74 J**	**70 J**	**10**	**33**	< 20
2-Hexanone	50	ug/L	< 25	< 5.0	< 10	< 50	< 100	< 50	< 5.0	**3.7 J**	< 10
4-Methyl-2-pentanone	NE	ug/L	< 25	**5**	**5.3 J**	< 50	< 100	< 50	**2.2 J**	**2.9 J**	< 10
Acetone	50	ug/L	< 50	**12**	< 20	< 100	**330**	**230**	**47**	**130**	< 20
Benzene	1	ug/L	**3.0 J**	< 1.0	< 2.0	**310**	**48**	**69**	**85**	**74**	< 2.0
Bromodichloromethane	50	ug/L	< 5.0	**1.5**	**3.3**	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Bromoform	50	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Carbon disulfide	60	ug/L	**0.95 J**	**0.53 J**	**1.1 J**	< 10	**6.2 J**	**2.4 J**	**3.2**	**2**	**0.53 J**
Carbon Tetrachloride	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Chlorobenzene	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Chloroethane	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U*	< 2.0
Chloroform	7	ug/L	< 5.0	**19**	**21**	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
cis-1,2-Dichloroethene	5	ug/L	**1600 E**	**2.2**	**67**	**14**	< 20	< 5.0	**0.38 J**	**0.28 J**	< 2.0
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Cyclohexane	NE	ug/L	**5**	< 1.0	< 2.0	**20**	< 20	**8.3 J**	**6.7**	**7.2**	**0.40 J**
Dibromochloromethane	50	ug/L	< 5.0	< 1.0	**0.65 J**	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Ethylbenzene	5	ug/L	**6.7**	< 1.0	< 2.0	< 10	< 20	**1.2 J**	**1.4**	**1.6**	< 2.0
Isopropylbenzene	5	ug/L	< 5.0	< 1.0	< 2.0	**14**	< 20	**6.8**	**7.4**	**4.8**	< 2.0
Methyl acetate	NE	ug/L	< 13	< 2.5	< 5.0	< 25	< 50	< 50	< 5.0	5.0 U	< 5.0
Methyl-t-butyl ether	10	ug/L	**13**	**4.6**	**5.5**	**65**	**11 J**	**28**	**40**	**14**	**140**
Methylcyclohexane	NE	ug/L	**4.5 J**	< 1.0	< 2.0	**4.4 J**	**5.1 J**	**6.2 J**	**5.6**	**3.3**	< 2.0
Methylene chloride (Dichloromethane)	5	ug/L	**330**	< 1.0	< 2.0	< 10	< 20	< 25	**0.68 J**	**0.62 J**	< 2.0
Styrene	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Tetrachloroethene	5	ug/L	**6.7**	**1.2**	**1.2 J**	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Toluene	5	ug/L	**9**	< 1.0	< 2.0	< 10	< 20	**4.1 J**	**4.9**	**4.8**	< 2.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-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-18R 460-191318-12 09/14/2019	MW-18R 460-198228-1 12/05/2019	MW-23-D1 10/26/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**13**	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	**1500 E**	**4.8**	**1.7 J**	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 1.0	< 2.0	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Vinyl chloride (Chloroethene)	2	ug/L	**400**	**11**	**31**	< 10	< 20	< 5.0	< 1.0	1.0 U	< 2.0
Xylene (total)	5	ug/L	**36**	**0.89 J**	< 4.0	< 20	< 40	**5.2 J**	**7.1**	**5.2**	< 4.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	NA	**2.2 J**	**11 B**	**32**	**3 J**	NA
Ethane	NE	ug/L	NA	NA	NA	NA	< 660	< 660	<660	**21**	NA
Ethene	NE	ug/L	NA	NA	NA	NA	< 620	< 620	<620	**0.81 J**	NA
Methane	NE	ug/L	NA	NA	NA	NA	**3,800**	**9,700**	**13,000**	**16,000**	NA
Inorganics											
Iron	300	ug/L	NA	NA	NA	**11,500 B**	**1,400**	**450**	**11,700**	**3,100**	< 50
Manganese	300	ug/L	NA	NA	NA	**470 B**	**17 B**	**26 B**	**110**	**30.8**	**21 B**
Sodium	20,000	ug/L	NA	NA	NA	NA	**161,000**	**193,000**	**310,000**	**323,000**	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	**515 B**	NA	NA	NA	NA	**555**
Alkalinity, Total as CaCO3	NE	ug/L	NA	NA	NA	**515,000 B**	**184,000 B**	**365,000**	**386,000**	**225,000**	**555,000**
Chloride	250	mg/L	NA	NA	NA	NA	**367**	**259**	**480**	**400**	NA
Ferric Iron	NE	mg/L	NA	NA	NA	NA	**1.3**	**0.45**	**8.2**	**2.8**	NA
Ferrous Iron	NE	ug/L	NA	NA	NA	NA	**110 HF**	< 100	**3,500 HF**	**0.28 HF**	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	NA	< 50	< 50	<100	**30 JB**	NA
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	NA	< 0.050	< 0.050	**0.024 J B**	**0.029 J**	NA
Sulfate (SO4)	NE	ug/L	NA	NA	NA	**27,800**	**120,000**	**20,000 B**	**86,000**	**74,000**	**148,000**
Sulfide	NE	ug/L	NA	NA	NA	< 100	**12,200**	**11,600**	**14,800**	**15,900**	**6,400**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	NA	NA	NA	95,400	**123,000**	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-1R 460-191318-5 09/13/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
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	< 1.0
1,1-Dichloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
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	< 10
1,2-Dibromoethane	0.0006	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 50	< 10	< 40	< 40	< 40	< 40	< 50	< 5.0
2-Hexanone	50	ug/L	< 25	< 25	< 5.0	< 20	< 20	< 20	< 20	< 10	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 25	< 25	< 5.0	< 20	< 20	< 20	< 20	< 10	< 5.0
Acetone	50	ug/L	< 50	< 50	**6.4 J**	< 40	< 40	< 40	< 40	< 25	< 5.0
Benzene	1	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	**2.7 J**	**3.8**	**1.5**
Bromodichloromethane	50	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**0.29 J**	< 1.0
Carbon Tetrachloride	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**1.7**	**0.73 J**
cis-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0
Dibromochloromethane	50	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**0.56 J**	**0.35 J**
Methyl acetate	NE	ug/L	< 13	< 13	< 2.5	< 10	< 10	< 10	< 10	< 10	< 5.0
Methyl-t-butyl ether	10	ug/L	**180**	**210**	**30**	**140**	**130**	**150**	**91**	**94**	**92**
Methylcyclohexane	NE	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 5.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 5.0	**0.53 J**
Styrene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Toluene	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-1R 460-191318-5 09/13/2019
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	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 5.0	< 5.0	< 1.0	< 4.0	< 4.0	< 4.0	< 4.0	**1**	**0.26 J**
Xylene (total)	5	ug/L	< 10	< 10	< 2.0	< 8.0	< 8.0	< 8.0	< 8.0	< 3.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	**82**	**75**	**55**	**64**	**63**	**68**
Ethane	NE	ug/L	NA	NA	NA	< 150	< 83	< 170	< 330	< 660	<83
Ethene	NE	ug/L	NA	NA	NA	< 140	< 77	< 150	< 310	< 620	<77
Methane	NE	ug/L	NA	NA	NA	**150**	**1,500**	**1,300**	**4,800**	**3,600**	**1,400**
Inorganics											
Iron	300	ug/L	**240 B**	NA	**660**	**17,100**	**33,900**	**3,800**	**4,300**	**1,900**	**1,460**
Manganese	300	ug/L	**670 B**	NA	**690 B**	**3,100**	**2200 B**	**1000 B**	**810 B**	**930**	**636**
Sodium	20,000	ug/L	NA	NA	NA	**1,190,000 ^**	**1,190,000 ^**	**1,230,000 ^**	**1,360,000**	**1,220,000**	**971,000**
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**	**467,000**
Chloride	250	mg/L	NA	NA	NA	**1,970**	**2,190**	**2,270**	**2,250**	**2,260**	**2,000**
Ferric Iron	NE	mg/L	NA	NA	NA	**17.1**	**31.9**	**3.8**	**4**	**1.9**	**1.1**
Ferrous Iron	NE	ug/L	NA	NA	NA	< 100	**2,000 HF**	< 100	**260 HF**	< 100	**330 HF**
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	< 50	**23 J H**	< 50	< 50	< 50	**26 J B**
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	**0.017 J B**
Sulfate (SO4)	NE	ug/L	**156,000**	NA	**180,000**	**259,000**	**173,000**	**178,000 B**	**149,000**	**177,000**	**190,000**
Sulfide	NE	ug/L	**13,600**	NA	**16,900 F1**	**8,400**	**15,400**	**26,800**	**28,800**	**25,200**	**10,300**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	**16,100 B**	**17,300 B**	**15,400 B**	NA	NA	20,800

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-23D-1R 460-198228-4 12/05/2019	MW-23D-2R 01/12/2016	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-23D-2R 460-191318-6 09/13/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	5.0 U	< 50	< 10	< 10	< 40	< 10	<5.0	< 5.0	< 5.0
2-Hexanone	50	ug/L	5.0 U	< 25	< 5.0	< 5.0	< 20	< 5.0	<5.0	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	5.0 U	< 25	< 5.0	< 5.0	< 20	< 5.0	<5.0	< 5.0	< 5.0
Acetone	50	ug/L	5.0 U	< 50	**23**	**4.0 J**	< 40	< 10	<5.0	< 5.0	< 5.0
Benzene	1	ug/L	**1.4**	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	**2.3**	**2.3**	< 1.0
Bromodichloromethane	50	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Bromoform	50	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	**0.44 J**	<1.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	1.0 U*	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Chloroform	7	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0*	< 1.0
cis-1,2-Dichloroethene	5	ug/L	**0.72 J**	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	**0.41 J**	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0*	< 1.0
Ethylbenzene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	**0.44 J**	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	5.0 U	< 13	< 2.5	< 2.5	< 10	< 2.5	<5.0	< 5.0	< 5.0
Methyl-t-butyl ether	10	ug/L	**83**	**130**	**26**	**8**	**72**	**150 E**	**8.8**	**8.8**	**63**
Methylcyclohexane	NE	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	**0.47 J**
Styrene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Toluene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-23D-1R 460-198228-4 12/05/2019	MW-23D-2R 01/12/2016	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-23D-2R 460-191318-6 09/13/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	< 1.0	<1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	1.0 U	< 5.0	< 1.0	< 1.0	< 4.0	**1.2**	<1.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	2.0 U	< 10	< 2.0	< 2.0	< 8.0	< 2.0	<2.0	< 2.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**660**	NA	NA	**130**	**110**	**100**	**32**	**32**	**140**
Ethane	NE	ug/L	**8.2**	NA	NA	< 38	< 83	< 170	< 170	< 170	< 170
Ethene	NE	ug/L	3 U	NA	NA	< 35	< 77	< 150	< 150	< 150	< 150
Methane	NE	ug/L	**2,100**	NA	NA	**73**	**360**	**200**	**290**	**290**	**700**
Inorganics											
Iron	300	ug/L	**2,020**	NA	**40 J**	**4,400**	**1,800**	**2,800**	**1,660**	**1,660**	**25,700**
Manganese	300	ug/L	**852**	NA	**110 B**	**210**	**170 B**	**140 B**	**279**	**279**	**2,350**
Sodium	20,000	ug/L	**389,000**	NA	NA	**2,190,000 ^**	**1,930,000 ^**	**2,570,000 ^**	**1,930,000**	**1,930,000**	**1,600,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	**543**	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**309,000**	NA	**543,000**	**520,000**	**434,000 B**	**654,000**	**587,000**	**587,000**	**415,000**
Chloride	250	mg/L	**1,300**	NA	NA	**5,260**	**5,420**	**4,460**	**3,800**	**3,800**	**2,500**
Ferric Iron	NE	mg/L	**1.8**	NA	NA	**4.2**	**1.8**	**2.8**	**1.4**	**1.4**	**21.6**
Ferrous Iron	NE	ug/L	**260 HF**	NA	NA	**170 HF**	< 100	< 100	**240 HF**	**240 HF**	**4,100 HF**
Nitrogen, Nitrate as N	10,000	ug/L	**37 JB**	NA	NA	< 50	**37 J H**	< 50	**38 J**	**38 J**	**17 J B**
Nitrogen, Nitrite	1	mg/L	**0.018 J**	NA	NA	< 0.050	< 0.050	< 0.050	**0.0045 J**	**0.0045 J**	**0.025 J B**
Sulfate (SO4)	NE	ug/L	**130,000**	NA	**317,000**	**861,000**	**665,000**	**478,000 B**	**290,000**	**290,000**	**160,000**
Sulfide	NE	ug/L	**3,500**	NA	**700**	**29,600**	**36,200**	**20,000**	**10,900**	**10,900**	**34,100**
Total Organic Carbon (TOC)	NE	ug/L	**22,300**	NA	NA	**5,200 B**	**6,100 B**	**9,700 B**	**20,700 B**	**20,700 B**	**17,100**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-D2R 12/05/2019	MW-24-D1 01/13/2016	MW-24-D1 06/21/2016	MW-24-D1 10/26/2016	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
Volatile Organics											
1,1 Dichloroethene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0*
1,1-Dichloroethane	5	ug/L	1.0 U	< 5.0	< 4.0	**0.56 J**	**0.74 J**	< 4.0	< 8.0	< 5.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 50	< 1.0
1,2-Dibromoethane	0.0006	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,2-Dichloropropane	1	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	5.0 U	< 50	< 40	< 10	< 10	< 40	< 80	< 250	< 5.0
2-Hexanone	50	ug/L	5.0 U	< 25	< 20	< 5.0	< 5.0	< 20	< 40	< 50	< 5.0
4-Methyl-2-pentanone	NE	ug/L	5.0 U	< 25	< 20	< 5.0	< 5.0	< 20	< 40	< 50	< 5.0
Acetone	50	ug/L	5.0 U	< 50	< 40	< 10	< 10	< 40	< 80	< 130	< 5.0
Benzene	1	ug/L	**1.8**	< 5.0	**5.4**	**4.1**	**4.9**	< 4.0	**11**	**8.3**	**1.5**
Bromodichloromethane	50	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Bromoform	50	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Carbon disulfide	60	ug/L	1.0 U	< 5.0	**1.6 J**	**1.7**	**1.3**	< 4.0	**2.1 J**	**1.4 J**	**0.62 J**
Carbon Tetrachloride	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Chlorobenzene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Chloroethane	5	ug/L	1.0 U*	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Chloroform	7	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	1.0 U	**10**	**4.9**	**4**	**6.1**	< 4.0	< 8.0	< 5.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Cyclohexane	NE	ug/L	1.0 U	< 5.0	**1.9 J**	**1.6**	**1.4**	< 4.0	< 8.0	< 25	< 1.0
Dibromochloromethane	50	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Ethylbenzene	5	ug/L	1.0 U	< 5.0	**3.1 J**	**2.3**	**2.2**	< 4.0	**7.1 J**	**6.1**	**1.0**
Isopropylbenzene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Methyl acetate	NE	ug/L	5.0 U	< 13	< 10	< 2.5	< 2.5	< 10	< 20	< 50	< 5.0
Methyl-t-butyl ether	10	ug/L	**14**	**220**	**160**	**140 E**	**120 E**	**81**	**290**	**270**	**65**
Methylcyclohexane	NE	ug/L	1.0 U	< 5.0	**1.3 J**	**0.64 J**	**0.66 J**	< 4.0	< 8.0	< 25	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 25	< 1.0
Styrene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Tetrachloroethene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Toluene	5	ug/L	1.0 U	< 5.0	< 4.0	**0.68 J**	**0.64 J**	< 4.0	**23**	**17**	**1.5**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-D2R 12/05/2019	MW-24-D1 01/13/2016	MW-24-D1 06/21/2016	MW-24-D1 10/26/2016	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
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	1.0 U	< 5.0	**11**	**6.5**	**6.8**	< 4.0	**22**	**12**	**2.0**
trans-1,3-Dichloropropene	0.4	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 4.0	< 8.0	< 5.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	1.0 U	**99**	**35**	**33**	**15**	< 4.0	**160**	**22**	**1.5**
Xylene (total)	5	ug/L	2.0 U	< 10	**9.3**	**7.2**	**6.6**	< 8.0	**29**	**25**	**3.6**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**69**	NA	NA	NA	NA	NA	**67**	**59**	**98**
Ethane	NE	ug/L	**2.9 J**	NA	NA	NA	NA	NA	**130 J**	< 660	< 330
Ethene	NE	ug/L	3 U	NA	NA	NA	NA	NA	**1,100**	**550 J**	< 310
Methane	NE	ug/L	**1,500**	NA	NA	NA	NA	NA	**5,900**	**6,000**	**1,600**
Inorganics											
Iron	300	ug/L	**26,100**	NA	**32 J**	< 50	**58 B**	**24 J B**	**10,100**	**2,900**	**4,120**
Manganese	300	ug/L	**2,120**	NA	**60 B**	**49 B**	**8.9 B**	**59 B**	**120 B**	**91**	**79.6**
Sodium	20,000	ug/L	**1,410,000**	NA	NA	NA	NA	NA	**2,140,000**	**1,070,000**	**1,720,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	**642 B**	**526**	**324**	**577**	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**349,000**	NA	**642,000 B**	**526,000**	**324,000**	**577,000**	**875,000 B**	**583,000**	**572,000**
Chloride	250	mg/L	**2,400**	NA	NA	NA	NA	NA	**4,220**	**2,370**	**3,900**
Ferric Iron	NE	mg/L	**26.1**	NA	NA	NA	NA	NA	**10.1**	**2.9**	**3.3**
Ferrous Iron	NE	ug/L	100 U HF	NA	NA	NA	NA	NA	< 100	< 100	**860 HF**
Nitrogen, Nitrate as N	10,000	ug/L	**69 JB**	NA	NA	NA	NA	NA	< 50	< 50	**63 J**
Nitrogen, Nitrite	1	mg/L	**0.051 J**	NA	NA	NA	NA	NA	< 0.050	< 0.050	**0.014 J**
Sulfate (SO4)	NE	ug/L	**160,000**	NA	**189,000**	**217,000**	**248,000**	**219,000**	**200,000**	**75,300**	**250,000**
Sulfide	NE	ug/L	**3,800**	NA	**79,300**	**64,000 F1**	**60,000**	**56,000**	**66,400**	**56,400**	**41,400**
Total Organic Carbon (TOC)	NE	ug/L	**18,900**	NA	NA	NA	NA	NA	NA	NA	**15,400 B**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-24D1R 460-191306-1 09/13/2019	MW-24D1R 460-198100-2 12/05/2019	MW-24-D2 01/13/2016	MW-24-D2 01/13/2016	MW-24-D2 06/21/2016	MW-24-D2 10/25/2016	MW-24-D2 10/25/2016
Volatile Organics									
1,1 Dichloroethene	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,1,1-Trichloroethane	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,1,2-Trichloroethane	1	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,1-Dichloroethane	5	ug/L	**0.72 J [0.69 J]**	**0.36 J [0.71 J]**	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0 [<1.0]	1.0 U	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,2-Dichloroethane	0.6	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,2-Dichloropropane	1	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,3-Dichlorobenzene	3	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
1,4-Dichlorobenzene	3	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	<5.0 [<5.0]	5.0 U [5.0 U]	< 50	< 50	< 10	< 40	< 50
2-Hexanone	50	ug/L	<5.0 [<5.0]	5.0 U [5.0 U]	< 25	< 25	< 5.0	< 20	< 25
4-Methyl-2-pentanone	NE	ug/L	<5.0 [<5.0]	5.0 U [5.0 U]	< 25	< 25	< 5.0	< 20	< 25
Acetone	50	ug/L	<5.0 [<5.0]	**9.4** [5.0 U]	< 50	< 50	< 10	**62**	**56**
Benzene	1	ug/L	**13 [13]**	**5.7 [11]**	**3.3 J**	**3.1 J**	**0.97 J**	< 4.0	**3.0 J**
Bromodichloromethane	50	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Bromoform	50	ug/L	<1.0* [<1.0*]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Carbon disulfide	60	ug/L	**3.2 [1.8]**	1.0 U [1.0 U]	< 5.0	< 5.0	**0.31 J**	< 4.0	< 5.0
Carbon Tetrachloride	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Chlorobenzene	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Chloroethane	5	ug/L	< 1.0 [<1.0]	1.0 U* [1.0 U*]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Chloroform	7	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	**1.6**	< 4.0	< 5.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Cyclohexane	NE	ug/L	**1.1 [0.94 J]**	1.0 U **[0.99 J]**	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Dibromochloromethane	50	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Ethylbenzene	5	ug/L	**7.9 [7.2]**	**2.4 [7.2]**	< 5.0	< 5.0	**0.84 J**	< 4.0	< 5.0
Isopropylbenzene	5	ug/L	**0.97 J [0.86 J]**	1.0 U **[0.86 J]**	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Methyl acetate	NE	ug/L	<5.0 [<5.0]	5.0 U [5.0 U]	< 13	< 13	< 2.5	< 10	< 13
Methyl-t-butyl ether	10	ug/L	**210 [200]**	**180 [210]**	**260**	**250**	**140 E**	**120**	**270**
Methylcyclohexane	NE	ug/L	**0.63 J [0.57 J]**	1.0 U **[0.56 J]**	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	**120**	**84 F1**
Styrene	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Tetrachloroethene	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Toluene	5	ug/L	**7.2 [6.4]**	**1.4 [2.3]**	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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-24D1R 460-191306-1 09/13/2019	MW-24D1R 460-198100-2 12/05/2019	MW-24-D2 01/13/2016	MW-24-D2 01/13/2016	MW-24-D2 06/21/2016	MW-24-D2 10/25/2016	MW-24-D2 10/25/2016
Volatile Organics (cont.)									
trans-1,2-Dichloroethene	5	ug/L	**16 [15]**	**7.0 [16]**	< 5.0	< 5.0	**0.98 J**	< 4.0	< 5.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0 [<1.0]	1.0 U [1.0 U]	< 5.0	< 5.0	< 1.0	< 4.0	< 5.0
Vinyl chloride (Chloroethene)	2	ug/L	**8.0 [9.2]**	**3.4 [5.4]**	**180**	**170**	**38**	**20**	**280 F1**
Xylene (total)	5	ug/L	**33 [30]**	**11 [29]**	< 10	< 10	< 2.0	< 8.0	< 10
GC Volatiles - RSK-175									
Carbon Dioxide	NE	mg/L	**36 [51]**	**30 [60]**	NA	NA	NA	NA	NA
Ethane	NE	ug/L	**750 [730]**	**320 [880]**	NA	NA	NA	NA	NA
Ethene	NE	ug/L	**100 J [99 J]**	**88 [280]**	NA	NA	NA	NA	NA
Methane	NE	ug/L	**7,300 [7,700]**	**2,400 [8,400]**	NA	NA	NA	NA	NA
Inorganics									
Iron	300	ug/L	**2,140 [4,060]**	**1,540 [1,410]**	NA	NA	**40 J**	**49 J**	< 50
Manganese	300	ug/L	**32.1 [56.5]**	**40.6 [38.3]**	NA	NA	**55 B**	**62**	**56**
Sodium	20,000	ug/L	**1,320,000 [1,520,000]**	**1,340,000 [1,170,000]**	NA	NA	NA	NA	NA
General Chemistry									
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	**741 B**	**512**	**759**
Alkalinity, Total as CaCO3	NE	ug/L	**411,000 [588,000]**	**301,000 [514,000]**	NA	NA	**741,000 B**	**512,000**	**759,000**
Chloride	250	mg/L	**1,800 [3,000]**	**1,900 [2,000]**	NA	NA	NA	NA	NA
Ferric Iron	NE	mg/L	**1.9 [3.5]**	**1.3 [1.3]**	NA	NA	NA	NA	NA
Ferrous Iron	NE	ug/L	**230 HF [600 HF]**	**290 HF [110 HF]**	NA	NA	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	<100 [<100]	**150 B** [100 U]	NA	NA	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	**0.015 J [<0.10]**	**0.17 B** [0.10 U]	NA	NA	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**320,000 [200,000]**	**350,000 [130,000]**	NA	NA	**270,000**	**374,000**	**270,000**
Sulfide	NE	ug/L	**29,200 [75,900]**	**22,400 [92,800]**	NA	NA	**92,200**	**48,000**	**64,000**
Total Organic Carbon (TOC)	NE	ug/L	**36,100 [34,900]**	**50,900 [25,900]**	NA	NA	NA	NA	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 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-D2 460-191306-3 09/13/2019	MW-24-D2 460-198100-1 12/05/2019	MW-24-VD 07/12/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,1,1-Trichloroethane	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,1,2-Trichloroethane	1	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,1-Dichloroethane	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,2,4-Trichlorobenzene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 10	< 1.0	< 1.0	1.0 U	< 4.0
1,2-Dibromoethane	0.0006	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,2-Dichloroethane	0.6	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,2-Dichloropropane	1	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,3-Dichlorobenzene	3	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
1,4-Dichlorobenzene	3	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 80	< 80	< 20	< 20	< 50	< 5.0	< 5.0	5.0 U	< 40
2-Hexanone	50	ug/L	< 40	< 40	< 10	< 10	< 10	< 5.0	< 5.0	5.0 U	< 20
4-Methyl-2-pentanone	NE	ug/L	< 40	< 40	< 10	< 10	< 10	< 5.0	< 5.0	5.0 U	< 20
Acetone	50	ug/L	< 80	< 80	< 20	< 20	**2.8 J**	< 5.0	< 5.0	**5.2**	< 40
Benzene	1	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	**1.4**	< 4.0
Bromodichloromethane	50	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Bromoform	50	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0 *	1.0 U	< 4.0
Bromomethane (Methyl bromide)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Carbon disulfide	60	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	**0.24 J**	< 1.0	< 1.0	1.0 U	< 4.0
Carbon Tetrachloride	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Chlorobenzene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Chloroethane	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 4.0
Chloroform	7	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Chloromethane (Methyl chloride)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 4.0
cis-1,2-Dichloroethene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	**0.52 J**	< 1.0	< 1.0	1.0 U	< 4.0
cis-1,3-Dichloropropene	0.4	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Cyclohexane	NE	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U	< 4.0
Dibromochloromethane	50	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 4.0
Ethylbenzene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Isopropylbenzene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Methyl acetate	NE	ug/L	< 20	< 20	< 5.0	< 5.0	< 10	< 5.0	< 5.0	5.0 U	< 10
Methyl-t-butyl ether	10	ug/L	**220**	**87**	**60**	**2.5**	**2**	< 1.0	< 1.0	**13**	**4.2**
Methylcyclohexane	NE	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U	< 4.0
Methylene chloride (Dichloromethane)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U	< 4.0
Styrene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Tetrachloroethene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Toluene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 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-D2 460-191306-3 09/13/2019	MW-24-D2 460-198100-1 12/05/2019	MW-24-VD 07/12/2018
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
trans-1,3-Dichloropropene	0.4	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 8.0	< 8.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0	1.0 U	< 4.0
Vinyl chloride (Chloroethene)	2	ug/L	**250 F1**	**72**	**18**	< 2.0	**0.23 J**	< 1.0	< 1.0	1.0 U	< 4.0
Xylene (total)	5	ug/L	< 16	< 16	< 4.0	< 4.0	< 3.0	< 2.0	< 2.0	2.0 U	< 8.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**130**	**110**	**54**	**15**	**5.7**	**5.0**	**15.0**	**26**	**89**
Ethane	NE	ug/L	< 150	< 170	< 170	< 7.5	< 170	< 7.5	< 7.5	**1.5 J**	**2.1 J**
Ethene	NE	ug/L	< 140	< 150	< 150	< 7.0	< 150	< 7.0	< 7.0	**0.57 J**	**2.3 J**
Methane	NE	ug/L	**130**	**980**	**410**	**44**	**370**	< 4.0	< 4.0	**270**	**160**
Inorganics											
Iron	300	ug/L	**1,800**	**6,600**	**5,500**	**1,100**	**610**	**391**	**2,160**	**2,090**	**37,900**
Manganese	300	ug/L	**88**	**160 B**	**140 B**	**33 B**	**32**	**7.7 J**	**35.6**	**58.7**	**910 B**
Sodium	20,000	ug/L	**2,520,000 ^**	**2,260,000**	**2,380,000 ^**	**94,900**	**108,000 ^**	**100,000**	**81,400**	**366,000**	**8,960,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**667,000**	**774,000 B**	**804,000**	**114,000 B**	**102,000**	**112,000**	**108,000**	**190,000**	**454,000 B**
Chloride	250	mg/L	**4,060**	**4,100**	**3,720**	**182**	**201**	**89**	**49**	**550**	**16,000**
Ferric Iron	NE	mg/L	**1.8**	**6.6**	**5.5**	**1.1**	**0.61**	**0.39**	**2**	**1.9**	**37.8**
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	< 100	< 100	< 100 HF	**160 HF**	**180 HF**	**100 HF**
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	**51 H**	< 50	**18 J**	**1,200**	100 U	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	**0.020 J H**	< 0.050	**0.038 J**	**0.013 J**	0.10 U	< 0.050
Sulfate (SO4)	NE	ug/L	**541,000**	**346,000**	**298,000 B**	**28,000**	**29,900**	**9,100**	**9,900**	**55,000**	**1,640,000**
Sulfide	NE	ug/L	**84,000**	**61,800**	**56,400**	**800 J**	**800 J**	< 1,000	< 1,000	**12,100**	< 1,000
Total Organic Carbon (TOC)	NE	ug/L	**12,500 B**	**11,600 B**	**10,800 B**	NA	NA	**6,300 B**	**6,000**	**59,700**	NA

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID:	NYSDEC		MW-24-VD	MW-24-VDR	MW-24VDR	MW-24VDR	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1	MW-26-D1
Lab Sample ID:				460-181653-3	460-191306-2	460-198100-3					
Date Sampled:	TOGS 1.1.1	Units	10/17/2018	05/09/2019	09/13/2019	12/05/2019	01/12/2016	06/22/2016	10/25/2016	10/25/2016	07/05/2017
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,1-Dichloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 10	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 50	< 5.0	< 5.0	5.0 U	< 50	< 40	< 100	< 40	< 100
2-Hexanone	50	ug/L	< 10	< 5.0	< 5.0	5.0 U	< 25	< 20	< 50	< 20	< 50
4-Methyl-2-pentanone	NE	ug/L	< 10	< 5.0	< 5.0	5.0 U	< 25	< 20	< 50	< 20	< 50
Acetone	50	ug/L	< 25	< 5.0	< 5.0	**5.5**	< 50	< 40	< 100	< 40	< 100
Benzene	1	ug/L	< 1.0	< 1.0	**2.4**	**7.2**	**9.1**	**9.3**	**8.6 J**	**12**	**8.7 J**
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Bromoform	50	ug/L	< 1.0	< 1.0	< 1.0 *	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Carbon disulfide	60	ug/L	**0.64 J**	**0.30 J**	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Chlorobenzene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Chloroethane	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U*	< 5.0	< 4.0	< 10	< 4.0	< 10
Chloroform	7	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0*	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
cis-1,2-Dichloroethene	5	ug/L	**0.28 J**	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Cyclohexane	NE	ug/L	< 5.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0*	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Ethylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	**3.0 J**	< 10
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Methyl acetate	NE	ug/L	< 10	< 5.0	< 5.0	5.0 U	< 13	< 10	< 25	< 10	< 25
Methyl-t-butyl ether	10	ug/L	**2.9**	**1.6**	**0.75 J**	1.0 U	**380**	**340**	**310**	**390**	**290**
Methylcyclohexane	NE	ug/L	< 5.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Methylene chloride (Dichloromethane)	5	ug/L	< 5.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	**3.6 J**	< 10
Styrene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Toluene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-24-VD 10/17/2018	MW-24-VDR 460-181653-3 05/09/2019	MW-24VDR 460-191306-2 09/13/2019	MW-24VDR 460-198100-3 12/05/2019	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
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	< 1.0	1.0 U	< 5.0	< 4.0	< 10	< 4.0	< 10
Vinyl chloride (Chloroethene)	2	ug/L	**0.55 J**	**0.40 J**	**0.35 J**	1.0 U	**16**	**20**	**18**	**51**	**28**
Xylene (total)	5	ug/L	< 3.0	< 2.0	< 2.0	2.0 U	< 10	< 8.0	< 20	< 8.0	< 20
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**79**	**92**	**92**	**3.8 J**	NA	NA	NA	NA	**120**
Ethane	NE	ug/L	< 7.5	< 83	<7.5	4 U	NA	NA	NA	NA	< 150
Ethene	NE	ug/L	< 7.0	< 77	<7.0	**1.7 J**	NA	NA	NA	NA	< 140
Methane	NE	ug/L	**120**	**13 J**	**26**	**28**	NA	NA	NA	NA	**250**
Inorganics											
Iron	300	ug/L	**26,100**	**25,200**	**8,910**	**36,500**	NA	< 50	< 50	< 50	**230**
Manganese	300	ug/L	**740**	**597**	**235**	**694**	NA	**35 B**	**25**	**37**	**41**
Sodium	20,000	ug/L	**8,730,000**	**6,100,000**	**2,520,000**	**9,030,000**	NA	NA	NA	NA	**1,570,000 ^**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	**569 B**	**479**	**591**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**416,000**	**461,000**	**295,000**	**446,000**	NA	**569,000 B**	**479,000**	**591,000**	**542,000**
Chloride	250	mg/L	**13,100**	**16,000**	**7,300**	**17,000**	NA	NA	NA	NA	**2,520**
Ferric Iron	NE	mg/L	**26.1**	**25.2**	**8.2**	**36.5**	NA	NA	NA	NA	**0.23**
Ferrous Iron	NE	ug/L	< 100	< 100 HF	**700 HF**	100 U HF	NA	NA	NA	NA	< 100
Nitrogen, Nitrate as N	10,000	ug/L	< 50	**10 J**	<100	100 U	NA	NA	NA	NA	< 50
Nitrogen, Nitrite	1	mg/L	< 0.050	**0.063 J**	**0.010 J**	0.10 U	NA	NA	NA	NA	< 0.050
Sulfate (SO4)	NE	ug/L	**1,300,000**	**1,700,000**	**720,000**	**3,100,000**	NA	**139,000**	**252,000**	**131,000**	**313,000**
Sulfide	NE	ug/L	< 1,000	<1,000	**1,200**	1,000 U	NA	**70,600 F1**	**48,000**	**56,000**	**44,000**
Total Organic Carbon (TOC)	NE	ug/L	NA	**7,700 B**	**7,700**	**4,800**	NA	NA	NA	NA	**9,100 B**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D1 08/27/2017	MW-26-D1 10/11/2017	MW-26-D1 07/13/2018	MW-26-D1 10/17/2018	MW-26-D1 460-191318-3 09/13/2019	MW-26-D1 460-198228-9 12/06/2019	MW-26-D2 01/12/2016	MW-26-D2 06/22/2016	MW-26-D2 10/25/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,1-Dichloroethane	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,2,4-Trichlorobenzene	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 10	< 2.0	< 2.0	< 10	< 10	1.0 U	< 5.0	< 1.0	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 10	< 2.0	< 5.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,2-Dichloropropane	1	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 100	< 20	< 20	< 50	< 5.0	5.0 U	< 50	< 10	< 20
2-Hexanone	50	ug/L	< 50	< 10	< 10	< 10	< 5.0	5.0 U	< 25	< 5.0	< 10
4-Methyl-2-pentanone	NE	ug/L	< 50	< 10	< 10	< 10	< 5.0	5.0 U	< 25	< 5.0	< 10
Acetone	50	ug/L	< 100	**6.5 J**	< 20	< 25	< 5.0	5.0 U	< 50	< 10	**9.4 J**
Benzene	1	ug/L	**9.5 J**	< 2.0	**17**	**4.9**	**9.3**	**6.2**	< 5.0	< 1.0	< 2.0
Bromodichloromethane	50	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Bromoform	50	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Carbon disulfide	60	ug/L	< 10	< 2.0	< 2.0	**0.45 J**	< 1.0	1.0 U	< 5.0	**1.4**	**0.60 J**
Carbon Tetrachloride	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Chlorobenzene	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Chloroethane	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U*	< 5.0	< 1.0	< 2.0
Chloroform	7	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
cis-1,2-Dichloroethene	5	ug/L	< 10	< 2.0	< 2.0	**0.42 J**	**1.2**	**0.75 J**	< 5.0	**0.86 J**	< 2.0
cis-1,3-Dichloropropene	0.4	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Cyclohexane	NE	ug/L	< 10	< 2.0	< 2.0	< 5.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Dibromochloromethane	50	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Ethylbenzene	5	ug/L	< 10	< 2.0	**3.5**	**0.95 J**	**1.8**	**1.2**	< 5.0	< 1.0	< 2.0
Isopropylbenzene	5	ug/L	< 10	< 2.0	< 2.0	**0.43 J**	**0.73 J**	**0.56 J**	< 5.0	< 1.0	< 2.0
Methyl acetate	NE	ug/L	< 25	< 5.0	< 5.0	< 10	< 5.0	5.0 U	< 13	< 2.5	< 5.0
Methyl-t-butyl ether	10	ug/L	**240**	< 2.0	**220 E**	**110**	**86**	**77**	< 5.0	**59**	**85**
Methylcyclohexane	NE	ug/L	< 10	< 2.0	< 2.0	< 5.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Methylene chloride (Dichloromethane)	5	ug/L	< 10	< 2.0	< 2.0	< 5.0	< 1.0	1.0 U	< 5.0	< 1.0	**15**
Styrene	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Tetrachloroethene	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Toluene	5	ug/L	< 10	< 2.0	< 2.0	**0.23 J**	**0.67 J**	**0.4 J**	< 5.0	< 1.0	< 2.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D1 08/27/2017	MW-26-D1 10/11/2017	MW-26-D1 07/13/2018	MW-26-D1 10/17/2018	MW-26-D1 460-191318-3 09/13/2019	MW-26-D1 460-198228-9 12/06/2019	MW-26-D2 01/12/2016	MW-26-D2 06/22/2016	MW-26-D2 10/25/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	**1.0**	**0.74 J**	< 5.0	< 1.0	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 10	< 2.0	< 2.0	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 2.0
Vinyl chloride (Chloroethene)	2	ug/L	< 10	< 2.0	**13**	< 1.0	**19**	**12**	< 5.0	**1.2**	< 2.0
Xylene (total)	5	ug/L	< 20	< 4.0	< 4.0	< 3.0	< 2.0	2.0 U	< 10	< 2.0	< 4.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**95**	**10**	**110**	**65 B**	**79**	**64**	NA	NA	NA
Ethane	NE	ug/L	< 170	< 7.5	< 330	< 170	< 170	5.3	NA	NA	NA
Ethene	NE	ug/L	< 150	< 7.0	< 310	< 150	< 150	21	NA	NA	NA
Methane	NE	ug/L	**1,200**	**10**	**2,900**	**1,800**	**4,100**	**2,400**	NA	NA	NA
Inorganics											
Iron	300	ug/L	**640**	**190**	**320**	**280**	**93.9 J**	**364**	NA	**490 B**	**55**
Manganese	300	ug/L	**48 B**	**75 B**	**35 B**	**24 B**	**19.2**	**18**	NA	**700 B**	**63**
Sodium	20,000	ug/L	**1,500,000**	**304,000**	**1,640,000**	**1,510,000**	**1,400,000**	**1,260,000**	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	**344**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**532,000 B**	**177,000**	**558,000**	**416,000**	**542,000**	**405,000**	NA	**344,000**	NA
Chloride	250	mg/L	**2,530**	**483**	**2,810**	**2,540**	**3,000**	**2,000**	NA	NA	NA
Ferric Iron	NE	mg/L	**0.64**	**0.19**	**0.32**	**0.28**	<0.10	**0.25**	NA	NA	NA
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	< 100	**170 HF**	**110 HF**	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	**600**	< 50	< 50	**12 J B**	**30 JB**	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	**5.1**	< 0.050	< 0.050	**0.012 J B**	**0.010 J**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	**203,000**	**69,200**	**237,000**	**264,000 B**	**98,000**	**230,000**	NA	**1,200,000**	NA
Sulfide	NE	ug/L	**43,200**	< 1,000	**44,800**	**28,400**	**23,600**	**21,000**	NA	**1,700**	**40,000**
Total Organic Carbon (TOC)	NE	ug/L	**10,800 B**	**22,900 B**	NA	NA	33,000	**31,600**	NA	NA	NA

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D2 10/25/2016	MW-26-D2 07/05/2017	MW-26-D2 08/27/2017	MW-26-D2 10/11/2017	MW-26-D2 10/17/2018	MW-26-D2 460-181653-8 05/09/2019	MW-26-D2 460-191318-4 09/13/2019	MW-26-D2 460-198228-8 12/06/2019	MW-26-VD 01/13/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,1-Dichloroethane	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 10	< 1.0	< 1.0	1.0 U	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,2-Dichloropropane	1	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 20	< 10	< 80	< 10	< 50	< 5.0	< 5.0	5.0 U	< 10
2-Hexanone	50	ug/L	< 10	< 5.0	< 40	< 5.0	< 10	< 5.0	< 5.0	5.0 U	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 10	< 5.0	< 40	< 5.0	< 10	< 5.0	< 5.0	5.0 U	< 5.0
Acetone	50	ug/L	**37**	< 10	< 80	< 10	< 25	< 5.0	< 5.0	5.0 U	< 10
Benzene	1	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	**0.69 J**	**0.79 J**	**0.46 J**	1.0 U	< 1.0
Bromodichloromethane	50	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Bromoform	50	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Carbon disulfide	60	ug/L	< 2.0	**0.37 J**	< 8.0	< 1.0	< 1.0	**0.25 J**	< 1.0	1.0 U	< 1.0
Carbon Tetrachloride	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Chlorobenzene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Chloroethane	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 1.0
Chloroform	7	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Cyclohexane	NE	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0
Dibromochloromethane	50	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0
Ethylbenzene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	**0.39 J**	**0.44 J**	< 1.0	1.0 U	< 1.0
Isopropylbenzene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Methyl acetate	NE	ug/L	< 5.0	< 2.5	< 20	< 2.5	< 10	< 5.0	< 5.0	5.0 U	< 2.5
Methyl-t-butyl ether	10	ug/L	**43**	< 1.0	< 8.0	**14**	**76**	**84**	**60**	**29**	< 1.0
Methylcyclohexane	NE	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 5.0	< 1.0	< 1.0	1.0 U	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	**81**	< 1.0	< 8.0	< 1.0	< 5.0	< 1.0	**0.44 J**	1.0 U	< 1.0
Styrene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Tetrachloroethene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Toluene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-D2 10/25/2016	MW-26-D2 07/05/2017	MW-26-D2 08/27/2017	MW-26-D2 10/11/2017	MW-26-D2 10/17/2018	MW-26-D2 460-181653-8 05/09/2019	MW-26-D2 460-191318-4 09/13/2019	MW-26-D2 460-198228-8 12/06/2019	MW-26-VD 01/13/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	**0.90 J**	**0.56 J**	1.0 U	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	**0.50 J**	< 1.0	1.0 U	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	< 1.0	1.0 U	1.0 U	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 2.0	< 1.0	< 8.0	< 1.0	< 1.0	**1.5**	< 1.0	1.0 U	< 1.0
Xylene (total)	5	ug/L	< 4.0	< 2.0	< 16	< 2.0	< 3.0	< 2.0	< 2.0	2.0 U	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	**130**	**110**	**55**	**110 B**	**130**	**150**	**140**	NA
Ethane	NE	ug/L	NA	< 7.5	< 83	< 170	< 170	< 660	<83	**1.1 J**	NA
Ethene	NE	ug/L	NA	< 7.0	< 77	< 150	< 150	< 620	<77	3 U	NA
Methane	NE	ug/L	NA	**76**	**92**	**670**	**1,100**	**750**	**1,000**	**1,300**	NA
Inorganics											
Iron	300	ug/L	< 50	**970**	**970**	**1,100**	**150**	**466**	**207**	**54.4 J**	NA
Manganese	300	ug/L	**140**	**420**	**310 B**	**160 B**	**52 B**	**75.2**	**65.6**	**59.8**	NA
Sodium	20,000	ug/L	NA	**3,930,000 ^**	**3,370,000**	**2,770,000**	**2,190,000**	**2,420,000**	**2,270,000**	**2,340,000**	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**653**	NA	NA	NA	NA		NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**653,000**	**348,000**	**379,000**	**435,000**	**509,000**	**684,000**	**702,000**	**628,000**	NA
Chloride	250	mg/L	NA	**9,010**	**7,980**	**8,600**	**3,820**	**5,000**	**4,000**	**4,000**	NA
Ferric Iron	NE	mg/L	NA	**0.97**	**0.97**	**1.1**	**0.15**	**0.47**	**0.21**	0.10 U	NA
Ferrous Iron	NE	ug/L	NA	< 100	< 100	< 100	< 100	< 100 HF	<100 HF	**270 HF**	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	< 50	< 50	**28 J**	< 50	**21 J**	<100	100 U	NA
Nitrogen, Nitrite	1	mg/L	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10	**0.0071 J B**	0.10 U	NA
Sulfate (SO4)	NE	ug/L	**382,000**	**1,580,000**	**1,100,000**	**1,100,000**	**361,000 B**	**350,000**	**280,000**	**280,000**	NA
Sulfide	NE	ug/L	**36,000**	**24,400**	**16,000**	**26,800**	**25,600**	**54,600**	**57,000**	**45,600**	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	**4,300 B**	**4,800 B**	**8,800 B**	NA	**14,600 B**	**14,900**	**13,700**	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-VD 06/22/2016	MW-27-D1 01/13/2016	MW-27-D1 06/21/2016	MW-27-D1 07/05/2017	MW-27-D1 08/27/2017	MW-27-D1 07/13/2018	MW-27-D1 10/18/2018	MW-27-D1R 460-181703-1 05/10/2019	MW-27-D1R 460-191318-11 09/14/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	**0.29 J**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 10	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 50	**1.7 J**	< 20	< 20	< 20	< 50	< 5.0	< 5.0
2-Hexanone	50	ug/L	< 5.0	< 25	< 5.0	< 10	< 10	< 10	< 10	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 25	< 5.0	< 10	< 10	< 10	< 10	< 5.0	< 5.0
Acetone	50	ug/L	**170**	**53**	**5.0 J**	< 20	< 20	< 20	< 25	< 5.0	< 5.0
Benzene	1	ug/L	< 1.0	< 5.0	< 1.0	**1.1 J**	**1.6 J**	**7.8**	**3.6**	**2.4**	**4.8**
Bromodichloromethane	50	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	**0.19 J**	< 5.0	**0.66 J**	< 2.0	< 2.0	**0.64 J**	< 1.0	**1.0**	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 5.0	**1**	**2.2**	**3.2**	**2**	**1**	**0.57 J**	**0.80 J**
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	**0.40 J**
Isopropylbenzene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 13	< 2.5	< 5.0	< 5.0	< 5.0	< 10	< 5.0	< 5.0
Methyl-t-butyl ether	10	ug/L	**0.96 J**	< 5.0	**10**	**84**	**100**	**62**	**38**	**18**	**33**
Methylcyclohexane	NE	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 5.0	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	**0.94 J**	< 2.0	< 5.0	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	**1.6 J**	**1**	**0.44 J**	**1.2**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-26-VD 06/22/2016	MW-27-D1 01/13/2016	MW-27-D1 06/21/2016	MW-27-D1 07/05/2017	MW-27-D1 08/27/2017	MW-27-D1 07/13/2018	MW-27-D1 10/18/2018	MW-27-D1R 460-181703-1 05/10/2019	MW-27-D1R 460-191318-11 09/14/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	**5**	**4.1**	< 1.0	**0.96 J**	**2.3**
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	**0.26 J**	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 5.0	< 1.0	< 2.0	< 2.0	< 2.0	< 1.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 5.0	**0.97 J**	**28**	**110**	**88**	**70**	**17**	**25**
Xylene (total)	5	ug/L	< 2.0	< 10	< 2.0	< 4.0	< 4.0	< 4.0	< 3.0	< 2.0	**1.2 J**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	NA	NA	NA	**26**	**100**	**140**	**150 B**	**97**	**170**
Ethane	NE	ug/L	NA	NA	NA	< 380	< 170	< 660	< 170	< 83	<330
Ethene	NE	ug/L	NA	NA	NA	< 350	< 150	< 620	< 150	< 77	<310
Methane	NE	ug/L	NA	NA	NA	**550**	**1,100**	**3,700**	**3,900**	**1,600**	**1,600**
Inorganics											
Iron	300	ug/L	**74,000 B**	NA	**430**	**2,800**	**1,300**	**8,200**	**2,100**	**51,600**	**12,800**
Manganese	300	ug/L	**2,600 B**	NA	**200 B**	**56**	**330 B**	**170 B**	**61 B**	**456**	**161**
Sodium	20,000	ug/L	NA	NA	NA	**1,130,000 ^**	**960,000**	**1,690,000**	**1,770,000**	**1,900,000**	**2,090,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**176 B**	NA	**795 B**	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**176,000 B**	NA	**795,000 B**	**394,000 B**	**884,000**	**526,000 B**	**725,000**	**579,000**	**724,000**
Chloride	250	mg/L	NA	NA	NA	**2,860**	**5,640**	**2,770**	**3,890**	**3,500**	**3,400**
Ferric Iron	NE	mg/L	NA	NA	NA	**2.8**	**1.3**	**8**	**2**	**50.7**	**12.4**
Ferrous Iron	NE	ug/L	NA	NA	NA	< 100	< 100	**170 HF**	**91 J HF**	**910 HF**	**420 HF**
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA	NA	< 50	< 50	< 50	< 50	**19 J**	<100
Nitrogen, Nitrite	1	mg/L	NA	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	**0.010 J**	**0.0084 J B**
Sulfate (SO4)	NE	ug/L	**497,000**	NA	**290,000**	**308,000**	**699,000**	**157,000**	**183,000**	**260,000**	**160,000**
Sulfide	NE	ug/L	**6,000**	NA	**97,300**	**14,400**	**1,400**	**63,200**	**63,200**	**37,600**	**53,200**
Total Organic Carbon (TOC)	NE	ug/L	NA	NA	NA	**13,700 B**	**14,400 B**	NA	NA	**17,600**	**17,600**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D1R 460-198228-2 12/05/2019	MW-27-D2 01/13/2016	MW-27-D2 06/21/2016	MW-27-D2 07/05/2017	MW-27-D2 08/27/2017	MW-27-D2 10/12/2017	MW-27-D2 07/13/2018	MW-27-D2 10/18/2018	MW-27-D2 460-181703-5 05/10/2019
Volatile Organics											
1,1 Dichloroethene	5	ug/L	1.0 U	< 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 U	< 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 U	< 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 U	< 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 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	**0.36 J**	< 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 U	< 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 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 10	< 1.0
1,2-Dibromoethane	0.0006	ug/L	1.0 U	< 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 U	< 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 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	1.0 U	< 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 U	< 50	**8.2 J**	< 10	< 10	< 10	< 40	< 50	< 5.0
2-Hexanone	50	ug/L	5.0 U	< 25	< 20	< 5.0	< 5.0	< 5.0	< 20	< 10	< 5.0
4-Methyl-2-pentanone	NE	ug/L	5.0 U	< 25	< 20	< 5.0	< 5.0	< 5.0	< 20	< 10	< 5.0
Acetone	50	ug/L	5.0 U	< 50	**38 J**	< 10	< 10	< 10	< 40	< 25	< 5.0
Benzene	1	ug/L	**6.4**	< 5.0	**160**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Bromodichloromethane	50	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Bromoform	50	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chloroethane	5	ug/L	1.0 U*	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chloroform	7	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0*
cis-1,2-Dichloroethene	5	ug/L	**0.95 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 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	1.0 U	< 5.0	**22 J**	< 1.0	< 1.0	< 1.0	< 4.0	< 5.0	< 1.0
Dibromochloromethane	50	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0*
Ethylbenzene	5	ug/L	**0.48 J**	< 5.0	**92**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	1.0 U	< 5.0	**38**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Methyl acetate	NE	ug/L	5.0 U	< 13	< 10	< 2.5	< 2.5	< 2.5	< 10	< 10	< 5.0
Methyl-t-butyl ether	10	ug/L	**39**	< 5.0	**8.1**	< 1.0	< 1.0	< 1.0	**3.4 J**	< 1.0	**7.9**
Methylcyclohexane	NE	ug/L	1.0 U	< 5.0	**26**	< 1.0	< 1.0	< 1.0	< 4.0	< 5.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	1.0 U	< 5.0	**5.7**	< 1.0	< 1.0	< 1.0	< 4.0	< 5.0	< 1.0
Styrene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Toluene	5	ug/L	**1.7**	< 5.0	**17**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D1R 460-198228-2 12/05/2019	MW-27-D2 01/13/2016	MW-27-D2 06/21/2016	MW-27-D2 07/05/2017	MW-27-D2 08/27/2017	MW-27-D2 10/12/2017	MW-27-D2 07/13/2018	MW-27-D2 10/18/2018	MW-27-D2 460-181703-5 05/10/2019
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	**3.6**	< 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 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	**0.37 J**	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	1.0 U	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**61**	< 5.0	< 4.0	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	**1.6 J**	< 10	**68**	< 2.0	< 2.0	< 2.0	< 8.0	< 3.0	< 2.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**170**	NA	NA	**130**	**100**	**81**	**140**	**130 B**	**66**
Ethane	NE	ug/L	**5.5**	NA	NA	< 75	< 83	< 170	< 330	< 170	< 170
Ethene	NE	ug/L	**40**	NA	NA	< 70	< 77	< 150	< 310	< 150	< 150
Methane	NE	ug/L	**2,600**	NA	NA	**53**	**180**	**350**	**1,500**	**1,200**	**310**
Inorganics											
Iron	300	ug/L	**1,310**	NA	**1,300**	**12,400**	**11,600**	**9,500**	**4,600**	**2,800**	**902**
Manganese	300	ug/L	**51.9**	NA	**38 B**	**550**	**1,200 B**	**1,700 B**	**340 B**	**940 B**	**197**
Sodium	20,000	ug/L	**1,920,000**	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	NA	**279 B**	NA	NA	NA	NA	NA	**NA**
Alkalinity, Total as CaCO3	NE	ug/L	**762,000**	NA	**279,000 B**	**408,000 B**	**303,000**	**374,000**	**363,000 B**	**195,000**	**599,000**
Chloride	250	mg/L	**3,800**	NA	NA	**6,330**	**9,140**	**8,290**	**7,510**	**8,300**	**4,100**
Ferric Iron	NE	mg/L	**1.3**	NA	NA	**12.4**	**11.6**	**9.1**	**4.6**	**2.8**	**0.14**
Ferrous Iron	NE	ug/L	100 U HF	NA	NA	< 100	< 100	**450 HF**	< 100	< 100	**760 HF**
Nitrogen, Nitrate as N	10,000	ug/L	**45 JB**	NA	NA	< 50	< 50	**40 J**	< 50	< 50	**29 J**
Nitrogen, Nitrite	1	mg/L	0.10 U	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050	< 0.10
Sulfate (SO4)	NE	ug/L	**200,000**	NA	**49,200**	**808,000**	**1,300,000**	**1,120,000 B**	**844,000**	**1,250,000**	**250,000**
Sulfide	NE	ug/L	**45,600**	NA	**160**	**12,800**	**16,600**	**8,800**	**10,800**	**7,200**	**24,400**
Total Organic Carbon (TOC)	NE	ug/L	**16,600**	NA	NA	**6,300 B**	**4,800 B**	**4,700 B**	NA	NA	**15,200**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D2 460-191318-10 09/14/2019	MW-27-D2 460-198228-3 12/05/2019	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
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	**0.29 J**	**0.38 J**	**0.76 J**	< 10	**0.58 J**	< 4.0	< 4.0	< 1.0	**0.69 J**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 10	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 5.0	5.0 U	**2.3 J**	< 100	< 10	< 40	< 40	< 50	< 5.0
2-Hexanone	50	ug/L	< 5.0	5.0 U	< 5.0	< 50	< 5.0	< 20	< 20	< 10	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	5.0 U	< 5.0	< 50	< 5.0	< 20	< 20	< 10	< 5.0
Acetone	50	ug/L	< 5.0	5.0 U	**45**	**280**	< 10	< 40	< 40	**9.3 J**	< 5.0
Benzene	1	ug/L	< 1.0	1.0 U	**2.1**	< 10	**8.9**	**2.7 J**	**3.7 J**	**5.6**	**2.4**
Bromodichloromethane	50	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	1.0 U	**1**	< 10	**0.40 J**	< 4.0	**4.9**	**0.47 J**	**0.34 J**
Carbon Tetrachloride	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	1.0 U*	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0*
cis-1,2-Dichloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0	< 1.0
Dibromochloromethane	50	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0*
Ethylbenzene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	**1.2**	< 4.0	< 4.0	**1.4**	**0.49 J**
Isopropylbenzene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	**0.33 J**	< 1.0
Methyl acetate	NE	ug/L	< 5.0	5.0 U	< 2.5	< 25	< 2.5	< 10	< 10	< 10	< 5.0
Methyl-t-butyl ether	10	ug/L	**9.0**	**4.9**	**6.2**	**4.7 J**	**19**	**6.6**	**4.8**	**9.5**	**7**
Methylcyclohexane	NE	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 5.0	< 1.0
Styrene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	**0.39 J**	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID: / Lab Sample ID: / Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-27-D2 460-191318-10 09/14/2019	MW-27-D2 460-198228-3 12/05/2019	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
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	1.0 U	< 1.0	< 10	< 1.0	< 4.0	< 4.0	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	2.0 U	< 2.0	< 20	< 2.0	< 8.0	< 8.0	**2.6 J**	**0.47 J**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**150**	**150**	NA	NA	**51**	**15**	**3.8 J**	**8.9 B**	**120**
Ethane	NE	ug/L	< 170	4 U	NA	NA	< 150	< 170	< 170	< 330	< 660
Ethene	NE	ug/L	< 150	3 U	NA	NA	< 140	< 150	< 150	< 310	< 620
Methane	NE	ug/L	**1,200**	**1,600**	NA	NA	**290**	**1,000**	**520**	**1,500**	**1,300**
Inorganics											
Iron	300	ug/L	**4,080**	**1,190**	**79**	NA	**3,600**	**740**	**950**	**980**	**2,480**
Manganese	300	ug/L	**272**	**174**	**68 B**	NA	**67**	**19 B**	**27 B**	**22 B**	**89**
Sodium	20,000	ug/L	**1,120,000**	**1,620,000**	NA	NA	**418,000 ^**	**1,040,000 ^**	**998,000**	**386,000**	**1,940,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	**745 B**	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**638,000**	**526,000**	**745,000 B**	NA	**457,000**	**393,000**	**196,000**	**102,000**	**667,000**
Chloride	250	mg/L	**3,500**	**3,600**	NA	NA	**3,120**	**3,310**	**1,530**	**945**	**3,300**
Ferric Iron	NE	mg/L	**3.5**	**1.1**	NA	NA	**3.6**	**0.74**	**0.95**	**0.98**	**1.9**
Ferrous Iron	NE	ug/L	**630 HF**	**120 HF**	NA	NA	< 100	< 100	< 100	< 100	**600 HF**
Nitrogen, Nitrate as N	10,000	ug/L	**26 J B**	100 U	NA	NA	< 50	< 50	< 50	**76**	< 100
Nitrogen, Nitrite	1	mg/L	**0.013 J B**	**0.011 J**	NA	NA	< 0.050	< 0.050	< 0.050	**0.044 J**	**0.016 J**
Sulfate (SO4)	NE	ug/L	**250,000**	**280,000**	**155,000**	NA	**340,000**	**349,000**	**196,000**	**231,000**	**170,000**
Sulfide	NE	ug/L	**32,200**	**22,000**	**54,400**	NA	**4,000**	**18,200**	**32,800**	**7,200**	**45,200**
Total Organic Carbon (TOC)	NE	ug/L	**12,700**	**12,000**	NA	NA	**13,000 B**	**14,400 B**	**23,900 B**	NA	**12,900 B**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

Location ID:	NYSDEC		MW-28-D1	MW-28-D1	MW-28-D2R	MW-28-D2R	MW-28-D2R	MW-28-D2R	MW-28-D2R	MW-28-D2R	MW-28-D2R
Lab Sample ID:			460-191318-1	460-198228-6							
Date Sampled:	TOGS 1.1.1	Units	09/13/2019	12/05/2019	06/24/2016	07/28/2016	07/05/2017	08/27/2017	10/11/2017	07/13/2018	10/17/2018
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,1-Dichloroethane	5	ug/L	**0.67 J**	**0.4 J**	**0.48 J**	< 1.0	< 1.0	< 4.0	**1.3**	< 4.0	< 1.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	1.0 U	**0.21 J**	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 5.0	5.0 U	< 10	< 10	< 10	< 40	< 10	< 40	< 50
2-Hexanone	50	ug/L	< 5.0	5.0 U	< 5.0	< 5.0	< 5.0	< 20	< 5.0	< 20	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	5.0 U	< 5.0	< 5.0	< 5.0	< 20	< 5.0	< 20	< 10
Acetone	50	ug/L	< 5.0	5.0 U	**3.3 J**	**4.4 J**	< 10	< 40	< 10	< 40	< 25
Benzene	1	ug/L	**9.0**	**11.0**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Bromodichloromethane	50	ug/L	< 1.0	1.0 U	< 1.0	**1.2**	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Bromoform	50	ug/L	< 1.0	1.0 U	< 1.0	**5.6**	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	1.0 U	< 1.0	**0.52 J**	**0.38 J**	< 4.0	**0.95 J**	**1.0 J**	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Chloroethane	5	ug/L	< 1.0	1.0 U*	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Chloroform	7	ug/L	< 1.0	1.0 U	< 1.0	**0.51 J**	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0
Dibromochloromethane	50	ug/L	< 1.0	1.0 U	< 1.0	**3.2**	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Ethylbenzene	5	ug/L	**1.7**	**1.1**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Isopropylbenzene	5	ug/L	**0.56 J**	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Methyl acetate	NE	ug/L	< 5.0	5.0 U	< 2.5	< 2.5	< 2.5	< 10	< 2.5	< 10	< 10
Methyl-t-butyl ether	10	ug/L	**22**	**21**	< 1.0	**0.25 J**	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Methylcyclohexane	NE	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0
Methylene chloride (Dichloromethane)	5	ug/L	**0.42 J**	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 5.0
Styrene	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Toluene	5	ug/L	< 1.0	**0.53 J**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 460-191318-1 09/13/2019	MW-28-D1 460-198228-6 12/05/2019	MW-28-D2R 06/24/2016	MW-28-D2R 07/28/2016	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
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	**0.25 J**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	1.0 U	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	**1.0**	**0.68 J**	< 1.0	< 1.0	< 1.0	< 4.0	< 1.0	< 4.0	< 1.0
Xylene (total)	5	ug/L	**2.2**	**1.9 J**	< 2.0	< 2.0	< 2.0	< 8.0	< 2.0	< 8.0	< 3.0
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**160**	**75**	NA	NA	**120**	**120**	**91**	**91**	**140 B**
Ethane	NE	ug/L	<170	**33**	NA	NA	< 7.5	< 83	< 170	< 330	< 170
Ethene	NE	ug/L	<150	**15**	NA	NA	< 7.0	< 77	< 150	< 310	< 150
Methane	NE	ug/L	**1,600**	**2,500**	NA	NA	**67**	**62**	**370**	**880**	**240**
Inorganics											
Iron	300	ug/L	**511**	**169**	**52,800**	NA	**6,800**	**6,000**	**9,300**	**5,200**	**2,200**
Manganese	300	ug/L	**63.1**	**10.4 J**	**1,100 B**	NA	**340**	**500 B**	**470 F1 B**	**190 B**	**710 B**
Sodium	20,000	ug/L	**1,970,000**	**874,000**	NA	NA	**3,810,000 ^**	**5,340,000**	**4,750,000**	**3,000,000**	**4,670,000**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	**182**	NA	NA	NA	NA	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**735,000**	**337,000**	**182,000**	NA	**334,000**	**337,000 B**	**412,000**	**468,000 B**	**333,000**
Chloride	250	mg/L	**2,900**	**1,800**	NA	NA	**9,090**	**11,300 B**	**6,670**	**4,010**	**9,820**
Ferric Iron	NE	mg/L	<0.10	0.10 U	NA	NA	**6.7**	**5.6**	**9.1**	**5.2**	**2.2**
Ferrous Iron	NE	ug/L	**560 HF**	**100 HF**	NA	NA	**92 J HF**	**420 HF**	**160 HF**	< 100	< 100
Nitrogen, Nitrate as N	10,000	ug/L	<100	**21 JB**	NA	NA	< 50	< 50	< 50	< 50	**260**
Nitrogen, Nitrite	1	mg/L	**0.014 J B**	**0.017 J**	NA	NA	< 0.050	< 0.050	< 0.050	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**81,000**	**280,000**	**1,080,000**	NA	**1,620,000**	**1,370,000**	**938,000**	**432,000**	**1,330,000**
Sulfide	NE	ug/L	**51,400**	**1,600**	< 100	NA	**2,400**	**4,000**	**3,600**	**11,200**	**3,200**
Total Organic Carbon (TOC)	NE	ug/L	**14,800**	**17,300**	NA	NA	**4,000 B**	**4,800 B**	**4,500 B**	NA	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 460-181653-1 05/09/2019	MW-28-D2R 460-191318-2 09/13/2019	MW-28-D2R 460-198228-7 12/06/2019	MW-29-D1 01/14/2016	MW-29-D1 06/21/2016	MW-29-D1 10/26/2016	MW-29-D1 10/26/2016	MW-29-D1 07/05/2017	MW-29-D1 08/27/2017
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,1-Dichloroethane	5	ug/L	**0.67 J**	**0.79 J**	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 5.0	< 5.0	5.0 U	< 50	< 10	< 10	< 10	< 20	< 20
2-Hexanone	50	ug/L	< 5.0	< 5.0	5.0 U	< 25	< 5.0	< 5.0	< 5.0	< 10	< 10
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0	5.0 U	< 25	< 5.0	< 5.0	< 5.0	< 10	< 10
Acetone	50	ug/L	< 5.0	< 5.0	5.0 U	**25 J**	**9.5 J**	< 10	< 10	< 20	< 20
Benzene	1	ug/L	**0.50 J**	< 1.0	1.0 U	**81**	**6.3**	**32**	**5.5**	**9.7**	**19**
Bromodichloromethane	50	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Bromoform	50	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Carbon disulfide	60	ug/L	**0.27 J**	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	**0.21 J**	< 2.0	< 2.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Chloroethane	5	ug/L	< 1.0	< 1.0	1.0 U*	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Chloroform	7	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0*	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Cyclohexane	NE	ug/L	< 1.0	< 1.0	1.0 U	**13**	**8**	**21**	**11**	**7.6**	**12**
Dibromochloromethane	50	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0*	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0	1.0 U	**24**	**5.4**	**16**	**6.4**	**7.7**	**9.3**
Methyl acetate	NE	ug/L	< 5.0	< 5.0	5.0 U	< 13	< 2.5	< 2.5	< 2.5	< 5.0	< 5.0
Methyl-t-butyl ether	10	ug/L	< 1.0	< 1.0	1.0 U	**34**	**23**	**44**	**23**	**71**	**28**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0	1.0 U	**5.5**	**3.8**	**10**	**2.5**	**1.8 J**	**5.8**
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Styrene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Toluene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	**1**	**3.1**	**1.6**	**2.3**	**1.7 J**

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 460-181653-1 05/09/2019	MW-28-D2R 460-191318-2 09/13/2019	MW-28-D2R 460-198228-7 12/06/2019	MW-29-D1 01/14/2016	MW-29-D1 06/21/2016	MW-29-D1 10/26/2016	MW-29-D1 10/26/2016	MW-29-D1 07/05/2017	MW-29-D1 08/27/2017
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0	1.0 U	< 5.0	< 1.0	< 1.0	< 1.0	< 2.0	< 2.0
Xylene (total)	5	ug/L	< 2.0	< 2.0	2.0 U	< 10	**2**	**9.7**	**4**	**3.7 J**	**4.3**
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**42**	**160**	**160**	NA	NA	NA	NA	**180**	**150**
Ethane	NE	ug/L	< 330	<7.5	4 U	NA	NA	NA	NA	< 300	< 660
Ethene	NE	ug/L	< 310	<7.0	3 U	NA	NA	NA	NA	< 280	< 620
Methane	NE	ug/L	**730**	**620**	**310**	NA	NA	NA	NA	**680**	**11,000**
Inorganics											
Iron	300	ug/L	**569**	**450**	**463**	NA	**520**	**220 B**	< 50	**460**	**2,400**
Manganese	300	ug/L	**224**	**241**	**989**	NA	**270 B**	**250 B**	**5.2 B**	**350**	**150 B**
Sodium	20,000	ug/L	**2,850,000**	**2,700,000**	**4,430,000**	NA	NA	NA	NA	**951,000 ^**	**2,470,000 ^**
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	**567 B**	**540**	**547**	NA	NA
Alkalinity, Total as CaCO3	NE	ug/L	**385,000**	**428,000**	**349,000**	NA	**567,000 B**	**540,000**	**547,000**	**556,000**	**560,000 B**
Chloride	250	mg/L	**7,600**	**4,600**	**7,400**	NA	NA	NA	NA	**1,610**	**1,580**
Ferric Iron	NE	mg/L	**0.37**	**0.25**	**0.3**	NA	NA	NA	NA	**0**	**2.4**
Ferrous Iron	NE	ug/L	**200 HF**	**200 HF**	**160 HF**	NA	NA	NA	NA	< 100	< 100
Nitrogen, Nitrate as N	10,000	ug/L	< 100	**23 J B**	**25 JB**	NA	NA	NA	NA	< 50	< 50
Nitrogen, Nitrite	1	mg/L	**0.036 J**	**0.020 J B**	**0.015 J**	NA	NA	NA	NA	< 0.050	< 0.050
Sulfate (SO4)	NE	ug/L	**870,000**	**530,000**	**850,000**	NA	< 5000	< 5000	**1,800 J**	< 100,000	< 100,000
Sulfide	NE	ug/L	**10,900**	**6,100**	**5,000**	NA	**230**	**1,200**	< 2,000	**800 J**	**101,000**
Total Organic Carbon (TOC)	NE	ug/L	**9,400 B**	**8,800**	**6,600**	NA	NA	NA	NA	**13,500 B**	**12,900 B**

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Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 10/12/2017	MW-29-D1 07/13/2018	MW-29-D1 10/18/2018	MW-29-D1 460-181703-2 05/10/2019	MW-29-D1 460-191318-14 09/14/2019	MW-29-D1 460-198228-11 12/06/2019	MW-29-D2 480-93983-6 01/14/2016	MW-29-D2 480-102059-3 06/21/2016	MW-29-VD 480-93983-7 01/14/2016
Volatile Organics											
1,1 Dichloroethene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,1,1-Trichloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,1,2,2-Tetrachloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,1,2-Trichloroethane	1	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,1-Dichloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	**7.3**	**4.8**	< 10
1,2,4-Trichlorobenzene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 4.0	< 4.0	< 10	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,2-Dibromoethane	0.0006	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,2-Dichloroethane	0.6	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,2-Dichloropropane	1	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,3-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
1,4-Dichlorobenzene	3	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 40	< 40	< 50	< 5.0	< 5.0	5.0 U	< 10	< 10	< 100
2-Hexanone	50	ug/L	< 20	**9.1 J**	< 10	< 5.0	< 5.0	5.0 U	< 5.0	< 5.0	< 50
4-Methyl-2-pentanone	NE	ug/L	< 20	< 20	< 10	< 5.0	< 5.0	5.0 U	< 5.0	< 5.0	< 50
Acetone	50	ug/L	< 40	< 40	< 25	< 5.0	< 5.0	5.0 U	< 10	< 10	< 100
Benzene	1	ug/L	**4.3**	**5.2**	**3.7**	**9.8**	**0.67 J**	1.0 U	< 1.0	< 1.0	< 10
Bromodichloromethane	50	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Bromoform	50	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Bromomethane (Methyl bromide)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Carbon disulfide	60	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	**0.62 J**	< 10
Carbon Tetrachloride	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Chlorobenzene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Chloroethane	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U*	< 1.0	< 1.0	< 10
Chloroform	7	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Chloromethane (Methyl chloride)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0	< 10
cis-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
cis-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Cyclohexane	NE	ug/L	**5.4**	**24**	**20**	**24**	**2.8**	**0.47 J**	< 1.0	< 1.0	< 10
Dibromochloromethane	50	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0*	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Ethylbenzene	5	ug/L	< 4.0	< 4.0	**0.31 J**	**0.34 J**	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Isopropylbenzene	5	ug/L	**5.8**	**19**	**16**	**18**	**2.2**	1.0 U	< 1.0	< 1.0	< 10
Methyl acetate	NE	ug/L	< 10	< 10	< 10	< 5.0	< 5.0	5.0 U	< 2.5	< 2.5	< 25
Methyl-t-butyl ether	10	ug/L	**20**	**39**	**33**	**51**	**18**	**12**	**66**	**51**	< 10
Methylcyclohexane	NE	ug/L	**1.5 J**	**11**	**11**	**8.6**	**1.2**	1.0 U	< 1.0	< 1.0	< 10
Methylene chloride (Dichloromethane)	5	ug/L	< 4.0	< 4.0	< 5.0	< 1.0	**0.48 J**	1.0 U	< 1.0	< 1.0	< 10
Styrene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Tetrachloroethene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Toluene	5	ug/L	< 4.0	**3.0 J**	**2.8**	**2.3**	< 1.0	1.0 U	< 1.0	< 1.0	< 10

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 10/12/2017	MW-29-D1 07/13/2018	MW-29-D1 10/18/2018	MW-29-D1 460-181703-2 05/10/2019	MW-29-D1 460-191318-14 09/14/2019	MW-29-D1 460-198228-11 12/06/2019	MW-29-D2 480-93983-6 01/14/2016	MW-29-D2 480-102059-3 06/21/2016	MW-29-VD 480-93983-7 01/14/2016
Volatile Organics (cont.)											
trans-1,2-Dichloroethene	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
trans-1,3-Dichloropropene	0.4	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Trichloroethene (Trichloroethylene)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Trichlorofluoromethane (Freon 11)	5	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Vinyl chloride (Chloroethene)	2	ug/L	< 4.0	< 4.0	< 1.0	< 1.0	< 1.0	1.0 U	< 1.0	< 1.0	< 10
Xylene (total)	5	ug/L	**4.3 J**	**5.5 J**	**8.1**	**3.3**	< 2.0	2.0 U	< 2.0	< 2.0	< 20
GC Volatiles - RSK-175											
Carbon Dioxide	NE	mg/L	**140**	**180**	**210 B**	**190**	**40**	**28**	NA	NA	NA
Ethane	NE	ug/L	< 170	< 660	< 1700	< 83	<170	**1 J**	NA	NA	NA
Ethene	NE	ug/L	< 150	< 620	< 1500	< 77	<150	3 U	NA	NA	NA
Methane	NE	ug/L	**5,200**	**15,000**	**19,000**	**9,300 E**	**3,200**	**1,100**	NA	NA	NA
Inorganics											
Iron	300	ug/L	**3,400**	**1,300**	**1,500**	**1,450**	**4,370**	**673**	NA	**64**	NA
Manganese	300	ug/L	**300 B**	**340 B**	**270 B**	**470**	**58.4**	**32.1**	NA	**150 B**	NA
Sodium	20,000	ug/L	**893,000 ^**	**988,000**	**960,000**	**839,000**	**23,500**	**75,900**	NA	NA	NA
General Chemistry											
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	NA	NA	NA	NA	NA	NA	NA	**453 B**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**619,000**	**563,000 B**	**535,000**	**469,000**	**40,100**	**63,500**	NA	**453,000 B**	NA
Chloride	250	mg/L	**1,530**	**1,680**	**1,550**	**1,700**	**58**	**130**	NA	NA	NA
Ferric Iron	NE	mg/L	**3.4**	**1.3**	**1.5**	**1.4**	**4.3**	**0.67**	NA	NA	NA
Ferrous Iron	NE	ug/L	< 100	< 100	< 100	**63 J HF**	**110 HF**	100 U HF	NA	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	< 50	< 50	< 50	< 100	<100	**53 JB**	NA	NA	NA
Nitrogen, Nitrite	1	mg/L	< 0.050	< 0.050	< 0.050	**0.026 J**	**0.016 J B**	**0.036 J**	NA	NA	NA
Sulfate (SO4)	NE	ug/L	< 40,000	< 40,000	**13,600 J**	**13,000**	**6,900**	**16,000**	NA	**939,000**	NA
Sulfide	NE	ug/L	**1,200**	**1,200**	**800 J**	**1,100**	**830 J**	1,000 U	NA	**17,000**	NA
Total Organic Carbon (TOC)	NE	ug/L	**11,300 B**	NA	NA	**14,200**	**10,000**	**29,500**	NA	NA	NA

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
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 480-102059-6 06/21/2016	MW-30-D1 480-93983-3 01/14/2016
Volatile Organics				
1,1 Dichloroethene	5	ug/L	< 1.0	< 1.0
1,1,1-Trichloroethane	5	ug/L	< 1.0	< 1.0
1,1,2,2-Tetrachloroethane	5	ug/L	< 1.0	< 1.0
1,1,2-Trichloroethane	1	ug/L	< 1.0	< 1.0
1,1,2-Trichlorotrifluoroethane (Freon 113)	5	ug/L	< 1.0	< 1.0
1,1-Dichloroethane	5	ug/L	< 1.0	**1.9**
1,2,4-Trichlorobenzene	5	ug/L	< 1.0	< 1.0
1,2-Dibromo-3-chloropropane (DBCP)	0.04	ug/L	< 1.0	< 1.0
1,2-Dibromoethane	0.0006	ug/L	< 1.0	< 1.0
1,2-Dichlorobenzene (o-Dichlorobenzene)	3	ug/L	< 1.0	< 1.0
1,2-Dichloroethane	0.6	ug/L	< 1.0	< 1.0
1,2-Dichloropropane	1	ug/L	< 1.0	< 1.0
1,3-Dichlorobenzene	3	ug/L	< 1.0	< 1.0
1,4-Dichlorobenzene	3	ug/L	< 1.0	< 1.0
2-Butanone (Methyl ethyl ketone)	50	ug/L	< 10	< 10
2-Hexanone	50	ug/L	< 5.0	< 5.0
4-Methyl-2-pentanone	NE	ug/L	< 5.0	< 5.0
Acetone	50	ug/L	< 10	< 10
Benzene	1	ug/L	< 1.0	**1.1**
Bromodichloromethane	50	ug/L	< 1.0	< 1.0
Bromoform	50	ug/L	< 1.0	< 1.0
Bromomethane (Methyl bromide)	5	ug/L	< 1.0	< 1.0
Carbon disulfide	60	ug/L	< 1.0	< 1.0
Carbon Tetrachloride	5	ug/L	< 1.0	< 1.0
Chlorobenzene	5	ug/L	< 1.0	< 1.0
Chloroethane	5	ug/L	< 1.0	< 1.0
Chloroform	7	ug/L	< 1.0	< 1.0
Chloromethane (Methyl chloride)	5	ug/L	< 1.0	< 1.0
cis-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0
cis-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0
Cyclohexane	NE	ug/L	< 1.0	**0.39 J**
Dibromochloromethane	50	ug/L	< 1.0	< 1.0
Dichlorodifluoromethane (Freon 12)	5	ug/L	< 1.0	< 1.0
Ethylbenzene	5	ug/L	< 1.0	< 1.0
Isopropylbenzene	5	ug/L	< 1.0	< 1.0
Methyl acetate	NE	ug/L	< 2.5	< 2.5
Methyl-t-butyl ether	10	ug/L	**0.42 J**	**100 E**
Methylcyclohexane	NE	ug/L	< 1.0	< 1.0
Methylene chloride (Dichloromethane)	5	ug/L	< 1.0	< 1.0
Styrene	5	ug/L	< 1.0	< 1.0
Tetrachloroethene	5	ug/L	< 1.0	< 1.0
Toluene	5	ug/L	< 1.0	< 1.0

See Notes on Page 53.

Table 3
Summary of Historical Groundwater Analytical Results - VOCs - 2016 through 2019
Chevron Facility #6518040
Former Gulf Oil Terminal
Oceanside, Township of Hempstead, New York

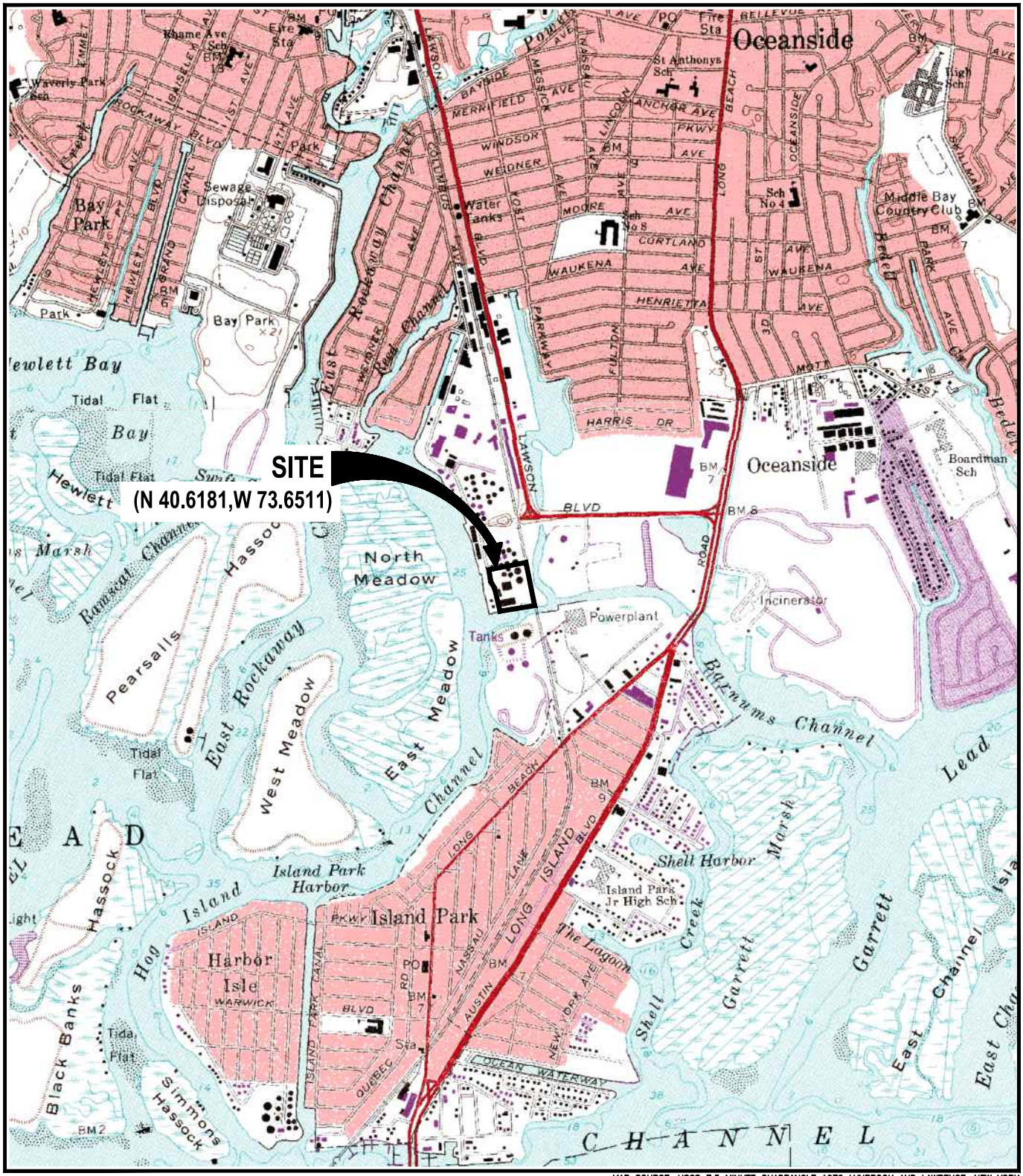
Location ID: Lab Sample ID: Date Sampled:	NYSDEC TOGS 1.1.1	Units	MW-29-VD 480-102059-6 06/21/2016	MW-30-D1 480-93983-3 01/14/2016
Volatile Organics (cont.)				
trans-1,2-Dichloroethene	5	ug/L	< 1.0	< 1.0
trans-1,3-Dichloropropene	0.4	ug/L	< 1.0	< 1.0
Trichloroethene (Trichloroethylene)	5	ug/L	< 1.0	< 1.0
Trichlorofluoromethane (Freon 11)	5	ug/L	< 1.0	< 1.0
Vinyl chloride (Chloroethene)	2	ug/L	< 1.0	< 1.0
Xylene (total)	5	ug/L	< 2.0	< 2.0
GC Volatiles - RSK-175				
Carbon Dioxide	NE	mg/L	NA	NA
Ethane	NE	ug/L	NA	NA
Ethene	NE	ug/L	NA	NA
Methane	NE	ug/L	NA	NA
Inorganics				
Iron	300	ug/L	**390**	NA
Manganese	300	ug/L	**62 B**	NA
Sodium	20,000	ug/L	NA	NA
General Chemistry				
Alkalinity, Bicarbonate as CaCO3	NE	mg/L	**229 B**	NA
Alkalinity, Total as CaCO3	NE	ug/L	**229,000 B**	NA
Chloride	250	mg/L	NA	NA
Ferric Iron	NE	mg/L	NA	NA
Ferrous Iron	NE	ug/L	NA	NA
Nitrogen, Nitrate as N	10,000	ug/L	NA	NA
Nitrogen, Nitrite	1	mg/L	NA	NA
Sulfate (SO4)	NE	ug/L	**1,890,000**	NA
Sulfide	NE	ug/L	< 100	NA
Total Organic Carbon (TOC)	NE	ug/L	NA	NA

See Notes on Page 53.

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.
H = Sample was prepped or analyzed beyond the specified holding time.
B = Compound was found in the blank and sample.
F1 = Matrix spike and/or matrix spike duplicate recovery was outside acceptance limits.
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

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

COSTCO BUILDING

BUILDING

HAMPTON ROAD

RAILROAD TRACKS

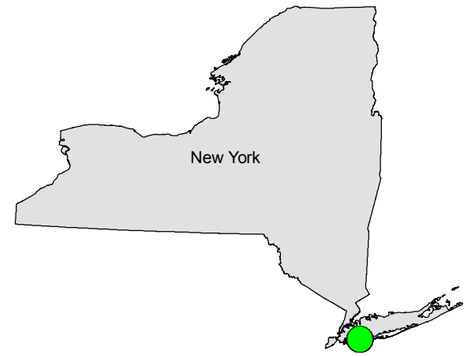
PARKING LOT

BARNUM ISLAND CHANNEL

COSTCO SERVICE STATION

OW-2-D1 0.26
MW-24-VDR
MW-24-D2
MW-24-D1R 0.32
MW-23-D1R 0.26
MW-23-D2R
AMW-13-D1 -0.01
AMW-13-D2
AMW-13-VD
AMW-15-D3
AMW-15-VD
AMW-15-D2
AMW-15-D1 0.18
MW-26-D1 -0.06
MW-26-D2
MW-26-VD
AMW-14-D1 -0.02
AMW-14-VD
AMW-14-D2
MW-27-D1R 0.05
MW-27-D2
AMW-3
MW-32D 0.11
MW-28-D1 -0.08
MW-28-D2R
MW-31-D2R
MW-31-D1R -0.02
MW-18R
MW-30-VD
MW-30-D2
MW-30-D1 0.28
MW-29-VD
MW-29-D1 0.03
MW-29-D2
AMW-7

0.30
0.20
0.00
0.20
0.10



SITE LOCATION

LEGEND:

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

0 70 140 Feet

GRAPHIC SCALE

NOTES:

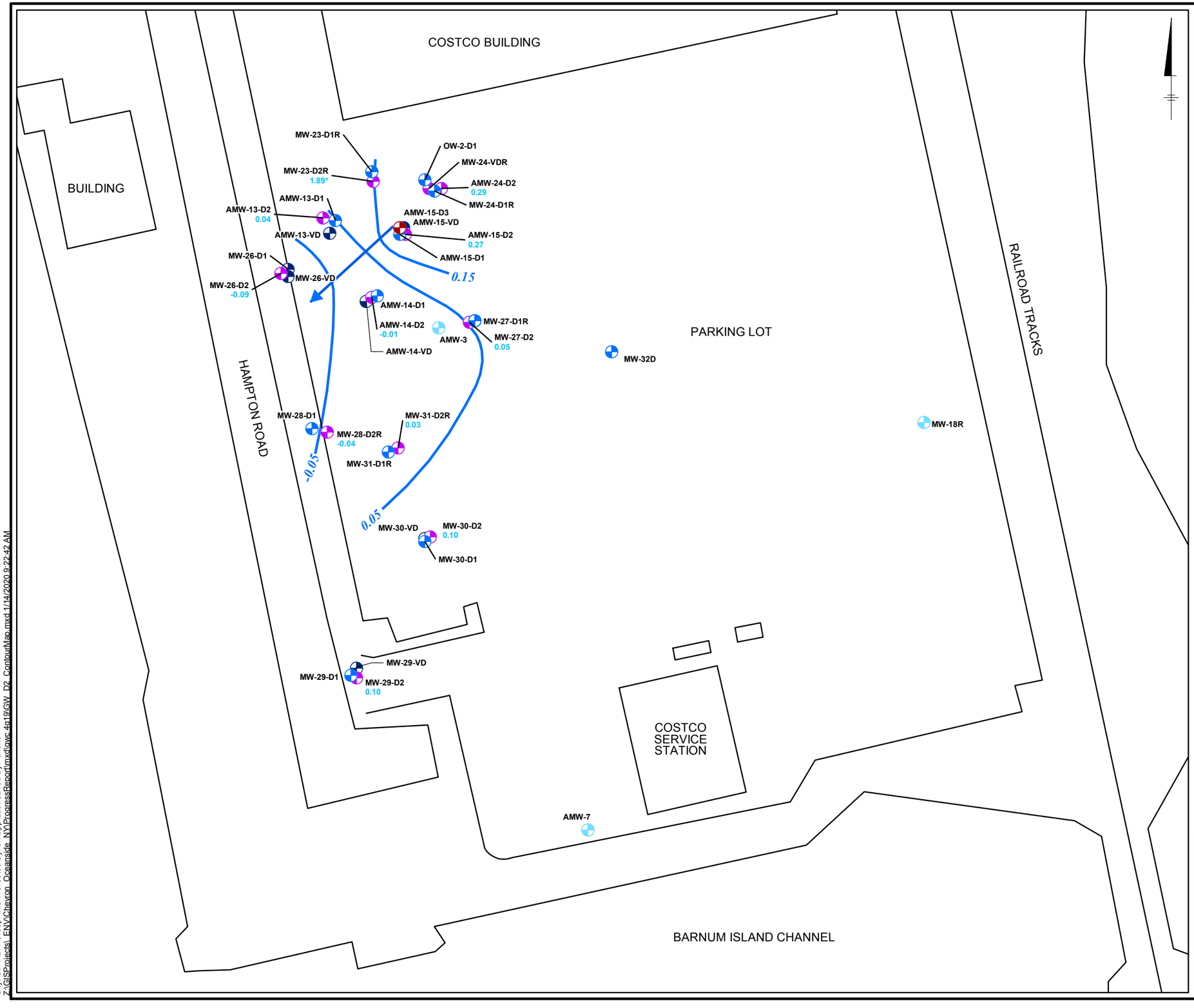
1. 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.
2. NAVD 88 = NORTH AMERICA VERTICAL DATUM OF 1988.

CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

D1 HORIZON GROUNDWATER CONTOUR MAP DECEMBER 4, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 3



NOTE:

1. 2017 IMAGERY OBTAINED FROM GOOGLE EARTH.

CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

D2 HORIZON GROUNDWATER CONTOUR MAP DECEMBER 4, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 4

COSTCO BUILDING

BUILDING

HAMPTON ROAD

RAILROAD TRACKS

PARKING LOT

COSTCO SERVICE STATION

BARNUM ISLAND CHANNEL

MW-23-D1R
MW-23-D2R
OW-2-D1
MW-24-VDR
0.98
MW-24-D2
MW-24-D1R
AMW-13-D2
AMW-13-D1
AMW-15-D3
AMW-15-VD
0.57
AMW-15-D2
AMW-15-D1
AMW-13-VD
0.44
MW-26-D1
MW-26-D2
MW-26-VD
0.55
AMW-14-D1
AMW-14-D2
AMW-14-VD
0.14*
MW-27-D1R
MW-27-D2
AMW-3
MW-32D
MW-18R
MW-31-D2R
MW-28-D1
MW-28-D2R
MW-31-D1R
MW-30-VD
0.72
MW-30-D2
MW-30-D1
MW-29-VD
0.01*
MW-29-D1
MW-29-D2
AMW-7

0.70
0.90
0.50
0.70

SITE LOCATION

LEGEND:

- SHALLOW FILL UNIT MONITORING WELLS
- D1 HORIZON MONITORING WELLS
- D2 HORIZON MONITORING WELLS
- D3 HORIZON MONITORING WELLS
- VD HORIZON MONITORING WELLS
- FLOW DIRECTION
- 0.98 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

NOTE:
1. NAVD 88 = NORTH AMERICA VERTICAL DATUM OF 1988

CHEVRON FACILITY 6518040
3705 HAMPTON RD
OCEANSIDE, NY

VD HORIZON GROUNDWATER CONTOUR MAP DECEMBER 4, 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\owc 4q19\GW_VD_ContourMap.mxd 2/20/2020 12:03:17 PM

Sample ID	MW-23-D1R
Sample Date	12/5/2019
Benzene	1.4
Ethylbenzene	1.0 U
Methyl-t-butyl ether	83
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	MW-23-D2R
Sample Date	12/5/2019
Benzene	1.8
Ethylbenzene	1.0 U
Methyl-t-butyl ether	14
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	AMW-14-D1
Sample Date	12/5/2019
Benzene	1.8
Ethylbenzene	1.5
Methyl-t-butyl ether	94
trans-1,2-Dichloroethene	9.0
Vinyl chloride (Chloroethene)	22
Xylene (total)	1.8 J

Sample ID	MW-26-D1
Sample Date	12/5/2019
Benzene	6.2
Ethylbenzene	1.2
Methyl-t-butyl ether	77
trans-1,2-Dichloroethene	0.74 J
Vinyl chloride (Chloroethene)	12
Xylene (total)	2.0 U

Sample ID	MW-26-D2
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	29
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	AMW-14-VD
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	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	AMW-14-D2
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	29
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	0.33 J
Xylene (total)	2.0 U

Sample ID	MW-28-D1
Sample Date	12/5/2019
Benzene	11
Ethylbenzene	1.1
Methyl-t-butyl ether	21
trans-1,2-Dichloroethene	0.25 J
Vinyl chloride (Chloroethene)	0.68 J
Xylene (total)	1.9 J

Sample ID	MW-28-D2R
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	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	MW-24-VDR
Sample Date	12/5/2019
Benzene	7.2
Ethylbenzene	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	MW-24-D1R
Sample Date	12/5/2019
Benzene	5.7 [11]
Ethylbenzene	2.4 [7.2]
Methyl-t-butyl ether	180 [210]
trans-1,2-Dichloroethene	7.0 [16]
Vinyl chloride (Chloroethene)	3.4 [5.4]
Xylene (total)	11 [29]

Sample ID	MW-24-D2
Sample Date	12/5/2019
Benzene	1.4
Ethylbenzene	1.0 U
Methyl-t-butyl ether	13
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	AMW-15-D3
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	7.7
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	AMW-15-VD
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	1.1
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	MW-27-D1R
Sample Date	12/5/2019
Benzene	6.4
Ethylbenzene	0.48 J
Methyl-t-butyl ether	39
trans-1,2-Dichloroethene	3.6
Vinyl chloride (Chloroethene)	61
Xylene (total)	1.6 J

Sample ID	MW-18R
Sample Date	12/5/2019
Benzene	74
Ethylbenzene	1.6
Methyl-t-butyl ether	14
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	5.2

Sample ID	AMW-15-D2
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	96
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	MW-27-D2
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	4.9
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	AMW-15-D1
Sample Date	12/5/2019
Benzene	6.6
Ethylbenzene	2.8
Methyl-t-butyl ether	120
trans-1,2-Dichloroethene	7.1
Vinyl chloride (Chloroethene)	2.2
Xylene (total)	5.8

Sample ID	MW-29-D1
Sample Date	12/5/2019
Benzene	1.0 U
Ethylbenzene	1.0 U
Methyl-t-butyl ether	12
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	2.0 U

Sample ID	AMW-7R
Sample Date	12/5/2019
Benzene	0.89 J
Ethylbenzene	0.49 J
Methyl-t-butyl ether	1.0 U
trans-1,2-Dichloroethene	1.0 U
Vinyl chloride (Chloroethene)	1.0 U
Xylene (total)	0.73 J

MW-23-D1R
MW-23-D2R
QW-2-D1
MW-24-VDR
MW-24-D1
MW-24-D2
AMW-13-D2
AMW-13-D1
AMW-15-D3
AMW-13-VD
AMW-15-D1
AMW-15-D2
AMW-15-VD
MW-25-D3
MW-25-D2
MW-25-VD
MW-25-D1
MW-26-D1
MW-26-D2
MW-26-VD
AMW-14-VD
AMW-14-D1
AMW-14-D2
AMW-3
MW-27-D2
MW-27-D1R
MW-32D
MW-18R
MW-28-D1
MW-28-D2R
MW-31-D2R
MW-31-D1R
MW-30-VD
MW-30-D2
MW-30-D1
MW-29-VD
MW-29-D1
MW-29-D2
AMW-7R

0 70 140 Feet
GRAPHIC SCALE

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
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 and greater than or equal to the Method Detection Limit 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 DECEMBER 4-5, 2019

ARCADIS Design & Consultancy for natural and built assets

FIGURE 6

City: SYR Div/Group: IMDV Created By: J.Rapp Last Saved By: akens
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ATTACHMENT 1

Groundwater Gauging and Sampling Logs

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)	Depth to Bottom (ft btoc)
AMW-3	12-4-19	2	12.42	9 05	6.63	12.40
AMW-13-D1		2	34 01	9 87	9.15	32.90
AMW-13-D2		2	43.95	9 76	9.80	43.70
AMW-13-VD		2	71 82	9 77	9.33	70.15
OW-2-D1		2	33.95	9.94	9.63	33.55
MW-26-VD		2	68.25	9 99	9.44	67.17
MW-29-D2		2	39.82	5 38	5.08	37.95
MW-29-VD		2	67 22	5 27	5.16	67.17
MW-30-D1		2	30	8 74	8.46	29.91
MW-30-D2		2	46 63	8.72	8.62	40.14
MW-30-VD		4	83 40	8 70	7.98	82.82
MW-31-D1R		2	30 04	8 39	8.41	29.96
MW-31-D2R		2	45.15	8 35	8.32	45.11
MW-32D	12-4-19	2	37.45	8 85	8.74	36.59
MW-27-D2		2	46.97	9 09	9.04	46.91
MW-28-D2R		2	46 69	8 40	8.44	45.54
MW-24-D2		2	42.20	10 00	9.71	41.31
MW-24-VDR		2	73 98	9 72	8.74	73.13
AMW-15-VD		2	72 15	9.82	9.25	71.31
AMW-7R		2	14 42	9 95	8.04	14.42
AMW-14-VD		2	75 61	9.25	9.11	75.31
AMW-14-D2		2	43 17	9 37	9.32	43.20
MW-28-D1		2	30 38	8 25	8.33	31.11
MW-26-D2		2	43 76	9.40	9.44	43.77
MW-23-D2R		2	44 63	10 52	8.63	44.63
AMW-15-D2		2	36 2	9 71	9.44	41.35
AMW-15-D3		2	48 6	9 81	9.57	45.69
MW-23-D1R		2	25 78	9 84	9.58	25.30
AMW-15-D1		2	36.2	9.74	9.56	35.80
MW-27-D1R		2	32.99	9.01	8.96	33.01
MW-26-D1		2	28 8	9 95	10.81	28.80
MW-29-D1		2	23 45	5.21	5.18	24.1
MW-18R	12-4-19	2	10 17	7.98	1.70	9.75
AMW-14-D1		2	33 15	9.38	9.40	33.20
MW-24-D1R		2	32 23	9 82	9.50	32.25

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 highlighted wells

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

Measure DTB after sampling

ARCADIS Design & Consultancy for natural and built assets

Chevron Oceanside

Oceanside New York

Date: 12-5-17 / 12-6-17

Technician: Felix Cuevas / Blake Sundquist

Well ID	Time	pH	Temp (deg C)	Cond (Ms/cm3)	DO (mg/L)	ORP (mV)	Notes
MW-24D2	0000	6.93	16.57	9.734	1.71	-337	
MW-24D1R	0030	7.34	16.46	7.285	0.17	-342	
MW-24VDR	0115	7.78	17.47	0.327	4.73	-64.5	
AMW-15D2	0135	8.15	18.14	0.544	2.34	-105.8	
AMW-15VD	0150	7.96	18.02	1.337	0.39	-15.4	
AMW-15D3	0210	12.11	17.95	3.952	0.10	-532	
AMW-15D1	0235	7.24	18.24	6.001	0.13	-254.7	
AMW-14VD	0255	7.69	17.00	7.736	0.46	-145	
AMW-14D1	0315	7.24	17.46	2.630	1.44	-143.2	
AMW-14D2	0335	10.41	16.47	1.871	0.44	-225.0	
MW-18R	2045	6.6[illegible]	15.[illegible]	3.426	1.77	-265	
MW-27D1R	2115	7.96	10.[illegible]	8.403	0.76	-213	
MW-27D2	2145	7.21	12.87	1.921	0.50	-120	
~~MW-23D2R~~	~~2230~~	~~8.01~~	~~17.46~~	~~2.115~~	~~3.20~~	~~-119~~	
MW-23D1R	2300	8.01	17.46	2.115	3.20	-119	
MW-23D2R	2230	7.37	16.22	8.374	2.00	-146	
MW-25D1	2330	7.75	15.81	4.930	1.64	-76	
MW-28D2R	0020	7.55	16.02	2.450	2.50	-40	
MW-26D2	0045	7.60	15.82	11.99	1.35	-323	
MW-26D1	0110	7.25	16.75	7.311	0.54	-320	
AMW-7R	0140	7.54	17.77	1.273	2.31	-279	
MW-29D1	0205	6.92	15.71	0.533	0.54	-134	

12-5-17

12-6-17

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: 460-198100-1
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:
12/19/2019 5:03:13 PM
Alexander Gilbert, Project Management Assistant I
alexander.gilbert@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: 460-198100-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U	Indicates the analyte was analyzed for but not detected.

GC VOA

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

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
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: 460-198100-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative
460-198100-1

Comments
No additional comments.

Receipt
The samples were received on 12/5/2019 5:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 3.0º C and 3.3º C.

Receipt Exceptions
The HCl preserved vials do not have a chemical lot sticker: AMW-15D2-W-20191205 (460-198100-4)

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) associated with batch 460-662282 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane, Chloroethane and Chloromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260C: The laboratory control sample (LCS) for analytical batch 460-662282 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) analyzed in batch 460-662383 was outside the method criteria for the following analyte(s): Bromomethane (biased low); Chloroethane and Chloromethane (biased 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 8260C: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for analytical batch 460-662383 recovered outside control limits for the following analyte: Chloroethane. This analyte was biased high in the LCS /LCSD and was not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 460-663467 recovered above the upper control limit for Chloromethane and Chloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

Method 8260C: The laboratory control sample (LCS) for analytical batch 460-663467 recovered outside control limits for the following analytes: Chloroethane and Chloromethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The laboratory control sample (LCS) for analytical batch 460-663546 recovered outside control limits for the following analytes: Chloromethane and Chloroethane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260C: The continuing calibration verification (CCV) associated with batch 460-663546 recovered above the upper control limit for Dichlorodifluoromethane, Chloromethane and Chloroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported.

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

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

GC Semi VOA
Method 300.0: The following samples were diluted to bring the concentration of Sulfate within the calibration range: MW-24D1R-W-20191205 (460-198100-2), AMW-15D3-W-20191205 (460-198100-6) and AMW-15D1-W-20191205 (460-198100-7).

Job ID: 460-198100-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

Elevated reporting limits (RLs) are provided.

Method 300.0: The following samples were diluted to bring the concentration of Chloride within the calibration range: MW-24VDR-W-20191205 (460-198100-3), AMW-15VD-W-20191205 (460-198100-5), AMW-15D1-W-20191205 (460-198100-7) and AMW-14VD-W-20191205 (460-198100-8). Elevated reporting limits (RLs) are provided.

Method 300.0: The following samples were diluted to bring the concentration of Sulfate within the calibration range: MW-24D2-W-20191205 (460-198100-1), MW-24VDR-W-20191205 (460-198100-3), AMW-15D2-W-20191205 (460-198100-4), AMW-15VD-W-20191205 (460-198100-5), AMW-14VD-W-20191205 (460-198100-8), AMW-14D1-W-20191205 (460-198100-9), AMW-14D2-W-20191205 (460-198100-10) and BD-W-20191205 (460-198100-11). Elevated reporting limits (RLs) are provided.

Method 300.0: The following samples were diluted to bring the concentration of Chloride within the calibration range: MW-24D2-W-20191205 (460-198100-1), MW-24D1R-W-20191205 (460-198100-2), AMW-15D2-W-20191205 (460-198100-4), AMW-15D3-W-20191205 (460-198100-6), AMW-14D1-W-20191205 (460-198100-9), AMW-14D2-W-20191205 (460-198100-10) and BD-W-20191205 (460-198100-11). 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
Methods 353.2, SM 4500 NO3 F: The method blank for analytical batch 460-660349 contained Nitrate Nitrite Nitrate 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: 460-198100-1

Client Sample ID: MW-24D2-W-20191205 — Lab Sample ID: 460-198100-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.2		5.0	4.4	ug/L	1		8260C	Total/NA
Benzene	1.4		1.0	0.20	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	13		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	26000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	1.5	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	0.57	J	3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	270		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	550		25	2.9	mg/L	210		300.0	Total/NA
Sulfate	55		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	2090		150	34.2	ug/L	1		6010D	Total/NA
Manganese	58.7		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	366000		5000	460	ug/L	1		6010D	Total/NA
Total Organic Carbon	59.7		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	190		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	0.18	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	12.1		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-24D1R-W-20191205 — Lab Sample ID: 460-198100-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.36	J	1.0	0.26	ug/L	1		8260C	Total/NA
Acetone	9.4		5.0	4.4	ug/L	1		8260C	Total/NA
Benzene	5.7		1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	2.4		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	180		1.0	0.47	ug/L	1		8260C	Total/NA
Toluene	1.4		1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	7.0		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	3.4		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	11		2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	30000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	320		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	88		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	2400		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	1900		94	11	mg/L	780		300.0	Total/NA
Sulfate	350		30	17	mg/L	50		300.0	Total/NA
Iron	1540		150	34.2	ug/L	1		6010D	Total/NA
Manganese	40.6		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1340000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate as N	0.15	B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrite as N	0.17	B	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	50.9		20.0	11.5	mg/L	20		9060A	Total/NA
Alkalinity, Total	301		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.3		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.29	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	22.4		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-24VDR-W-20191205 — Lab Sample ID: 460-198100-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.5		5.0	4.4	ug/L	1		8260C	Total/NA
Benzene	7.2		1.0	0.20	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-24VDR-W-20191205 (Continued) — Lab Sample ID: 460-198100-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	3800	J	5000	1800	ug/L	1		RSK-175	Total/NA
Ethene	1.7	J	3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	28		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	17000		600	70	mg/L	5000		300.0	Total/NA
Sulfate	3100		600	350	mg/L	1000		300.0	Total/NA
Iron	36500		150	34.2	ug/L	1		6010D	Total/NA
Manganese	694		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	9030000		250000	23000	ug/L	50		6010D	Total/NA
Total Organic Carbon	4.8		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	446		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	36.5		0.10	0.10	mg/L	1		SM 3500	Total/NA

Client Sample ID: AMW-15D2-W-20191205 — Lab Sample ID: 460-198100-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	96		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	120000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	1.3	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	800		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	4000		120	14	mg/L	1000		300.0	Total/NA
Sulfate	280		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	739		150	34.2	ug/L	1		6010D	Total/NA
Manganese	62.7		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1870000		50000	4600	ug/L	10		6010D	Total/NA
Total Organic Carbon	15.8		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	636		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.46		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.28	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	58.8		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-15VD-W-20191205 — Lab Sample ID: 460-198100-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	1.1		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	22000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	51		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	17000		600	70	mg/L	5000		300.0	Total/NA
Sulfate	2800		600	350	mg/L	1000		300.0	Total/NA
Iron	5150		150	34.2	ug/L	1		6010D	Total/NA
Manganese	220		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	6360000		250000	23000	ug/L	50		6010D	Total/NA
Nitrite as N	0.019	J B	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	7.7		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	478		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	5.0		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.13	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA

Client Sample ID: AMW-15D3-W-20191205 — Lab Sample ID: 460-198100-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	7.7		1.0	0.47	ug/L	1		8260C	Total/NA
Methylene Chloride	0.32	J	1.0	0.32	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMW-15D3-W-20191205 (Continued) — Lab Sample ID: 460-198100-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	100000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1400		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	5300		120	14	mg/L	1000		300.0	Total/NA
Sulfate	470		30	17	mg/L	50		300.0	Total/NA
Iron	349		150	34.2	ug/L	1		6010D	Total/NA
Manganese	97.4		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1550000		50000	4600	ug/L	10		6010D	Total/NA
Total Organic Carbon	12.3		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	594		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.35		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	58.8		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-15D1-W-20191205 — Lab Sample ID: 460-198100-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.87	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	6.6		1.0	0.20	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.63	J	1.0	0.22	ug/L	1		8260C	Total/NA
Cyclohexane	0.77	J	1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	2.8		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	0.63	J	1.0	0.26	ug/L	1		8260C	Total/NA
Methylene Chloride	0.41	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	0.43	J	1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	7.1		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	2.2		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	5.8		2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	39000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	490		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	550		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	6200		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	2000		84	9.8	mg/L	700		300.0	Total/NA
Sulfate	180		60	35	mg/L	100		300.0	Total/NA
Iron	3550		150	34.2	ug/L	1		6010D	Total/NA
Manganese	243		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1200000		50000	4600	ug/L	10		6010D	Total/NA
Total Organic Carbon	40.8		10.0	5.8	mg/L	10		9060A	Total/NA
Alkalinity, Total	424		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	3.2		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.34	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	30.7		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-14VD-W-20191205 — Lab Sample ID: 460-198100-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloroethane	0.45	J	1.0	0.43	ug/L	1		8260C	Total/NA
Carbon dioxide	130000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	33		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	17000		600	70	mg/L	5000		300.0	Total/NA
Sulfate	2800		600	350	mg/L	1000		300.0	Total/NA
Iron	18800		150	34.2	ug/L	1		6010D	Total/NA
Manganese	432		15.0	0.99	ug/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AMW-14VD-W-20191205 (Continued) — Lab Sample ID: 460-198100-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	8960000		250000	23000	ug/L	50		6010D	Total/NA
Nitrite as N	0.020	J B	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	9.3		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	493		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	18.7		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.13	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	1.2		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-14D1-W-20191205 — Lab Sample ID: 460-198100-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.36	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	1.8		1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	1.5		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	94		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.74	J	1.0	0.26	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	9.0		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.44	J	1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	22		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	1.8	J	2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	160000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	13		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	210		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	3800		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	2100		110	12	mg/L	880		300.0	Total/NA
Sulfate	130		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	6940		150	34.2	ug/L	1		6010D	Total/NA
Manganese	59.0		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1100000		50000	4600	ug/L	10		6010D	Total/NA
Total Organic Carbon	21.1		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	582		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	6.9		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	62.6		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-14D2-W-20191205 — Lab Sample ID: 460-198100-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	29		1.0	0.47	ug/L	1		8260C	Total/NA
Vinyl chloride	0.33	J	1.0	0.17	ug/L	1		8260C	Total/NA
Carbon dioxide	170000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	0.74	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	2200		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	4200		120	14	mg/L	1000		300.0	Total/NA
Sulfate	260		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	6830		150	34.2	ug/L	1		6010D	Total/NA
Manganese	135		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2380000		100000	9200	ug/L	20		6010D	Total/NA
Total Organic Carbon	18.3		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	727		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	6.5		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.29	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	51.2		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: 460-198100-1

Client Sample ID: BD-W-20191205 — Lab Sample ID: 460-198100-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.71	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	11		1.0	0.20	ug/L	1		8260C	Total/NA
Cyclohexane	0.99	J	1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	7.2		1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.86	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	210		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.56	J	1.0	0.26	ug/L	1		8260C	Total/NA
Toluene	2.3		1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	16		1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	5.4		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	29		2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	60000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	880		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	280		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	8400		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	2000		100	12	mg/L	840		300.0	Total/NA
Sulfate	130		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	1410		150	34.2	ug/L	1		6010D	Total/NA
Manganese	38.3		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1170000		50000	4600	ug/L	10		6010D	Total/NA
Total Organic Carbon	25.9		10.0	5.8	mg/L	10		9060A	Total/NA
Alkalinity, Total	514		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.3		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.11	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	92.8		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: TRIP BLANK-W-20191205 — Lab Sample ID: 460-198100-12

No Detections.

This Detection Summary does not include radiochemical test results.

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

Job ID: 460-198100-1

Client Sample ID: MW-24D2-W-20191205

Date Collected: 12/05/19 00:00
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-1

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			12/14/19 11:14	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 11:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 11:14	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 11:14	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 11:14	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 11:14	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 11:14	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 11:14	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 11:14	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 11:14	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 11:14	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 11:14	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 11:14	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 11:14	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 11:14	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 11:14	1
Acetone	**5.2**		5.0	4.4	ug/L			12/14/19 11:14	1
Benzene	**1.4**		1.0	0.20	ug/L			12/14/19 11:14	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 11:14	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 11:14	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 11:14	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 11:14	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 11:14	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 11:14	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 11:14	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 11:14	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 11:14	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 11:14	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 11:14	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 11:14	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 11:14	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 11:14	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 11:14	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 11:14	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 11:14	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 11:14	1
Methyl tert-butyl ether	**13**		1.0	0.47	ug/L			12/14/19 11:14	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 11:14	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 11:14	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 11:14	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 11:14	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 11:14	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 11:14	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 11:14	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 11:14	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 11:14	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 11:14	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 11:14	1

Client Sample ID: MW-24D2-W-20191205

Lab Sample ID: 460-198100-1

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*12/14/19 11:14*	*1*
4-Bromofluorobenzene	*84*		*77 - 124*		*12/14/19 11:14*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*12/14/19 11:14*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/14/19 11:14*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**26000**		5000	1800	ug/L			12/07/19 21:02	1
Ethane	**1.5**	**J**	4.0	0.71	ug/L			12/09/19 17:58	1
Ethene	**0.57**	**J**	3.0	0.53	ug/L			12/09/19 17:58	1
Methane	**270**		2.0	0.56	ug/L			12/09/19 17:58	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**550**		25	2.9	mg/L			12/10/19 04:02	210
Sulfate	**55**		6.0	3.5	mg/L			12/09/19 20:44	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2090**		150	34.2	ug/L		12/06/19 23:16	12/07/19 15:50	1
Manganese	**58.7**		15.0	0.99	ug/L		12/06/19 23:16	12/07/19 15:50	1
Sodium	**366000**		5000	460	ug/L		12/06/19 23:16	12/07/19 15:50	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:00	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:00	1
Total Organic Carbon	**59.7**		1.0	0.58	mg/L			12/07/19 05:42	1
Ferrous Iron	**0.18**	**HF**	0.10	0.099	mg/L			12/11/19 09:01	1
Sulfide	**12.1**		1.0	0.58	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**190**		5.0	5.0	mg/L			12/11/19 15:44	1
Ferric Iron	**1.9**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: MW-24D1R-W-20191205

Lab Sample ID: 460-198100-2

Date Collected: 12/05/19 00:30

Matrix: Water

Date Received: 12/05/19 17:30

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			12/14/19 11:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 11:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 11:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 11:38	1
1,1-Dichloroethane	**0.36**	**J**	1.0	0.26	ug/L			12/14/19 11:38	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 11:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 11:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 11:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 11:38	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 11:38	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 11:38	1

Client Sample ID: MW-24D1R-W-20191205
Date Collected: 12/05/19 00:30
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-2
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			12/14/19 11:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 11:38	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 11:38	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 11:38	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 11:38	1
Acetone	**9.4**		5.0	4.4	ug/L			12/14/19 11:38	1
Benzene	**5.7**		1.0	0.20	ug/L			12/14/19 11:38	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 11:38	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 11:38	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 11:38	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 11:38	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 11:38	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 11:38	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 11:38	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 11:38	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 11:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 11:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 11:38	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 11:38	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 11:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 11:38	1
Ethylbenzene	**2.4**		1.0	0.30	ug/L			12/14/19 11:38	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 11:38	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 11:38	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 11:38	1
Methyl tert-butyl ether	**180**		1.0	0.47	ug/L			12/14/19 11:38	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 11:38	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 11:38	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 11:38	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 11:38	1
Toluene	**1.4**		1.0	0.38	ug/L			12/14/19 11:38	1
trans-1,2-Dichloroethene	**7.0**		1.0	0.24	ug/L			12/14/19 11:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 11:38	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 11:38	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 11:38	1
Vinyl chloride	**3.4**		1.0	0.17	ug/L			12/14/19 11:38	1
Xylenes, Total	**11**		2.0	0.65	ug/L			12/14/19 11:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*12/14/19 11:38*	*1*
4-Bromofluorobenzene	*85*		*77 - 124*		*12/14/19 11:38*	*1*
Dibromofluoromethane (Surr)	*98*		*72 - 131*		*12/14/19 11:38*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/14/19 11:38*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**30000**		5000	1800	ug/L			12/07/19 21:11	1
Ethane	**320**		4.0	0.71	ug/L			12/09/19 18:07	1
Ethene	**88**		3.0	0.53	ug/L			12/09/19 18:07	1
Methane	**2400**		2.0	0.56	ug/L			12/09/19 18:07	1

Client Sample ID: MW-24D1R-W-20191205

Lab Sample ID: 460-198100-2

Date Collected: 12/05/19 00:30
Matrix: Water
Date Received: 12/05/19 17:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1900		94	11	mg/L			12/10/19 04:16	780
Sulfate	350		30	17	mg/L			12/10/19 16:12	50

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	1540		150	34.2	ug/L		12/06/19 23:16	12/07/19 15:54	1
Manganese	40.6		15.0	0.99	ug/L		12/06/19 23:16	12/07/19 15:54	1
Sodium	1340000		50000	4600	ug/L		12/06/19 23:16	12/07/19 18:29	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.15	B	0.10	0.016	mg/L			12/06/19 06:02	1
Nitrite as N	0.17	B	0.10	0.010	mg/L			12/06/19 06:02	1
Total Organic Carbon	50.9		20.0	11.5	mg/L			12/07/19 06:07	20
Ferrous Iron	0.29	HF	0.10	0.099	mg/L			12/11/19 09:01	1
Sulfide	22.4		1.0	0.58	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	301		5.0	5.0	mg/L			12/11/19 15:53	1
Ferric Iron	1.3		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: MW-24VDR-W-20191205

Lab Sample ID: 460-198100-3

Date Collected: 12/05/19 01:15
Matrix: Water
Date Received: 12/05/19 17:30

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			12/19/19 01:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/19/19 01:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/19/19 01:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/19/19 01:11	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/19/19 01:11	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/19/19 01:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/19/19 01:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/19/19 01:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/19/19 01:11	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/19/19 01:11	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/19/19 01:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/19/19 01:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/19/19 01:11	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/19/19 01:11	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/19/19 01:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/19/19 01:11	1
Acetone	5.5		5.0	4.4	ug/L			12/19/19 01:11	1
Benzene	7.2		1.0	0.20	ug/L			12/19/19 01:11	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/19/19 01:11	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/19/19 01:11	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/19/19 01:11	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/19/19 01:11	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/19/19 01:11	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/19/19 01:11	1

Client Sample ID: MW-24VDR-W-20191205
Date Collected: 12/05/19 01:15
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-3
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 F1 *	1.0	0.32	ug/L			12/19/19 01:11	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/19/19 01:11	1
Chloromethane	1.0	U F1 *	1.0	0.40	ug/L			12/19/19 01:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/19/19 01:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/19/19 01:11	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/19/19 01:11	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/19/19 01:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/19/19 01:11	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/19/19 01:11	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/19/19 01:11	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/19/19 01:11	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/19/19 01:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/19/19 01:11	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/19/19 01:11	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/19/19 01:11	1
Styrene	1.0	U	1.0	0.42	ug/L			12/19/19 01:11	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/19/19 01:11	1
Toluene	1.0	U	1.0	0.38	ug/L			12/19/19 01:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/19/19 01:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/19/19 01:11	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/19/19 01:11	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/19/19 01:11	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/19/19 01:11	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/19/19 01:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*		*12/19/19 01:11*	*1*
4-Bromofluorobenzene	*86*		*77 - 124*		*12/19/19 01:11*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*12/19/19 01:11*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/19/19 01:11*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**3800**	**J**	5000	1800	ug/L			12/07/19 21:20	1
Ethane	4.0	U	4.0	0.71	ug/L			12/09/19 18:16	1
Ethene	**1.7**	**J**	3.0	0.53	ug/L			12/09/19 18:16	1
Methane	**28**		2.0	0.56	ug/L			12/09/19 18:16	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17000**		600	70	mg/L			12/10/19 16:46	5000
Sulfate	**3100**		600	350	mg/L			12/10/19 04:31	1000

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**36500**		150	34.2	ug/L		12/06/19 23:16	12/07/19 15:58	1
Manganese	**694**		15.0	0.99	ug/L		12/06/19 23:16	12/07/19 15:58	1
Sodium	**9030000**		250000	23000	ug/L		12/06/19 23:16	12/07/19 18:33	50

Client Sample ID: MW-24VDR-W-20191205

Lab Sample ID: 460-198100-3

Date Collected: 12/05/19 01:15

Matrix: Water

Date Received: 12/05/19 17:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:01	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:01	1
Total Organic Carbon	**4.8**		1.0	0.58	mg/L			12/07/19 06:30	1
Ferrous Iron	0.10	U HF	0.10	0.099	mg/L			12/11/19 09:08	1
Sulfide	1.0	U	1.0	0.58	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**446**		5.0	5.0	mg/L			12/11/19 16:03	1
Ferric Iron	**36.5**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: AMW-15D2-W-20191205

Lab Sample ID: 460-198100-4

Date Collected: 12/05/19 01:35

Matrix: Water

Date Received: 12/05/19 17:30

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			12/14/19 12:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 12:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:02	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 12:02	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 12:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 12:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 12:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 12:02	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:02	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 12:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 12:02	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 12:02	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 12:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 12:02	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 12:02	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 12:02	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 12:02	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 12:02	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 12:02	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 12:02	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 12:02	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 12:02	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 12:02	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 12:02	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 12:02	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 12:02	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 12:02	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 12:02	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 12:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:02	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 12:02	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 12:02	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:02	1

Client Sample ID: AMW-15D2-W-20191205
Date Collected: 12/05/19 01:35
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-4
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	0.79	ug/L			12/14/19 12:02	1
Methyl tert-butyl ether	**96**		1.0	0.47	ug/L			12/14/19 12:02	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 12:02	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 12:02	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 12:02	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 12:02	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 12:02	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 12:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 12:02	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 12:02	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:02	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 12:02	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 12:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*12/14/19 12:02*	*1*
4-Bromofluorobenzene	*84*		*77 - 124*		*12/14/19 12:02*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*12/14/19 12:02*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/14/19 12:02*	*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			12/07/19 21:28	1
Ethane	**1.3**	**J**	4.0	0.71	ug/L			12/10/19 17:16	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 17:16	1
Methane	**800**		2.0	0.56	ug/L			12/10/19 17:16	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4000**		120	14	mg/L			12/10/19 04:46	1000
Sulfate	**280**		6.0	3.5	mg/L			12/09/19 22:09	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**739**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:17	1
Manganese	**62.7**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:17	1
Sodium	**1870000**		50000	4600	ug/L		12/08/19 21:00	12/10/19 19:40	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:02	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:02	1
Total Organic Carbon	**15.8**		1.0	0.58	mg/L			12/07/19 06:55	1
Ferrous Iron	**0.28**	**HF**	0.10	0.099	mg/L			12/11/19 09:08	1
Sulfide	**58.8**		5.0	2.9	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**636**		5.0	5.0	mg/L			12/11/19 16:13	1
Ferric Iron	**0.46**		0.10	0.10	mg/L			12/11/19 15:48	1

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

Job ID: 460-198100-1

Client Sample ID: AMW-15VD-W-20191205
Date Collected: 12/05/19 01:50
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-5
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			12/14/19 12:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 12:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:25	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 12:25	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 12:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 12:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 12:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 12:25	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:25	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 12:25	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 12:25	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 12:25	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 12:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 12:25	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 12:25	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 12:25	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 12:25	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 12:25	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 12:25	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 12:25	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 12:25	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 12:25	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 12:25	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 12:25	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 12:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 12:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 12:25	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 12:25	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 12:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:25	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 12:25	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 12:25	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:25	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 12:25	1
Methyl tert-butyl ether	**1.1**		1.0	0.47	ug/L			12/14/19 12:25	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 12:25	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 12:25	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 12:25	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 12:25	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 12:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 12:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 12:25	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 12:25	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:25	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 12:25	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 12:25	1

Client Sample ID: AMW-15VD-W-20191205

Lab Sample ID: 460-198100-5

Date Collected: 12/05/19 01:50

Matrix: Water

Date Received: 12/05/19 17:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*74 - 132*		*12/14/19 12:25*	*1*
4-Bromofluorobenzene	*83*		*77 - 124*		*12/14/19 12:25*	*1*
Dibromofluoromethane (Surr)	*94*		*72 - 131*		*12/14/19 12:25*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/14/19 12:25*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**22000**		5000	1800	ug/L			12/07/19 21:37	1
Ethane	4.0	U	4.0	0.71	ug/L			12/09/19 18:24	1
Ethene	3.0	U	3.0	0.53	ug/L			12/09/19 18:24	1
Methane	**51**		2.0	0.56	ug/L			12/09/19 18:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17000**		600	70	mg/L			12/10/19 17:01	5000
Sulfate	**2800**		600	350	mg/L			12/10/19 05:00	1000

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**5150**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:29	1
Manganese	**220**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:29	1
Sodium	**6360000**		250000	23000	ug/L		12/08/19 21:00	12/10/19 19:44	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U F1	0.10	0.016	mg/L			12/06/19 06:03	1
Nitrite as N	**0.019**	**J B**	0.10	0.010	mg/L			12/06/19 06:03	1
Total Organic Carbon	**7.7**		1.0	0.58	mg/L			12/07/19 07:20	1
Ferrous Iron	**0.13**	**HF**	0.10	0.099	mg/L			12/11/19 09:08	1
Sulfide	1.0	U	1.0	0.58	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**478**		5.0	5.0	mg/L			12/11/19 16:24	1
Ferric Iron	**5.0**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: AMW-15D3-W-20191205

Lab Sample ID: 460-198100-6

Date Collected: 12/05/19 02:10

Matrix: Water

Date Received: 12/05/19 17:30

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			12/14/19 12:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 12:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:49	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 12:49	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 12:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 12:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 12:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 12:49	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:49	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 12:49	1

Client Sample ID: AMW-15D3-W-20191205
Date Collected: 12/05/19 02:10
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-6
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			12/14/19 12:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 12:49	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 12:49	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 12:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 12:49	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 12:49	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 12:49	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 12:49	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 12:49	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 12:49	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 12:49	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 12:49	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 12:49	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 12:49	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 12:49	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 12:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 12:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 12:49	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 12:49	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 12:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:49	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 12:49	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 12:49	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:49	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 12:49	1
Methyl tert-butyl ether	**7.7**		1.0	0.47	ug/L			12/14/19 12:49	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 12:49	1
Methylene Chloride	**0.32**	**J**	1.0	0.32	ug/L			12/14/19 12:49	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 12:49	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 12:49	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 12:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 12:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 12:49	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 12:49	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:49	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 12:49	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 12:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*12/14/19 12:49*	*1*
4-Bromofluorobenzene	*83*		*77 - 124*		*12/14/19 12:49*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/14/19 12:49*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/14/19 12:49*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**100000**		5000	1800	ug/L			12/07/19 21:46	1
Ethane	4.0	U	4.0	0.71	ug/L			12/09/19 18:33	1
Ethene	3.0	U	3.0	0.53	ug/L			12/09/19 18:33	1
Methane	**1400**		2.0	0.56	ug/L			12/09/19 18:33	1

Client Sample ID: AMW-15D3-W-20191205

Lab Sample ID: 460-198100-6

Date Collected: 12/05/19 02:10

Matrix: Water

Date Received: 12/05/19 17:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**5300**		120	14	mg/L			12/10/19 06:00	1000
Sulfate	**470**		30	17	mg/L			12/10/19 17:16	50

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**349**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:34	1
Manganese	**97.4**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:34	1
Sodium	**1550000**		50000	4600	ug/L		12/08/19 21:00	12/10/19 19:48	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:04	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:04	1
Total Organic Carbon	**12.3**		1.0	0.58	mg/L			12/07/19 07:44	1
Ferrous Iron	0.10	U HF	0.10	0.099	mg/L			12/11/19 09:09	1
Sulfide	**58.8**		5.0	2.9	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**594**		5.0	5.0	mg/L			12/11/19 16:34	1
Ferric Iron	**0.35**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: AMW-15D1-W-20191205

Lab Sample ID: 460-198100-7

Date Collected: 12/05/19 02:35

Matrix: Water

Date Received: 12/05/19 17:30

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			12/14/19 13:13	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 13:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 13:13	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 13:13	1
1,1-Dichloroethane	**0.87**	**J**	1.0	0.26	ug/L			12/14/19 13:13	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 13:13	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 13:13	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 13:13	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 13:13	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 13:13	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 13:13	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 13:13	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 13:13	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 13:13	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 13:13	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 13:13	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 13:13	1
Benzene	**6.6**		1.0	0.20	ug/L			12/14/19 13:13	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 13:13	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 13:13	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 13:13	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 13:13	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 13:13	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 13:13	1

Client Sample ID: AMW-15D1-W-20191205

Date Collected: 12/05/19 02:35
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-7

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			12/14/19 13:13	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 13:13	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 13:13	1
cis-1,2-Dichloroethene	**0.63**	**J**	1.0	0.22	ug/L			12/14/19 13:13	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 13:13	1
Cyclohexane	**0.77**	**J**	1.0	0.32	ug/L			12/14/19 13:13	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 13:13	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 13:13	1
Ethylbenzene	**2.8**		1.0	0.30	ug/L			12/14/19 13:13	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 13:13	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 13:13	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 13:13	1
Methyl tert-butyl ether	**120**		1.0	0.47	ug/L			12/14/19 13:13	1
Methylcyclohexane	**0.63**	**J**	1.0	0.26	ug/L			12/14/19 13:13	1
Methylene Chloride	**0.41**	**J**	1.0	0.32	ug/L			12/14/19 13:13	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 13:13	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 13:13	1
Toluene	**0.43**	**J**	1.0	0.38	ug/L			12/14/19 13:13	1
trans-1,2-Dichloroethene	**7.1**		1.0	0.24	ug/L			12/14/19 13:13	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 13:13	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 13:13	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 13:13	1
Vinyl chloride	**2.2**		1.0	0.17	ug/L			12/14/19 13:13	1
Xylenes, Total	**5.8**		2.0	0.65	ug/L			12/14/19 13:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*74 - 132*		*12/14/19 13:13*	*1*
4-Bromofluorobenzene	*82*		*77 - 124*		*12/14/19 13:13*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/14/19 13:13*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/14/19 13:13*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**39000**		5000	1800	ug/L			12/07/19 21:55	1
Ethane	**490**		4.0	0.71	ug/L			12/09/19 18:42	1
Ethene	**550**		3.0	0.53	ug/L			12/09/19 18:42	1
Methane	**6200**		2.0	0.56	ug/L			12/09/19 18:42	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2000**		84	9.8	mg/L			12/10/19 19:00	700
Sulfate	**180**		60	35	mg/L			12/10/19 18:30	100

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3550**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:38	1
Manganese	**243**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:38	1
Sodium	**1200000**		50000	4600	ug/L		12/08/19 21:00	12/10/19 19:52	10

Client Sample ID: AMW-15D1-W-20191205

Lab Sample ID: 460-198100-7

Date Collected: 12/05/19 02:35

Matrix: Water

Date Received: 12/05/19 17:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:05	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:05	1
Total Organic Carbon	**40.8**		10.0	5.8	mg/L			12/07/19 08:58	10
Ferrous Iron	**0.34**	**HF**	0.10	0.099	mg/L			12/11/19 09:09	1
Sulfide	**30.7**		1.0	0.58	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**424**		5.0	5.0	mg/L			12/11/19 16:44	1
Ferric Iron	**3.2**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: AMW-14VD-W-20191205

Lab Sample ID: 460-198100-8

Date Collected: 12/05/19 02:55

Matrix: Water

Date Received: 12/05/19 17:30

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			12/15/19 00:11	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/15/19 00:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/15/19 00:11	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 00:11	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/15/19 00:11	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/15/19 00:11	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/15/19 00:11	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/15/19 00:11	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/15/19 00:11	1
1,2-Dichloroethane	**0.45**	**J**	1.0	0.43	ug/L			12/15/19 00:11	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/15/19 00:11	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/15/19 00:11	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/15/19 00:11	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/15/19 00:11	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/15/19 00:11	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/15/19 00:11	1
Acetone	5.0	U	5.0	4.4	ug/L			12/15/19 00:11	1
Benzene	1.0	U	1.0	0.20	ug/L			12/15/19 00:11	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/15/19 00:11	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/15/19 00:11	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/15/19 00:11	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/15/19 00:11	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/15/19 00:11	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/15/19 00:11	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/15/19 00:11	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/15/19 00:11	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/15/19 00:11	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/15/19 00:11	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/15/19 00:11	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/15/19 00:11	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/15/19 00:11	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/15/19 00:11	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/15/19 00:11	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/15/19 00:11	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/15/19 00:11	1

Client Sample ID: AMW-14VD-W-20191205

Lab Sample ID: 460-198100-8

Date Collected: 12/05/19 02:55

Matrix: Water

Date Received: 12/05/19 17:30

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	0.79	ug/L			12/15/19 00:11	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/15/19 00:11	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/15/19 00:11	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/15/19 00:11	1
Styrene	1.0	U	1.0	0.42	ug/L			12/15/19 00:11	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/15/19 00:11	1
Toluene	1.0	U	1.0	0.38	ug/L			12/15/19 00:11	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/15/19 00:11	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/15/19 00:11	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/15/19 00:11	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/15/19 00:11	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/15/19 00:11	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/15/19 00:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*12/15/19 00:11*	*1*
4-Bromofluorobenzene	*82*		*77 - 124*		*12/15/19 00:11*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/15/19 00:11*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/15/19 00:11*	*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			12/07/19 22:03	1
Ethane	4.0	U	4.0	0.71	ug/L			12/09/19 18:50	1
Ethene	3.0	U	3.0	0.53	ug/L			12/09/19 18:50	1
Methane	**33**		2.0	0.56	ug/L			12/09/19 18:50	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**17000**		600	70	mg/L			12/10/19 18:00	5000
Sulfate	**2800**		600	350	mg/L			12/10/19 06:15	1000

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**18800**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:42	1
Manganese	**432**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:42	1
Sodium	**8960000**		250000	23000	ug/L		12/08/19 21:00	12/10/19 19:56	50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:05	1
Nitrite as N	**0.020**	**J B**	0.10	0.010	mg/L			12/06/19 06:05	1
Total Organic Carbon	**9.3**		1.0	0.58	mg/L			12/07/19 09:22	1
Ferrous Iron	**0.13**	**HF**	0.10	0.099	mg/L			12/11/19 09:09	1
Sulfide	**1.2**		1.0	0.58	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**493**		5.0	5.0	mg/L			12/11/19 16:53	1
Ferric Iron	**18.7**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: AMW-14D1-W-20191205

Date Collected: 12/05/19 03:15
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-9

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			12/14/19 14:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 14:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 14:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 14:01	1
1,1-Dichloroethane	**0.36**	**J**	1.0	0.26	ug/L			12/14/19 14:01	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 14:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 14:01	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 14:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 14:01	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 14:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 14:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 14:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 14:01	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 14:01	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 14:01	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 14:01	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 14:01	1
Benzene	**1.8**		1.0	0.20	ug/L			12/14/19 14:01	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 14:01	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 14:01	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 14:01	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 14:01	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 14:01	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 14:01	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 14:01	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 14:01	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 14:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 14:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 14:01	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 14:01	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 14:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 14:01	1
Ethylbenzene	**1.5**		1.0	0.30	ug/L			12/14/19 14:01	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 14:01	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 14:01	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 14:01	1
Methyl tert-butyl ether	**94**		1.0	0.47	ug/L			12/14/19 14:01	1
Methylcyclohexane	**0.74**	**J**	1.0	0.26	ug/L			12/14/19 14:01	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 14:01	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 14:01	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 14:01	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 14:01	1
trans-1,2-Dichloroethene	**9.0**		1.0	0.24	ug/L			12/14/19 14:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 14:01	1
Trichloroethene	**0.44**	**J**	1.0	0.31	ug/L			12/14/19 14:01	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 14:01	1
Vinyl chloride	**22**		1.0	0.17	ug/L			12/14/19 14:01	1
Xylenes, Total	**1.8**	**J**	2.0	0.65	ug/L			12/14/19 14:01	1

Client Sample ID: AMW-14D1-W-20191205

Lab Sample ID: 460-198100-9

Date Collected: 12/05/19 03:15

Matrix: Water

Date Received: 12/05/19 17:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*12/14/19 14:01*	*1*
4-Bromofluorobenzene	*82*		*77 - 124*		*12/14/19 14:01*	*1*
Dibromofluoromethane (Surr)	*94*		*72 - 131*		*12/14/19 14:01*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*12/14/19 14:01*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**160000**		5000	1800	ug/L			12/07/19 22:12	1
Ethane	**13**		4.0	0.71	ug/L			12/09/19 18:59	1
Ethene	**210**		3.0	0.53	ug/L			12/09/19 18:59	1
Methane	**3800**		2.0	0.56	ug/L			12/09/19 18:59	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2100**		110	12	mg/L			12/10/19 06:29	880
Sulfate	**130**		6.0	3.5	mg/L			12/09/19 23:54	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6940**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:46	1
Manganese	**59.0**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:46	1
Sodium	**1100000**		50000	4600	ug/L		12/08/19 21:00	12/10/19 20:00	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:12	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:12	1
Total Organic Carbon	**21.1**		1.0	0.58	mg/L			12/07/19 09:47	1
Ferrous Iron	0.10	U HF	0.10	0.099	mg/L			12/11/19 09:09	1
Sulfide	**62.6**		5.0	2.9	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**582**		5.0	5.0	mg/L			12/11/19 17:04	1
Ferric Iron	**6.9**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: AMW-14D2-W-20191205

Lab Sample ID: 460-198100-10

Date Collected: 12/05/19 03:35

Matrix: Water

Date Received: 12/05/19 17:30

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			12/14/19 14:25	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 14:25	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 14:25	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 14:25	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 14:25	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 14:25	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 14:25	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 14:25	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 14:25	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 14:25	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 14:25	1

Client Sample ID: AMW-14D2-W-20191205
Date Collected: 12/05/19 03:35
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-10
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			12/14/19 14:25	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 14:25	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 14:25	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 14:25	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 14:25	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 14:25	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 14:25	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 14:25	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 14:25	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 14:25	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 14:25	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 14:25	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 14:25	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 14:25	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 14:25	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 14:25	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 14:25	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 14:25	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 14:25	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 14:25	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 14:25	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 14:25	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 14:25	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 14:25	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 14:25	1
Methyl tert-butyl ether	**29**		1.0	0.47	ug/L			12/14/19 14:25	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 14:25	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 14:25	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 14:25	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 14:25	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 14:25	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 14:25	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 14:25	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 14:25	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 14:25	1
Vinyl chloride	**0.33**	**J**	1.0	0.17	ug/L			12/14/19 14:25	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*		*12/14/19 14:25*	*1*
4-Bromofluorobenzene	*85*		*77 - 124*		*12/14/19 14:25*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*12/14/19 14:25*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*12/14/19 14:25*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**170000**		5000	1800	ug/L			12/07/19 22:21	1
Ethane	**0.74**	**J**	4.0	0.71	ug/L			12/09/19 19:08	1
Ethene	3.0	U	3.0	0.53	ug/L			12/09/19 19:08	1
Methane	**2200**		2.0	0.56	ug/L			12/09/19 19:08	1

Client Sample ID: AMW-14D2-W-20191205

Lab Sample ID: 460-198100-10

Date Collected: 12/05/19 03:35
Matrix: Water
Date Received: 12/05/19 17:30

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4200**		120	14	mg/L			12/10/19 06:44	1000
Sulfate	**260**		6.0	3.5	mg/L			12/10/19 00:09	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**6830**		150	34.2	ug/L		12/08/19 21:00	12/10/19 15:50	1
Manganese	**135**		15.0	0.99	ug/L		12/08/19 21:00	12/10/19 15:50	1
Sodium	**2380000**		100000	9200	ug/L		12/08/19 21:00	12/10/19 20:04	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:11	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:11	1
Total Organic Carbon	**18.3**		1.0	0.58	mg/L			12/07/19 10:12	1
Ferrous Iron	**0.29**	**HF**	0.10	0.099	mg/L			12/11/19 09:09	1
Sulfide	**51.2**		5.0	2.9	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**727**		5.0	5.0	mg/L			12/11/19 13:59	1
Ferric Iron	**6.5**		0.10	0.10	mg/L			12/11/19 15:48	1

Client Sample ID: BD-W-20191205

Lab Sample ID: 460-198100-11

Date Collected: 12/05/19 00:00
Matrix: Water
Date Received: 12/05/19 17:30

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			12/14/19 14:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 14:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 14:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 14:49	1
1,1-Dichloroethane	**0.71**	**J**	1.0	0.26	ug/L			12/14/19 14:49	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 14:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 14:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 14:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 14:49	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 14:49	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 14:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 14:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 14:49	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 14:49	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 14:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 14:49	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 14:49	1
Benzene	**11**		1.0	0.20	ug/L			12/14/19 14:49	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 14:49	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 14:49	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 14:49	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 14:49	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 14:49	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 14:49	1

Client Sample ID: BD-W-20191205
Date Collected: 12/05/19 00:00
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-11
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			12/14/19 14:49	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 14:49	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 14:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 14:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 14:49	1
Cyclohexane	**0.99**	**J**	1.0	0.32	ug/L			12/14/19 14:49	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 14:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 14:49	1
Ethylbenzene	**7.2**		1.0	0.30	ug/L			12/14/19 14:49	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 14:49	1
Isopropylbenzene	**0.86**	**J**	1.0	0.34	ug/L			12/14/19 14:49	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 14:49	1
Methyl tert-butyl ether	**210**		1.0	0.47	ug/L			12/14/19 14:49	1
Methylcyclohexane	**0.56**	**J**	1.0	0.26	ug/L			12/14/19 14:49	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 14:49	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 14:49	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 14:49	1
Toluene	**2.3**		1.0	0.38	ug/L			12/14/19 14:49	1
trans-1,2-Dichloroethene	**16**		1.0	0.24	ug/L			12/14/19 14:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 14:49	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 14:49	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 14:49	1
Vinyl chloride	**5.4**		1.0	0.17	ug/L			12/14/19 14:49	1
Xylenes, Total	**29**		2.0	0.65	ug/L			12/14/19 14:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*12/14/19 14:49*	*1*
4-Bromofluorobenzene	*82*		*77 - 124*		*12/14/19 14:49*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 131*		*12/14/19 14:49*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/14/19 14:49*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**60000**		5000	1800	ug/L			12/07/19 22:29	1
Ethane	**880**		4.0	0.71	ug/L			12/09/19 19:16	1
Ethene	**280**		3.0	0.53	ug/L			12/09/19 19:16	1
Methane	**8400**		2.0	0.56	ug/L			12/09/19 19:16	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2000**		100	12	mg/L			12/10/19 06:59	840
Sulfate	**130**		6.0	3.5	mg/L			12/10/19 00:24	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1410**		150	34.2	ug/L		12/11/19 10:32	12/11/19 18:06	1
Manganese	**38.3**		15.0	0.99	ug/L		12/11/19 10:32	12/11/19 18:06	1
Sodium	**1170000**		50000	4600	ug/L		12/11/19 10:32	12/11/19 19:47	10

Client Sample ID: BD-W-20191205

Lab Sample ID: 460-198100-11

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 06:10	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 06:10	1
Total Organic Carbon	**25.9**		10.0	5.8	mg/L			12/07/19 10:37	10
Ferrous Iron	**0.11**	**HF**	0.10	0.099	mg/L			12/11/19 09:09	1
Sulfide	**92.8**		5.0	2.9	mg/L			12/06/19 15:38	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**514**		5.0	5.0	mg/L			12/11/19 14:10	1
Ferric Iron	**1.3**		0.10	0.10	mg/L			12/12/19 05:45	1

Client Sample ID: TRIP BLANK-W-20191205

Lab Sample ID: 460-198100-12

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

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			12/14/19 10:27	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 10:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 10:27	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 10:27	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 10:27	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 10:27	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 10:27	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 10:27	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 10:27	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 10:27	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 10:27	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 10:27	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 10:27	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 10:27	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 10:27	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 10:27	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 10:27	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 10:27	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 10:27	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 10:27	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 10:27	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 10:27	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 10:27	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 10:27	1
Chloroethane	1.0	U *	1.0	0.32	ug/L			12/14/19 10:27	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 10:27	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 10:27	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 10:27	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 10:27	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 10:27	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 10:27	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 10:27	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 10:27	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 10:27	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 10:27	1

Client Sample ID: TRIP BLANK-W-20191205
Date Collected: 12/05/19 00:00
Date Received: 12/05/19 17:30

Lab Sample ID: 460-198100-12
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	0.79	ug/L			12/14/19 10:27	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/14/19 10:27	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 10:27	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 10:27	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 10:27	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 10:27	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 10:27	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 10:27	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 10:27	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 10:27	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 10:27	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 10:27	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 10:27	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*12/14/19 10:27*	*1*
4-Bromofluorobenzene	*81*		*77 - 124*		*12/14/19 10:27*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/14/19 10:27*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/14/19 10:27*	*1*

Surrogate Summary

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

Job ID: 460-198100-1

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)
460-198100-1	MW-24D2-W-20191205	106	84	97	98
460-198100-2	MW-24D1R-W-20191205	106	85	98	97
460-198100-3	MW-24VDR-W-20191205	108	86	101	98
460-198100-3 MS	MW-24VDR-W-20191205	107	88	102	98
460-198100-3 MSD	MW-24VDR-W-20191205	107	89	103	99
460-198100-4	AMW-15D2-W-20191205	105	84	97	96
460-198100-5	AMW-15VD-W-20191205	105	83	94	94
460-198100-6	AMW-15D3-W-20191205	104	83	95	93
460-198100-7	AMW-15D1-W-20191205	103	82	95	93
460-198100-8	AMW-14VD-W-20191205	106	82	95	93
460-198100-9	AMW-14D1-W-20191205	104	82	94	94
460-198100-10	AMW-14D2-W-20191205	107	85	97	95
460-198100-11	BD-W-20191205	106	82	96	93
460-198100-12	TRIP BLANK-W-20191205	104	81	95	93
LCS 460-662282/3	Lab Control Sample	112	87	102	100
LCS 460-662383/3	Lab Control Sample	109	87	101	98
LCS 460-663467/3	Lab Control Sample	108	90	104	101
LCS 460-663546/4	Lab Control Sample	107	88	104	98
LCSD 460-662282/4	Lab Control Sample Dup	104	84	95	95
LCSD 460-662383/4	Lab Control Sample Dup	104	83	95	94
MB 460-662282/8	Method Blank	108	85	98	98
MB 460-662383/9	Method Blank	104	83	97	93
MB 460-663467/7	Method Blank	106	86	101	97
MB 460-663546/8	Method Blank	108	89	102	99

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 460-662282/8
Matrix: Water
Analysis Batch: 662282

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			12/14/19 10:04	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 10:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 10:04	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 10:04	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 10:04	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 10:04	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 10:04	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 10:04	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 10:04	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 10:04	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 10:04	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 10:04	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 10:04	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 10:04	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 10:04	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 10:04	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 10:04	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 10:04	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 10:04	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 10:04	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 10:04	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 10:04	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 10:04	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 10:04	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 10:04	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 10:04	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 10:04	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 10:04	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 10:04	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 10:04	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 10:04	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 10:04	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 10:04	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 10:04	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 10:04	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 10:04	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/14/19 10:04	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 10:04	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 10:04	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 10:04	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 10:04	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 10:04	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 10:04	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 10:04	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 10:04	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 10:04	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 10:04	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 10:04	1

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

Lab Sample ID: MB 460-662282/8
Matrix: Water
Analysis Batch: 662282

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		74 - 132		12/14/19 10:04	1
4-Bromofluorobenzene	85		77 - 124		12/14/19 10:04	1
Dibromofluoromethane (Surr)	98		72 - 131		12/14/19 10:04	1
Toluene-d8 (Surr)	98		80 - 120		12/14/19 10:04	1

Lab Sample ID: LCS 460-662282/3
Matrix: Water
Analysis Batch: 662282

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.1		ug/L		106	75 - 125
1,1,2,2-Tetrachloroethane	20.0	23.6		ug/L		118	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	24.1		ug/L		120	59 - 150
1,1,2-Trichloroethane	20.0	21.3		ug/L		107	78 - 120
1,1-Dichloroethane	20.0	23.0		ug/L		115	77 - 123
1,1-Dichloroethene	20.0	23.3		ug/L		116	74 - 123
1,2,4-Trichlorobenzene	20.0	18.6		ug/L		93	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	22.3		ug/L		111	55 - 134
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	23.7		ug/L		119	76 - 121
1,2-Dichloropropane	20.0	22.8		ug/L		114	77 - 123
1,3-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120
1,4-Dichlorobenzene	20.0	20.8		ug/L		104	80 - 120
2-Butanone (MEK)	100	84.0		ug/L		84	64 - 120
2-Hexanone	100	95.2		ug/L		95	71 - 125
4-Methyl-2-pentanone (MIBK)	100	96.1		ug/L		96	78 - 124
Acetone	100	102		ug/L		102	39 - 150
Benzene	20.0	21.3		ug/L		107	77 - 121
Bromoform	20.0	17.9		ug/L		89	53 - 120
Bromomethane	20.0	16.4		ug/L		82	10 - 150
Carbon disulfide	20.0	23.6		ug/L		118	69 - 133
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 132
Chlorobenzene	20.0	21.1		ug/L		105	80 - 120
Chlorodibromomethane	20.0	20.1		ug/L		101	73 - 120
Chloroethane	20.0	30.9	*	ug/L		154	52 - 150
Chloroform	20.0	22.3		ug/L		112	80 - 120
Chloromethane	20.0	20.5		ug/L		103	56 - 131
cis-1,2-Dichloroethene	20.0	20.5		ug/L		103	80 - 120
cis-1,3-Dichloropropene	20.0	23.6		ug/L		118	77 - 120
Cyclohexane	20.0	21.9		ug/L		109	56 - 150
Dichlorobromomethane	20.0	21.5		ug/L		108	76 - 120
Dichlorodifluoromethane	20.0	23.1		ug/L		116	50 - 131
Ethylbenzene	20.0	19.7		ug/L		98	80 - 120
Ethylene Dibromide	20.0	21.0		ug/L		105	80 - 120
Isopropylbenzene	20.0	20.9		ug/L		105	80 - 123
Methyl acetate	40.0	32.9		ug/L		82	66 - 144
Methyl tert-butyl ether	20.0	21.6		ug/L		108	79 - 122
Methylcyclohexane	20.0	23.7		ug/L		119	61 - 145

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

Lab Sample ID: LCS 460-662282/3
Matrix: Water
Analysis Batch: 662282

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	21.4		ug/L		107	77 - 123
Styrene	20.0	20.0		ug/L		100	80 - 120
Tetrachloroethene	20.0	18.8		ug/L		94	78 - 122
Toluene	20.0	19.7		ug/L		98	80 - 120
trans-1,2-Dichloroethene	20.0	20.7		ug/L		103	79 - 120
trans-1,3-Dichloropropene	20.0	23.5		ug/L		117	76 - 120
Trichloroethene	20.0	19.1		ug/L		95	77 - 120
Trichlorofluoromethane	20.0	22.5		ug/L		112	71 - 143
Vinyl chloride	20.0	20.9		ug/L		105	62 - 138
Xylenes, Total	40.0	39.7		ug/L		99	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*112*		*74 - 132*
4-Bromofluorobenzene	*87*		*77 - 124*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
Toluene-d8 (Surr)	*100*		*80 - 120*

Lab Sample ID: LCSD 460-662282/4
Matrix: Water
Analysis Batch: 662282

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	20.9		ug/L		105	75 - 125	1	30
1,1,2,2-Tetrachloroethane	20.0	22.8		ug/L		114	74 - 120	3	30
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	23.0		ug/L		115	59 - 150	5	30
1,1,2-Trichloroethane	20.0	21.0		ug/L		105	78 - 120	1	30
1,1-Dichloroethane	20.0	22.3		ug/L		112	77 - 123	3	30
1,1-Dichloroethene	20.0	22.6		ug/L		113	74 - 123	3	30
1,2,4-Trichlorobenzene	20.0	18.8		ug/L		94	80 - 124	1	30
1,2-Dibromo-3-Chloropropane	20.0	21.3		ug/L		106	55 - 134	5	30
1,2-Dichlorobenzene	20.0	20.1		ug/L		101	80 - 120	2	30
1,2-Dichloroethane	20.0	23.3		ug/L		116	76 - 121	2	30
1,2-Dichloropropane	20.0	22.4		ug/L		112	77 - 123	2	30
1,3-Dichlorobenzene	20.0	20.4		ug/L		102	80 - 120	1	30
1,4-Dichlorobenzene	20.0	20.7		ug/L		103	80 - 120	0	30
2-Butanone (MEK)	100	84.8		ug/L		85	64 - 120	1	30
2-Hexanone	100	94.7		ug/L		95	71 - 125	1	30
4-Methyl-2-pentanone (MIBK)	100	96.2		ug/L		96	78 - 124	0	30
Acetone	100	91.8		ug/L		92	39 - 150	10	30
Benzene	20.0	21.1		ug/L		106	77 - 121	1	30
Bromoform	20.0	17.8		ug/L		89	53 - 120	1	30
Bromomethane	20.0	17.9		ug/L		90	10 - 150	9	30
Carbon disulfide	20.0	23.0		ug/L		115	69 - 133	3	30
Carbon tetrachloride	20.0	19.5		ug/L		97	70 - 132	4	30
Chlorobenzene	20.0	20.3		ug/L		101	80 - 120	4	30
Chlorodibromomethane	20.0	19.8		ug/L		99	73 - 120	2	30
Chloroethane	20.0	29.5		ug/L		147	52 - 150	5	30
Chloroform	20.0	21.6		ug/L		108	80 - 120	3	30

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

Lab Sample ID: LCSD 460-662282/4
Matrix: Water
Analysis Batch: 662282

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	21.7		ug/L		108	56 - 131	5	30
cis-1,2-Dichloroethene			20.0	20.5		ug/L		102	80 - 120	0	30
cis-1,3-Dichloropropene			20.0	22.9		ug/L		114	77 - 120	3	30
Cyclohexane			20.0	21.3		ug/L		107	56 - 150	2	30
Dichlorobromomethane			20.0	20.4		ug/L		102	76 - 120	5	30
Dichlorodifluoromethane			20.0	23.1		ug/L		115	50 - 131	0	30
Ethylbenzene			20.0	19.2		ug/L		96	80 - 120	2	30
Ethylene Dibromide			20.0	20.2		ug/L		101	80 - 120	4	30
Isopropylbenzene			20.0	20.7		ug/L		104	80 - 123	1	30
Methyl acetate			40.0	32.5		ug/L		81	66 - 144	1	30
Methyl tert-butyl ether			20.0	21.8		ug/L		109	79 - 122	1	30
Methylcyclohexane			20.0	22.8		ug/L		114	61 - 145	4	30
Methylene Chloride			20.0	20.9		ug/L		104	77 - 123	3	30
Styrene			20.0	19.6		ug/L		98	80 - 120	2	30
Tetrachloroethene			20.0	18.2		ug/L		91	78 - 122	3	30
Toluene			20.0	19.6		ug/L		98	80 - 120	1	30
trans-1,2-Dichloroethene			20.0	20.5		ug/L		103	79 - 120	1	30
trans-1,3-Dichloropropene			20.0	23.0		ug/L		115	76 - 120	2	30
Trichloroethene			20.0	18.9		ug/L		94	77 - 120	1	30
Trichlorofluoromethane			20.0	22.0		ug/L		110	71 - 143	2	30
Vinyl chloride			20.0	21.7		ug/L		109	62 - 138	4	30
Xylenes, Total			40.0	38.8		ug/L		97	80 - 120	2	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*
4-Bromofluorobenzene	*84*		*77 - 124*
Dibromofluoromethane (Surr)	*95*		*72 - 131*
Toluene-d8 (Surr)	*95*		*80 - 120*

Lab Sample ID: MB 460-662383/9
Matrix: Water
Analysis Batch: 662383

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			12/14/19 23:00	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 23:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 23:00	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 23:00	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 23:00	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 23:00	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 23:00	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 23:00	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 23:00	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 23:00	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 23:00	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 23:00	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 23:00	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 23:00	1

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

Lab Sample ID: MB 460-662383/9
Matrix: Water
Analysis Batch: 662383

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	1.1	ug/L			12/14/19 23:00	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 23:00	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 23:00	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 23:00	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 23:00	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 23:00	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 23:00	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 23:00	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 23:00	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 23:00	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 23:00	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 23:00	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 23:00	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 23:00	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 23:00	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 23:00	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 23:00	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 23:00	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 23:00	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 23:00	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 23:00	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 23:00	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/14/19 23:00	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 23:00	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 23:00	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 23:00	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 23:00	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 23:00	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 23:00	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 23:00	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 23:00	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 23:00	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 23:00	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 23:00	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*		*12/14/19 23:00*	*1*
4-Bromofluorobenzene	*83*		*77 - 124*		*12/14/19 23:00*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*12/14/19 23:00*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*12/14/19 23:00*	*1*

Lab Sample ID: LCS 460-662383/3
Matrix: Water
Analysis Batch: 662383

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	20.6		ug/L		103	75 - 125
1,1,2,2-Tetrachloroethane	20.0	22.9		ug/L		115	74 - 120

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

Lab Sample ID: LCS 460-662383/3
Matrix: Water
Analysis Batch: 662383

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	21.7		ug/L		108	59 - 150
1,1,2-Trichloroethane	20.0	20.5		ug/L		102	78 - 120
1,1-Dichloroethane	20.0	22.3		ug/L		111	77 - 123
1,1-Dichloroethene	20.0	21.7		ug/L		109	74 - 123
1,2,4-Trichlorobenzene	20.0	18.2		ug/L		91	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	19.9		ug/L		100	55 - 134
1,2-Dichlorobenzene	20.0	20.3		ug/L		102	80 - 120
1,2-Dichloroethane	20.0	23.5		ug/L		117	76 - 121
1,2-Dichloropropane	20.0	22.8		ug/L		114	77 - 123
1,3-Dichlorobenzene	20.0	20.3		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
2-Butanone (MEK)	100	85.2		ug/L		85	64 - 120
2-Hexanone	100	95.8		ug/L		96	71 - 125
4-Methyl-2-pentanone (MIBK)	100	95.1		ug/L		95	78 - 124
Acetone	100	98.0		ug/L		98	39 - 150
Benzene	20.0	21.1		ug/L		106	77 - 121
Bromoform	20.0	16.5		ug/L		82	53 - 120
Bromomethane	20.0	7.40		ug/L		37	10 - 150
Carbon disulfide	20.0	24.3		ug/L		122	69 - 133
Carbon tetrachloride	20.0	16.2		ug/L		81	70 - 132
Chlorobenzene	20.0	20.4		ug/L		102	80 - 120
Chlorodibromomethane	20.0	18.9		ug/L		95	73 - 120
Chloroethane	20.0	39.0	*	ug/L		195	52 - 150
Chloroform	20.0	22.2		ug/L		111	80 - 120
Chloromethane	20.0	19.5		ug/L		98	56 - 131
cis-1,2-Dichloroethene	20.0	19.9		ug/L		99	80 - 120
cis-1,3-Dichloropropene	20.0	21.7		ug/L		109	77 - 120
Cyclohexane	20.0	20.8		ug/L		104	56 - 150
Dichlorobromomethane	20.0	20.2		ug/L		101	76 - 120
Dichlorodifluoromethane	20.0	18.8		ug/L		94	50 - 131
Ethylbenzene	20.0	19.1		ug/L		95	80 - 120
Ethylene Dibromide	20.0	19.9		ug/L		99	80 - 120
Isopropylbenzene	20.0	20.2		ug/L		101	80 - 123
Methyl acetate	40.0	34.5		ug/L		86	66 - 144
Methyl tert-butyl ether	20.0	21.4		ug/L		107	79 - 122
Methylcyclohexane	20.0	21.4		ug/L		107	61 - 145
Methylene Chloride	20.0	21.1		ug/L		105	77 - 123
Styrene	20.0	19.7		ug/L		98	80 - 120
Tetrachloroethene	20.0	17.2		ug/L		86	78 - 122
Toluene	20.0	19.3		ug/L		96	80 - 120
trans-1,2-Dichloroethene	20.0	21.0		ug/L		105	79 - 120
trans-1,3-Dichloropropene	20.0	21.3		ug/L		107	76 - 120
Trichloroethene	20.0	18.6		ug/L		93	77 - 120
Trichlorofluoromethane	20.0	23.2		ug/L		116	71 - 143
Vinyl chloride	20.0	22.6		ug/L		113	62 - 138
Xylenes, Total	40.0	38.6		ug/L		97	80 - 120

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

Lab Sample ID: LCS 460-662383/3
Matrix: Water
Analysis Batch: 662383

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

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	109		74 - 132
4-Bromofluorobenzene	87		77 - 124
Dibromofluoromethane (Surr)	101		72 - 131
Toluene-d8 (Surr)	98		80 - 120

Lab Sample ID: LCSD 460-662383/4
Matrix: Water
Analysis Batch: 662383

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	17.5		ug/L		87	75 - 125	16	30
1,1,2,2-Tetrachloroethane			20.0	21.3		ug/L		107	74 - 120	7	30
1,1,2-Trichloro-1,2,2-trifluoroethane			20.0	18.6		ug/L		93	59 - 150	15	30
1,1,2-Trichloroethane			20.0	19.5		ug/L		97	78 - 120	5	30
1,1-Dichloroethane			20.0	20.2		ug/L		101	77 - 123	10	30
1,1-Dichloroethene			20.0	19.1		ug/L		95	74 - 123	13	30
1,2,4-Trichlorobenzene			20.0	16.5		ug/L		83	80 - 124	9	30
1,2-Dibromo-3-Chloropropane			20.0	18.7		ug/L		94	55 - 134	6	30
1,2-Dichlorobenzene			20.0	18.1		ug/L		91	80 - 120	11	30
1,2-Dichloroethane			20.0	21.4		ug/L		107	76 - 121	9	30
1,2-Dichloropropane			20.0	20.2		ug/L		101	77 - 123	12	30
1,3-Dichlorobenzene			20.0	18.2		ug/L		91	80 - 120	11	30
1,4-Dichlorobenzene			20.0	18.3		ug/L		91	80 - 120	9	30
2-Butanone (MEK)			100	78.4		ug/L		78	64 - 120	8	30
2-Hexanone			100	88.9		ug/L		89	71 - 125	8	30
4-Methyl-2-pentanone (MIBK)			100	90.4		ug/L		90	78 - 124	5	30
Acetone			100	92.3		ug/L		92	39 - 150	6	30
Benzene			20.0	18.8		ug/L		94	77 - 121	12	30
Bromoform			20.0	15.1		ug/L		75	53 - 120	9	30
Bromomethane			20.0	7.14		ug/L		36	10 - 150	4	30
Carbon disulfide			20.0	21.0		ug/L		105	69 - 133	15	30
Carbon tetrachloride			20.0	14.2		ug/L		71	70 - 132	13	30
Chlorobenzene			20.0	18.6		ug/L		93	80 - 120	9	30
Chlorodibromomethane			20.0	17.1		ug/L		86	73 - 120	10	30
Chloroethane			20.0	32.7	*	ug/L		163	52 - 150	18	30
Chloroform			20.0	19.6		ug/L		98	80 - 120	12	30
Chloromethane			20.0	18.0		ug/L		90	56 - 131	8	30
cis-1,2-Dichloroethene			20.0	17.6		ug/L		88	80 - 120	12	30
cis-1,3-Dichloropropene			20.0	20.1		ug/L		100	77 - 120	8	30
Cyclohexane			20.0	17.4		ug/L		87	56 - 150	18	30
Dichlorobromomethane			20.0	18.4		ug/L		92	76 - 120	9	30
Dichlorodifluoromethane			20.0	15.5		ug/L		77	50 - 131	19	30
Ethylbenzene			20.0	17.1		ug/L		85	80 - 120	11	30
Ethylene Dibromide			20.0	18.8		ug/L		94	80 - 120	6	30
Isopropylbenzene			20.0	17.8		ug/L		89	80 - 123	13	30
Methyl acetate			40.0	29.4		ug/L		73	66 - 144	16	30
Methyl tert-butyl ether			20.0	19.8		ug/L		99	79 - 122	8	30
Methylcyclohexane			20.0	18.5		ug/L		92	61 - 145	15	30

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

Lab Sample ID: LCSD 460-662383/4
Matrix: Water
Analysis Batch: 662383

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	19.0		ug/L		95	77 - 123	10	30
Styrene			20.0	17.8		ug/L		89	80 - 120	10	30
Tetrachloroethene			20.0	15.7		ug/L		78	78 - 122	10	30
Toluene			20.0	17.2		ug/L		86	80 - 120	12	30
trans-1,2-Dichloroethene			20.0	17.8		ug/L		89	79 - 120	16	30
trans-1,3-Dichloropropene			20.0	19.9		ug/L		100	76 - 120	7	30
Trichloroethene			20.0	16.5		ug/L		83	77 - 120	12	30
Trichlorofluoromethane			20.0	18.9		ug/L		95	71 - 143	20	30
Vinyl chloride			20.0	19.2		ug/L		96	62 - 138	16	30
Xylenes, Total			40.0	33.9		ug/L		85	80 - 120	13	30

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*74 - 132*
4-Bromofluorobenzene	*83*		*77 - 124*
Dibromofluoromethane (Surr)	*95*		*72 - 131*
Toluene-d8 (Surr)	*94*		*80 - 120*

Lab Sample ID: MB 460-663467/7
Matrix: Water
Analysis Batch: 663467

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			12/18/19 21:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/18/19 21:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/18/19 21:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/18/19 21:38	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/18/19 21:38	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/18/19 21:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/18/19 21:38	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/18/19 21:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/18/19 21:38	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/18/19 21:38	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/18/19 21:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/18/19 21:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/18/19 21:38	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/18/19 21:38	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/18/19 21:38	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/18/19 21:38	1
Acetone	5.0	U	5.0	4.4	ug/L			12/18/19 21:38	1
Benzene	1.0	U	1.0	0.20	ug/L			12/18/19 21:38	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/18/19 21:38	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/18/19 21:38	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/18/19 21:38	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/18/19 21:38	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/18/19 21:38	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/18/19 21:38	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/18/19 21:38	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/18/19 21:38	1

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

Lab Sample ID: MB 460-663467/7
Matrix: Water
Analysis Batch: 663467

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.40	ug/L			12/18/19 21:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/18/19 21:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/18/19 21:38	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/18/19 21:38	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/18/19 21:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/18/19 21:38	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/18/19 21:38	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/18/19 21:38	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/18/19 21:38	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/18/19 21:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/18/19 21:38	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/18/19 21:38	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/18/19 21:38	1
Styrene	1.0	U	1.0	0.42	ug/L			12/18/19 21:38	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/18/19 21:38	1
Toluene	1.0	U	1.0	0.38	ug/L			12/18/19 21:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/18/19 21:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/18/19 21:38	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/18/19 21:38	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/18/19 21:38	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/18/19 21:38	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/18/19 21:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*74 - 132*		*12/18/19 21:38*	*1*
4-Bromofluorobenzene	*86*		*77 - 124*		*12/18/19 21:38*	*1*
Dibromofluoromethane (Surr)	*101*		*72 - 131*		*12/18/19 21:38*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/18/19 21:38*	*1*

Lab Sample ID: LCS 460-663467/3
Matrix: Water
Analysis Batch: 663467

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.2		ug/L		106	75 - 125
1,1,2,2-Tetrachloroethane	20.0	20.7		ug/L		103	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	19.5		ug/L		97	59 - 150
1,1,2-Trichloroethane	20.0	19.9		ug/L		99	78 - 120
1,1-Dichloroethane	20.0	22.7		ug/L		113	77 - 123
1,1-Dichloroethene	20.0	22.7		ug/L		114	74 - 123
1,2,4-Trichlorobenzene	20.0	18.3		ug/L		91	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	17.8		ug/L		89	55 - 134
1,2-Dichlorobenzene	20.0	20.5		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	22.0		ug/L		110	76 - 121
1,2-Dichloropropane	20.0	22.3		ug/L		111	77 - 123
1,3-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 120
1,4-Dichlorobenzene	20.0	20.9		ug/L		104	80 - 120
2-Butanone (MEK)	100	89.6		ug/L		90	64 - 120

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

Lab Sample ID: LCS 460-663467/3
Matrix: Water
Analysis Batch: 663467

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	100	98.5		ug/L		98	71 - 125
4-Methyl-2-pentanone (MIBK)	100	103		ug/L		103	78 - 124
Acetone	100	93.6		ug/L		94	39 - 150
Benzene	20.0	21.8		ug/L		109	77 - 121
Bromoform	20.0	17.6		ug/L		88	53 - 120
Bromomethane	20.0	26.0		ug/L		130	10 - 150
Carbon disulfide	20.0	23.9		ug/L		120	69 - 133
Carbon tetrachloride	20.0	20.3		ug/L		101	70 - 132
Chlorobenzene	20.0	21.1		ug/L		106	80 - 120
Chlorodibromomethane	20.0	19.9		ug/L		99	73 - 120
Chloroethane	20.0	33.6	*	ug/L		168	52 - 150
Chloroform	20.0	22.3		ug/L		112	80 - 120
Chloromethane	20.0	29.1	*	ug/L		146	56 - 131
cis-1,2-Dichloroethene	20.0	20.4		ug/L		102	80 - 120
cis-1,3-Dichloropropene	20.0	23.2		ug/L		116	77 - 120
Cyclohexane	20.0	19.4		ug/L		97	56 - 150
Dichlorobromomethane	20.0	21.3		ug/L		106	76 - 120
Dichlorodifluoromethane	20.0	17.7		ug/L		89	50 - 131
Ethylbenzene	20.0	20.2		ug/L		101	80 - 120
Ethylene Dibromide	20.0	19.8		ug/L		99	80 - 120
Isopropylbenzene	20.0	21.5		ug/L		108	80 - 123
Methyl acetate	40.0	39.2		ug/L		98	66 - 144
Methyl tert-butyl ether	20.0	20.4		ug/L		102	79 - 122
Methylcyclohexane	20.0	19.6		ug/L		98	61 - 145
Methylene Chloride	20.0	21.2		ug/L		106	77 - 123
Styrene	20.0	20.3		ug/L		102	80 - 120
Tetrachloroethene	20.0	19.5		ug/L		98	78 - 122
Toluene	20.0	20.2		ug/L		101	80 - 120
trans-1,2-Dichloroethene	20.0	21.2		ug/L		106	79 - 120
trans-1,3-Dichloropropene	20.0	23.0		ug/L		115	76 - 120
Trichloroethene	20.0	19.9		ug/L		99	77 - 120
Trichlorofluoromethane	20.0	21.7		ug/L		108	71 - 143
Vinyl chloride	20.0	22.9		ug/L		115	62 - 138
Xylenes, Total	40.0	40.6		ug/L		101	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*108*		*74 - 132*
4-Bromofluorobenzene	*90*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Lab Sample ID: MB 460-663546/8
Matrix: Water
Analysis Batch: 663546

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			12/19/19 09:18	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/19/19 09:18	1

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

Lab Sample ID: MB 460-663546/8
Matrix: Water
Analysis Batch: 663546

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/19/19 09:18	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/19/19 09:18	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/19/19 09:18	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/19/19 09:18	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/19/19 09:18	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/19/19 09:18	1
1,2-Dichlorobenzene	0.605	J	1.0	0.43	ug/L			12/19/19 09:18	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/19/19 09:18	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/19/19 09:18	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/19/19 09:18	1
1,4-Dichlorobenzene	0.348	J	1.0	0.33	ug/L			12/19/19 09:18	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/19/19 09:18	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/19/19 09:18	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/19/19 09:18	1
Acetone	5.0	U	5.0	4.4	ug/L			12/19/19 09:18	1
Benzene	1.0	U	1.0	0.20	ug/L			12/19/19 09:18	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/19/19 09:18	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/19/19 09:18	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/19/19 09:18	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/19/19 09:18	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/19/19 09:18	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/19/19 09:18	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/19/19 09:18	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/19/19 09:18	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/19/19 09:18	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/19/19 09:18	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/19/19 09:18	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/19/19 09:18	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/19/19 09:18	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/19/19 09:18	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/19/19 09:18	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/19/19 09:18	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/19/19 09:18	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/19/19 09:18	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/19/19 09:18	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/19/19 09:18	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/19/19 09:18	1
Styrene	1.0	U	1.0	0.42	ug/L			12/19/19 09:18	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/19/19 09:18	1
Toluene	1.0	U	1.0	0.38	ug/L			12/19/19 09:18	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/19/19 09:18	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/19/19 09:18	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/19/19 09:18	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/19/19 09:18	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/19/19 09:18	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/19/19 09:18	1

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

Lab Sample ID: MB 460-663546/8
Matrix: Water
Analysis Batch: 663546

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		74 - 132		12/19/19 09:18	1
4-Bromofluorobenzene	89		77 - 124		12/19/19 09:18	1
Dibromofluoromethane (Surr)	102		72 - 131		12/19/19 09:18	1
Toluene-d8 (Surr)	99		80 - 120		12/19/19 09:18	1

Lab Sample ID: LCS 460-663546/4
Matrix: Water
Analysis Batch: 663546

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	20.0	21.4		ug/L		107	75 - 125
1,1,2,2-Tetrachloroethane	20.0	19.0		ug/L		95	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	24.4		ug/L		122	59 - 150
1,1,2-Trichloroethane	20.0	18.5		ug/L		93	78 - 120
1,1-Dichloroethane	20.0	22.3		ug/L		112	77 - 123
1,1-Dichloroethene	20.0	22.4		ug/L		112	74 - 123
1,2,4-Trichlorobenzene	20.0	17.3		ug/L		86	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	15.9		ug/L		79	55 - 134
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	21.5		ug/L		107	76 - 121
1,2-Dichloropropane	20.0	21.8		ug/L		109	77 - 123
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	20.0		ug/L		100	80 - 120
2-Butanone (MEK)	100	81.8		ug/L		82	64 - 120
2-Hexanone	100	88.2		ug/L		88	71 - 125
4-Methyl-2-pentanone (MIBK)	100	91.8		ug/L		92	78 - 124
Acetone	100	93.5		ug/L		94	39 - 150
Benzene	20.0	20.7		ug/L		103	77 - 121
Bromoform	20.0	15.8		ug/L		79	53 - 120
Bromomethane	20.0	24.0		ug/L		120	10 - 150
Carbon disulfide	20.0	23.5		ug/L		117	69 - 133
Carbon tetrachloride	20.0	20.2		ug/L		101	70 - 132
Chlorobenzene	20.0	19.9		ug/L		100	80 - 120
Chlorodibromomethane	20.0	18.2		ug/L		91	73 - 120
Chloroethane	20.0	31.2	*	ug/L		156	52 - 150
Chloroform	20.0	21.8		ug/L		109	80 - 120
Chloromethane	20.0	27.0	*	ug/L		135	56 - 131
cis-1,2-Dichloroethene	20.0	19.9		ug/L		100	80 - 120
cis-1,3-Dichloropropene	20.0	21.8		ug/L		109	77 - 120
Cyclohexane	20.0	22.4		ug/L		112	56 - 150
Dichlorobromomethane	20.0	20.6		ug/L		103	76 - 120
Dichlorodifluoromethane	20.0	25.9		ug/L		130	50 - 131
Ethylbenzene	20.0	18.8		ug/L		94	80 - 120
Ethylene Dibromide	20.0	18.3		ug/L		92	80 - 120
Isopropylbenzene	20.0	20.6		ug/L		103	80 - 123
Methyl acetate	40.0	38.9		ug/L		97	66 - 144
Methyl tert-butyl ether	20.0	19.4		ug/L		97	79 - 122
Methylcyclohexane	20.0	24.6		ug/L		123	61 - 145

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

Lab Sample ID: LCS 460-663546/4
Matrix: Water
Analysis Batch: 663546

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	20.5		ug/L		103	77 - 123
Styrene	20.0	19.2		ug/L		96	80 - 120
Tetrachloroethene	20.0	18.7		ug/L		94	78 - 122
Toluene	20.0	19.2		ug/L		96	80 - 120
trans-1,2-Dichloroethene	20.0	20.6		ug/L		103	79 - 120
trans-1,3-Dichloropropene	20.0	21.0		ug/L		105	76 - 120
Trichloroethene	20.0	18.9		ug/L		94	77 - 120
Trichlorofluoromethane	20.0	22.4		ug/L		112	71 - 143
Vinyl chloride	20.0	22.1		ug/L		110	62 - 138
Xylenes, Total	40.0	38.0		ug/L		95	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*88*		*77 - 124*
Dibromofluoromethane (Surr)	*104*		*72 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 460-198100-3 MS
Matrix: Water
Analysis Batch: 663546

Client Sample ID: MW-24VDR-W-20191205
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	1.0	U	200	207		ug/L		103	75 - 125
1,1,2,2-Tetrachloroethane	1.0	U	200	190		ug/L		95	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	233		ug/L		116	59 - 150
1,1,2-Trichloroethane	1.0	U	200	192		ug/L		96	78 - 120
1,1-Dichloroethane	1.0	U	200	218		ug/L		109	77 - 123
1,1-Dichloroethene	1.0	U	200	210		ug/L		105	74 - 123
1,2,4-Trichlorobenzene	1.0	U	200	164		ug/L		82	80 - 124
1,2-Dibromo-3-Chloropropane	1.0	U	200	154		ug/L		77	55 - 134
1,2-Dichlorobenzene	1.0	U	200	194		ug/L		97	80 - 120
1,2-Dichloroethane	1.0	U	200	215		ug/L		107	76 - 121
1,2-Dichloropropane	1.0	U	200	217		ug/L		109	77 - 123
1,3-Dichlorobenzene	1.0	U	200	195		ug/L		98	80 - 120
1,4-Dichlorobenzene	1.0	U	200	195		ug/L		97	80 - 120
2-Butanone (MEK)	5.0	U	1000	835		ug/L		83	64 - 120
2-Hexanone	5.0	U	1000	923		ug/L		92	71 - 125
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	979		ug/L		98	78 - 124
Acetone	5.5		1000	837		ug/L		83	39 - 150
Benzene	7.2		200	207		ug/L		100	77 - 121
Bromoform	1.0	U	200	162		ug/L		81	53 - 120
Bromomethane	1.0	U	200	186		ug/L		93	10 - 150
Carbon disulfide	1.0	U	200	224		ug/L		112	69 - 133
Carbon tetrachloride	1.0	U	200	204		ug/L		102	70 - 132
Chlorobenzene	1.0	U	200	197		ug/L		98	80 - 120
Chlorodibromomethane	1.0	U	200	187		ug/L		93	73 - 120
Chloroethane	1.0	U F1 *	200	316	F1	ug/L		158	52 - 150
Chloroform	1.0	U	200	216		ug/L		108	80 - 120

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

Lab Sample ID: 460-198100-3 MS
Matrix: Water
Analysis Batch: 663546

Client Sample ID: MW-24VDR-W-20191205
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	1.0	U F1 *	200	267	F1	ug/L		133	56 - 131
cis-1,2-Dichloroethene	1.0	U	200	194		ug/L		97	80 - 120
cis-1,3-Dichloropropene	1.0	U	200	213		ug/L		106	77 - 120
Cyclohexane	1.0	U	200	219		ug/L		110	56 - 150
Dichlorobromomethane	1.0	U	200	208		ug/L		104	76 - 120
Dichlorodifluoromethane	1.0	U	200	236		ug/L		118	50 - 131
Ethylbenzene	1.0	U	200	190		ug/L		95	80 - 120
Ethylene Dibromide	1.0	U	200	182		ug/L		91	80 - 120
Isopropylbenzene	1.0	U	200	201		ug/L		101	80 - 123
Methyl acetate	5.0	U	400	398		ug/L		99	66 - 144
Methyl tert-butyl ether	1.0	U	200	195		ug/L		97	79 - 122
Methylcyclohexane	1.0	U	200	234		ug/L		117	61 - 145
Methylene Chloride	1.0	U	200	205		ug/L		102	77 - 123
Styrene	1.0	U	200	187		ug/L		94	80 - 120
Tetrachloroethene	1.0	U	200	180		ug/L		90	78 - 122
Toluene	1.0	U	200	189		ug/L		94	80 - 120
trans-1,2-Dichloroethene	1.0	U	200	205		ug/L		103	79 - 120
trans-1,3-Dichloropropene	1.0	U	200	210		ug/L		105	76 - 120
Trichloroethene	1.0	U	200	189		ug/L		95	77 - 120
Trichlorofluoromethane	1.0	U	200	227		ug/L		114	71 - 143
Vinyl chloride	1.0	U	200	214		ug/L		107	62 - 138
Xylenes, Total	2.0	U	400	377		ug/L		94	80 - 120

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*88*		*77 - 124*
Dibromofluoromethane (Surr)	*102*		*72 - 131*
Toluene-d8 (Surr)	*98*		*80 - 120*

Lab Sample ID: 460-198100-3 MSD
Matrix: Water
Analysis Batch: 663546

Client Sample ID: MW-24VDR-W-20191205
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	1.0	U	200	219		ug/L		109	75 - 125	6	30
1,1,2,2-Tetrachloroethane	1.0	U	200	194		ug/L		97	74 - 120	2	30
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	200	248		ug/L		124	59 - 150	6	30
1,1,2-Trichloroethane	1.0	U	200	197		ug/L		98	78 - 120	3	30
1,1-Dichloroethane	1.0	U	200	220		ug/L		110	77 - 123	1	30
1,1-Dichloroethene	1.0	U	200	222		ug/L		111	74 - 123	6	30
1,2,4-Trichlorobenzene	1.0	U	200	172		ug/L		86	80 - 124	4	30
1,2-Dibromo-3-Chloropropane	1.0	U	200	163		ug/L		82	55 - 134	6	30
1,2-Dichlorobenzene	1.0	U	200	202		ug/L		101	80 - 120	4	30
1,2-Dichloroethane	1.0	U	200	220		ug/L		110	76 - 121	3	30
1,2-Dichloropropane	1.0	U	200	224		ug/L		112	77 - 123	3	30
1,3-Dichlorobenzene	1.0	U	200	203		ug/L		102	80 - 120	4	30
1,4-Dichlorobenzene	1.0	U	200	204		ug/L		102	80 - 120	5	30
2-Butanone (MEK)	5.0	U	1000	801		ug/L		80	64 - 120	4	30

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

Lab Sample ID: 460-198100-3 MSD
Matrix: Water
Analysis Batch: 663546

Client Sample ID: MW-24VDR-W-20191205
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
2-Hexanone	5.0	U	1000	956		ug/L		96	71 - 125	4	30
4-Methyl-2-pentanone (MIBK)	5.0	U	1000	993		ug/L		99	78 - 124	1	30
Acetone	5.5		1000	878		ug/L		87	39 - 150	5	30
Benzene	7.2		200	219		ug/L		106	77 - 121	6	30
Bromoform	1.0	U	200	167		ug/L		83	53 - 120	3	30
Bromomethane	1.0	U	200	213		ug/L		107	10 - 150	14	30
Carbon disulfide	1.0	U	200	240		ug/L		120	69 - 133	7	30
Carbon tetrachloride	1.0	U	200	209		ug/L		105	70 - 132	3	30
Chlorobenzene	1.0	U	200	207		ug/L		103	80 - 120	5	30
Chlorodibromomethane	1.0	U	200	195		ug/L		97	73 - 120	4	30
Chloroethane	1.0	U F1 *	200	327	F1	ug/L		163	52 - 150	4	30
Chloroform	1.0	U	200	217		ug/L		109	80 - 120	1	30
Chloromethane	1.0	U F1 *	200	279	F1	ug/L		140	56 - 131	5	30
cis-1,2-Dichloroethene	1.0	U	200	204		ug/L		102	80 - 120	5	30
cis-1,3-Dichloropropene	1.0	U	200	219		ug/L		110	77 - 120	3	30
Cyclohexane	1.0	U	200	225		ug/L		113	56 - 150	3	30
Dichlorobromomethane	1.0	U	200	212		ug/L		106	76 - 120	2	30
Dichlorodifluoromethane	1.0	U	200	254		ug/L		127	50 - 131	7	30
Ethylbenzene	1.0	U	200	200		ug/L		100	80 - 120	5	30
Ethylene Dibromide	1.0	U	200	191		ug/L		95	80 - 120	5	30
Isopropylbenzene	1.0	U	200	212		ug/L		106	80 - 123	6	30
Methyl acetate	5.0	U	400	402		ug/L		100	66 - 144	1	30
Methyl tert-butyl ether	1.0	U	200	196		ug/L		98	79 - 122	1	30
Methylcyclohexane	1.0	U	200	242		ug/L		121	61 - 145	4	30
Methylene Chloride	1.0	U	200	209		ug/L		105	77 - 123	2	30
Styrene	1.0	U	200	199		ug/L		99	80 - 120	6	30
Tetrachloroethene	1.0	U	200	190		ug/L		95	78 - 122	6	30
Toluene	1.0	U	200	198		ug/L		99	80 - 120	5	30
trans-1,2-Dichloroethene	1.0	U	200	213		ug/L		106	79 - 120	4	30
trans-1,3-Dichloropropene	1.0	U	200	218		ug/L		109	76 - 120	4	30
Trichloroethene	1.0	U	200	195		ug/L		97	77 - 120	3	30
Trichlorofluoromethane	1.0	U	200	240		ug/L		120	71 - 143	5	30
Vinyl chloride	1.0	U	200	223		ug/L		112	62 - 138	4	30
Xylenes, Total	2.0	U	400	396		ug/L		99	80 - 120	5	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*74 - 132*
4-Bromofluorobenzene	*89*		*77 - 124*
Dibromofluoromethane (Surr)	*103*		*72 - 131*
Toluene-d8 (Surr)	*99*		*80 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-150471/4
Matrix: Water
Analysis Batch: 150471

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			12/07/19 20:54	1

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: LCS 200-150471/2
Matrix: Water
Analysis Batch: 150471

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	35600		ug/L		89	70 - 130

Lab Sample ID: LCSD 200-150471/3
Matrix: Water
Analysis Batch: 150471

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	47100		ug/L		118	70 - 130	28	30

Lab Sample ID: MB 200-150520/4
Matrix: Water
Analysis Batch: 150520

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	4.0	U	4.0	0.71	ug/L			12/09/19 16:23	1
Ethene	3.0	U	3.0	0.53	ug/L			12/09/19 16:23	1
Methane	2.0	U	2.0	0.56	ug/L			12/09/19 16:23	1

Lab Sample ID: LCS 200-150520/2
Matrix: Water
Analysis Batch: 150520

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	515	501		ug/L		97	70 - 130
Ethene	450	430		ug/L		95	70 - 130
Methane	518	512		ug/L		99	70 - 130

Lab Sample ID: LCSD 200-150520/3
Matrix: Water
Analysis Batch: 150520

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	515	490		ug/L		95	70 - 130	2	30
Ethene	450	423		ug/L		94	70 - 130	2	30
Methane	518	499		ug/L		96	70 - 130	3	30

Lab Sample ID: MB 200-150548/4
Matrix: Water
Analysis Batch: 150548

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	4.0	U	4.0	0.71	ug/L			12/10/19 15:32	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 15:32	1
Methane	2.0	U	2.0	0.56	ug/L			12/10/19 15:32	1

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

Lab Sample ID: LCS 200-150548/2
Matrix: Water
Analysis Batch: 150548

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	515	482		ug/L		94	70 - 130
Ethene	450	418		ug/L		93	70 - 130
Methane	518	494		ug/L		95	70 - 130

Lab Sample ID: LCSD 200-150548/3
Matrix: Water
Analysis Batch: 150548

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	515	494		ug/L		96	70 - 130	2	30
Ethene	450	433		ug/L		96	70 - 130	3	30
Methane	518	507		ug/L		98	70 - 130	2	30

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 460-661250/3
Matrix: Water
Analysis Batch: 661250

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			12/09/19 15:53	1
Sulfate	0.60	U	0.60	0.35	mg/L			12/09/19 15:53	1

Lab Sample ID: LCS 460-661250/5
Matrix: Water
Analysis Batch: 661250

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	1.57		mg/L		104	90 - 110
Sulfate	7.50	7.10		mg/L		95	90 - 110

Lab Sample ID: LCSD 460-661250/6
Matrix: Water
Analysis Batch: 661250

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	1.47		mg/L		98	90 - 110	6	15
Sulfate	7.50	6.76		mg/L		90	90 - 110	5	15

Lab Sample ID: MB 460-661270/3
Matrix: Water
Analysis Batch: 661270

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			12/10/19 12:59	1
Sulfate	0.60	U	0.60	0.35	mg/L			12/10/19 12:59	1

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCS 460-661270/5
Matrix: Water
Analysis Batch: 661270

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	1.49		mg/L		99	90 - 110
Sulfate	7.50	7.99		mg/L		107	90 - 110

Lab Sample ID: LCSD 460-661270/6
Matrix: Water
Analysis Batch: 661270

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	1.49		mg/L		99	90 - 110	0	15
Sulfate	7.50	7.94		mg/L		106	90 - 110	1	15

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 460-660584/1-A
Matrix: Water
Analysis Batch: 660668

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 660584

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		12/06/19 23:16	12/07/19 14:04	1
Manganese	15.0	U	15.0	0.99	ug/L		12/06/19 23:16	12/07/19 14:04	1
Sodium	5000	U	5000	460	ug/L		12/06/19 23:16	12/07/19 14:04	1

Lab Sample ID: LCS 460-660584/2-A
Matrix: Water
Analysis Batch: 660668

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 660584

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	1059		ug/L		106	80 - 120
Manganese	500	524.7		ug/L		105	80 - 120
Sodium	20000	20630		ug/L		103	80 - 120

Lab Sample ID: MB 460-660863/1-A
Matrix: Water
Analysis Batch: 660973

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 660863

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		12/08/19 21:00	12/09/19 19:35	1
Manganese	15.0	U	15.0	0.99	ug/L		12/08/19 21:00	12/09/19 19:35	1
Sodium	5000	U	5000	460	ug/L		12/08/19 21:00	12/09/19 19:35	1

Lab Sample ID: LCS 460-660863/2-A
Matrix: Water
Analysis Batch: 660973

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 660863

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	1109		ug/L		111	80 - 120
Manganese	500	568.1		ug/L		114	80 - 120
Sodium	20000	21810		ug/L		109	80 - 120

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

Lab Sample ID: MB 460-661473/1-A
Matrix: Water
Analysis Batch: 661602

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 661473

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		12/11/19 10:32	12/11/19 15:41	1
Manganese	15.0	U	15.0	0.99	ug/L		12/11/19 10:32	12/11/19 15:41	1
Sodium	5000	U	5000	460	ug/L		12/11/19 10:32	12/11/19 15:41	1

Lab Sample ID: LCS 460-661473/2-A
Matrix: Water
Analysis Batch: 661602

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 661473

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	1059		ug/L		106	80 - 120
Manganese	500	505.0		ug/L		101	80 - 120
Sodium	20000	19530		ug/L		98	80 - 120

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 460-660349/11
Matrix: Water
Analysis Batch: 660349

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 05:18	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 05:18	1

Lab Sample ID: MB 460-660349/20
Matrix: Water
Analysis Batch: 660349

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/06/19 05:25	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/06/19 05:25	1

Lab Sample ID: MB 460-660349/84
Matrix: Water
Analysis Batch: 660349

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0177	J	0.10	0.016	mg/L			12/06/19 06:20	1
Nitrite as N	0.0177	J	0.10	0.010	mg/L			12/06/19 06:20	1

Lab Sample ID: LCSSRM 460-660349/12
Matrix: Water
Analysis Batch: 660349

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	1.13	1.13		mg/L		100.4	83.6 - 115.1

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

Lab Sample ID: 460-198100-5 MS — **Client Sample ID: AMW-15VD-W-20191205**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 660349

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate as N	0.10	U F1	0.500	0.578	F1	mg/L		116	85 - 115
Nitrite as N	0.019	J B	0.500	0.492		mg/L		95	85 - 119

Lab Sample ID: 460-198100-5 MSD — **Client Sample ID: AMW-15VD-W-20191205**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 660349

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Nitrate as N	0.10	U F1	0.500	0.532		mg/L		106	85 - 115	8	16
Nitrite as N	0.019	J B	0.500	0.538		mg/L		104	85 - 119	9	10

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

Lab Sample ID: MB 460-660954/31 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 660954

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.58	mg/L			12/07/19 00:41	1

Lab Sample ID: LCSSRM 460-660954/32 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 660954

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Total Organic Carbon	42.3	45.87		mg/L		108.4	83.0 - 116.5

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-661589/2 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661589

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	5.0	U	5.0	5.0	mg/L			12/11/19 11:20	1

Lab Sample ID: MB 460-661589/25 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661589

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	5.0	U	5.0	5.0	mg/L			12/11/19 14:16	1

Lab Sample ID: LCSSRM 460-661589/26 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 661589

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	64.8	62.82		mg/L		96.9	85.0 - 115.1

Method: SM 2320B - Alkalinity

Lab Sample ID: LCSSRM 460-661589/3
Matrix: Water
Analysis Batch: 661589

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	64.8	61.75		mg/L		95.3	85.0 - 115.1

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

Lab Sample ID: MB 460-661508/3
Matrix: Water
Analysis Batch: 661508

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	0.099	mg/L			12/11/19 08:17	1

Lab Sample ID: LCS 460-661508/4
Matrix: Water
Analysis Batch: 661508

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	0.474		mg/L		95	87 - 116

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 460-660462/1
Matrix: Water
Analysis Batch: 660462

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			12/06/19 15:38	1

Lab Sample ID: LCSSRM 460-660462/3
Matrix: Water
Analysis Batch: 660462

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	5.97	4.59		mg/L		76.8	44.2 - 144.7

GC/MS VOA

Analysis Batch: 662282

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	8260C	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	8260C	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	8260C	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	8260C	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	8260C	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	8260C	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	8260C	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	8260C	
460-198100-11	BD-W-20191205	Total/NA	Water	8260C	
460-198100-12	TRIP BLANK-W-20191205	Total/NA	Water	8260C	
MB 460-662282/8	Method Blank	Total/NA	Water	8260C	
LCS 460-662282/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-662282/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 662383

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	8260C	
MB 460-662383/9	Method Blank	Total/NA	Water	8260C	
LCS 460-662383/3	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-662383/4	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 663467

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	8260C	
MB 460-663467/7	Method Blank	Total/NA	Water	8260C	
LCS 460-663467/3	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 663546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-663546/8	Method Blank	Total/NA	Water	8260C	
LCS 460-663546/4	Lab Control Sample	Total/NA	Water	8260C	
460-198100-3 MS	MW-24VDR-W-20191205	Total/NA	Water	8260C	
460-198100-3 MSD	MW-24VDR-W-20191205	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 150471

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	RSK-175	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	RSK-175	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	RSK-175	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	RSK-175	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	RSK-175	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	RSK-175	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	RSK-175	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	RSK-175	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	RSK-175	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	RSK-175	
460-198100-11	BD-W-20191205	Total/NA	Water	RSK-175	
MB 200-150471/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-150471/2	Lab Control Sample	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 150471 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSD 200-150471/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 150520

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	RSK-175	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	RSK-175	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	RSK-175	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	RSK-175	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	RSK-175	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	RSK-175	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	RSK-175	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	RSK-175	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	RSK-175	
460-198100-11	BD-W-20191205	Total/NA	Water	RSK-175	
MB 200-150520/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-150520/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-150520/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 150548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	RSK-175	
MB 200-150548/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-150548/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-150548/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 661250

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	300.0	
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	300.0	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	300.0	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	300.0	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	300.0	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	300.0	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	300.0	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	300.0	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	300.0	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	300.0	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	300.0	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	300.0	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	300.0	
460-198100-11	BD-W-20191205	Total/NA	Water	300.0	
460-198100-11	BD-W-20191205	Total/NA	Water	300.0	
MB 460-661250/3	Method Blank	Total/NA	Water	300.0	
LCS 460-661250/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-661250/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 661270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	300.0	

HPLC/IC (Continued)

Analysis Batch: 661270 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	300.0	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	300.0	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	300.0	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	300.0	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	300.0	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	300.0	
MB 460-661270/3	Method Blank	Total/NA	Water	300.0	
LCS 460-661270/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-661270/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 660584

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	3010A	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	3010A	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	3010A	
MB 460-660584/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-660584/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 660668

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	6010D	660584
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	6010D	660584
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	6010D	660584
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	6010D	660584
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	6010D	660584
MB 460-660584/1-A	Method Blank	Total/NA	Water	6010D	660584
LCS 460-660584/2-A	Lab Control Sample	Total/NA	Water	6010D	660584

Prep Batch: 660863

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	3010A	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	3010A	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	3010A	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	3010A	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	3010A	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	3010A	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	3010A	
MB 460-660863/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-660863/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 660973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 460-660863/1-A	Method Blank	Total/NA	Water	6010D	660863
LCS 460-660863/2-A	Lab Control Sample	Total/NA	Water	6010D	660863

Analysis Batch: 661240

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	6010D	660863
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	6010D	660863

Metals (Continued)

Analysis Batch: 661240 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	6010D	660863
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	6010D	660863
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	6010D	660863
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	6010D	660863
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	6010D	660863
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	6010D	660863
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	6010D	660863
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	6010D	660863
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	6010D	660863
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	6010D	660863
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	6010D	660863
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	6010D	660863

Prep Batch: 661473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-11	BD-W-20191205	Total/NA	Water	3010A	
MB 460-661473/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-661473/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 661602

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-11	BD-W-20191205	Total/NA	Water	6010D	661473
460-198100-11	BD-W-20191205	Total/NA	Water	6010D	661473
MB 460-661473/1-A	Method Blank	Total/NA	Water	6010D	661473
LCS 460-661473/2-A	Lab Control Sample	Total/NA	Water	6010D	661473

General Chemistry

Analysis Batch: 660349

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	353.2	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	353.2	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	353.2	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	353.2	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	353.2	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	353.2	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	353.2	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	353.2	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	353.2	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	353.2	
460-198100-11	BD-W-20191205	Total/NA	Water	353.2	
MB 460-660349/11	Method Blank	Total/NA	Water	353.2	
MB 460-660349/20	Method Blank	Total/NA	Water	353.2	
MB 460-660349/84	Method Blank	Total/NA	Water	353.2	
LCSSRM 460-660349/12	Lab Control Sample	Total/NA	Water	353.2	
460-198100-5 MS	AMW-15VD-W-20191205	Total/NA	Water	353.2	
460-198100-5 MSD	AMW-15VD-W-20191205	Total/NA	Water	353.2	

Analysis Batch: 660462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	SM 4500 S2 F	

General Chemistry (Continued)

Analysis Batch: 660462 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198100-11	BD-W-20191205	Total/NA	Water	SM 4500 S2 F	
MB 460-660462/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCSSRM 460-660462/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 660954

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	9060A	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	9060A	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	9060A	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	9060A	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	9060A	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	9060A	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	9060A	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	9060A	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	9060A	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	9060A	
460-198100-11	BD-W-20191205	Total/NA	Water	9060A	
MB 460-660954/31	Method Blank	Total/NA	Water	9060A	
LCSSRM 460-660954/32	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 661508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198100-11	BD-W-20191205	Total/NA	Water	SM 3500 FE D	
MB 460-661508/3	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 460-661508/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 661558

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	SM 3500	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	SM 3500	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	SM 3500	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	SM 3500	

General Chemistry (Continued)

Analysis Batch: 661558 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	SM 3500	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	SM 3500	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	SM 3500	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	SM 3500	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	SM 3500	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	SM 3500	
460-198100-11	BD-W-20191205	Total/NA	Water	SM 3500	

Analysis Batch: 661589

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198100-1	MW-24D2-W-20191205	Total/NA	Water	SM 2320B	
460-198100-2	MW-24D1R-W-20191205	Total/NA	Water	SM 2320B	
460-198100-3	MW-24VDR-W-20191205	Total/NA	Water	SM 2320B	
460-198100-4	AMW-15D2-W-20191205	Total/NA	Water	SM 2320B	
460-198100-5	AMW-15VD-W-20191205	Total/NA	Water	SM 2320B	
460-198100-6	AMW-15D3-W-20191205	Total/NA	Water	SM 2320B	
460-198100-7	AMW-15D1-W-20191205	Total/NA	Water	SM 2320B	
460-198100-8	AMW-14VD-W-20191205	Total/NA	Water	SM 2320B	
460-198100-9	AMW-14D1-W-20191205	Total/NA	Water	SM 2320B	
460-198100-10	AMW-14D2-W-20191205	Total/NA	Water	SM 2320B	
460-198100-11	BD-W-20191205	Total/NA	Water	SM 2320B	
MB 460-661589/2	Method Blank	Total/NA	Water	SM 2320B	
MB 460-661589/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-661589/26	Lab Control Sample	Total/NA	Water	SM 2320B	
LCSSRM 460-661589/3	Lab Control Sample	Total/NA	Water	SM 2320B	

Client Sample ID: MW-24D2-W-20191205

Lab Sample ID: 460-198100-1

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 11:14	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:02	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150520	12/09/19 17:58	MLT	TAL BUR
Total/NA	Analysis	300.0		10	661250	12/09/19 20:44	VMI	TAL EDI
Total/NA	Analysis	300.0		210	661250	12/10/19 04:02	VMI	TAL EDI
Total/NA	Prep	3010A			660584	12/06/19 23:16	GAE	TAL EDI
Total/NA	Analysis	6010D		1	660668	12/07/19 15:50	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:00	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 05:42	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 15:44	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:01	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: MW-24D1R-W-20191205

Lab Sample ID: 460-198100-2

Date Collected: 12/05/19 00:30

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 11:38	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:11	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:07	MLT	TAL BUR
Total/NA	Analysis	300.0		780	661250	12/10/19 04:16	VMI	TAL EDI
Total/NA	Analysis	300.0		50	661270	12/10/19 16:12	VMI	TAL EDI
Total/NA	Prep	3010A			660584	12/06/19 23:16	GAE	TAL EDI
Total/NA	Analysis	6010D		1	660668	12/07/19 15:54	CDC	TAL EDI
Total/NA	Prep	3010A			660584	12/06/19 23:16	GAE	TAL EDI
Total/NA	Analysis	6010D		10	660668	12/07/19 18:29	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:02	AXH	TAL EDI
Total/NA	Analysis	9060A		20	660954	12/07/19 06:07	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 15:53	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:01	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: MW-24VDR-W-20191205

Lab Sample ID: 460-198100-3

Date Collected: 12/05/19 01:15

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	663467	12/19/19 01:11	AVM	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:20	MJZ	TAL BUR

Client Sample ID: MW-24VDR-W-20191205

Lab Sample ID: 460-198100-3

Date Collected: 12/05/19 01:15

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:16	MLT	TAL BUR
Total/NA	Analysis	300.0		1000	661250	12/10/19 04:31	VMI	TAL EDI
Total/NA	Analysis	300.0		5000	661270	12/10/19 16:46	VMI	TAL EDI
Total/NA	Prep	3010A			660584	12/06/19 23:16	GAE	TAL EDI
Total/NA	Analysis	6010D		1	660668	12/07/19 15:58	CDC	TAL EDI
Total/NA	Prep	3010A			660584	12/06/19 23:16	GAE	TAL EDI
Total/NA	Analysis	6010D		50	660668	12/07/19 18:33	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:01	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 06:30	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 16:03	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:08	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-15D2-W-20191205

Lab Sample ID: 460-198100-4

Date Collected: 12/05/19 01:35

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 12:02	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:28	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150548	12/10/19 17:16	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661250	12/09/19 22:09	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	661250	12/10/19 04:46	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:17	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		10	661240	12/10/19 19:40	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:02	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 06:55	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 16:13	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:08	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-15VD-W-20191205

Lab Sample ID: 460-198100-5

Date Collected: 12/05/19 01:50

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 12:25	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:37	MJZ	TAL BUR

Client Sample ID: AMW-15VD-W-20191205

Lab Sample ID: 460-198100-5

Date Collected: 12/05/19 01:50

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:24	MLT	TAL BUR
Total/NA	Analysis	300.0		1000	661250	12/10/19 05:00	VMI	TAL EDI
Total/NA	Analysis	300.0		5000	661270	12/10/19 17:01	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:29	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		50	661240	12/10/19 19:44	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:03	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 07:20	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 16:24	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:08	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-15D3-W-20191205

Lab Sample ID: 460-198100-6

Date Collected: 12/05/19 02:10

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 12:49	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:46	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:33	MLT	TAL BUR
Total/NA	Analysis	300.0		1000	661250	12/10/19 06:00	VMI	TAL EDI
Total/NA	Analysis	300.0		50	661270	12/10/19 17:16	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:34	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		10	661240	12/10/19 19:48	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:04	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 07:44	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 16:34	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:09	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-15D1-W-20191205

Lab Sample ID: 460-198100-7

Date Collected: 12/05/19 02:35

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 13:13	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 21:55	MJZ	TAL BUR

Client Sample ID: AMW-15D1-W-20191205

Lab Sample ID: 460-198100-7

Date Collected: 12/05/19 02:35

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:42	MLT	TAL BUR
Total/NA	Analysis	300.0		100	661270	12/10/19 18:30	VMI	TAL EDI
Total/NA	Analysis	300.0		700	661270	12/10/19 19:00	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:38	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		10	661240	12/10/19 19:52	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:05	AXH	TAL EDI
Total/NA	Analysis	9060A		10	660954	12/07/19 08:58	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 16:44	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:09	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-14VD-W-20191205

Lab Sample ID: 460-198100-8

Date Collected: 12/05/19 02:55

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662383	12/15/19 00:11	GXY	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 22:03	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:50	MLT	TAL BUR
Total/NA	Analysis	300.0		1000	661250	12/10/19 06:15	VMI	TAL EDI
Total/NA	Analysis	300.0		5000	661270	12/10/19 18:00	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:42	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		50	661240	12/10/19 19:56	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:05	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 09:22	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 16:53	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:09	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-14D1-W-20191205

Lab Sample ID: 460-198100-9

Date Collected: 12/05/19 03:15

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 14:01	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 22:12	MJZ	TAL BUR

Client Sample ID: AMW-14D1-W-20191205

Lab Sample ID: 460-198100-9

Date Collected: 12/05/19 03:15

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	150520	12/09/19 18:59	MLT	TAL BUR
Total/NA	Analysis	300.0		10	661250	12/09/19 23:54	VMI	TAL EDI
Total/NA	Analysis	300.0		880	661250	12/10/19 06:29	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:46	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		10	661240	12/10/19 20:00	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:12	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 09:47	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 17:04	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:09	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: AMW-14D2-W-20191205

Lab Sample ID: 460-198100-10

Date Collected: 12/05/19 03:35

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 14:25	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 22:21	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150520	12/09/19 19:08	MLT	TAL BUR
Total/NA	Analysis	300.0		10	661250	12/10/19 00:09	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	661250	12/10/19 06:44	VMI	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		1	661240	12/10/19 15:50	CDC	TAL EDI
Total/NA	Prep	3010A			660863	12/08/19 21:00	GAE	TAL EDI
Total/NA	Analysis	6010D		20	661240	12/10/19 20:04	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:11	AXH	TAL EDI
Total/NA	Analysis	9060A		1	660954	12/07/19 10:12	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 13:59	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/11/19 15:48	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:09	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: BD-W-20191205

Lab Sample ID: 460-198100-11

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 14:49	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150471	12/07/19 22:29	MJZ	TAL BUR

Lab Chronicle

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

Job ID: 460-198100-1

Client Sample ID: BD-W-20191205

Lab Sample ID: 460-198100-11

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	150520	12/09/19 19:16	MLT	TAL BUR
Total/NA	Analysis	300.0		10	661250	12/10/19 00:24	VMI	TAL EDI
Total/NA	Analysis	300.0		840	661250	12/10/19 06:59	VMI	TAL EDI
Total/NA	Prep	3010A			661473	12/11/19 10:32	QZY	TAL EDI
Total/NA	Analysis	6010D		1	661602	12/11/19 18:06	YZH	TAL EDI
Total/NA	Prep	3010A			661473	12/11/19 10:32	QZY	TAL EDI
Total/NA	Analysis	6010D		10	661602	12/11/19 19:47	YZH	TAL EDI
Total/NA	Analysis	353.2		1	660349	12/06/19 06:10	AXH	TAL EDI
Total/NA	Analysis	9060A		10	660954	12/07/19 10:37	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661589	12/11/19 14:10	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661558	12/12/19 05:45	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661508	12/11/19 09:09	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	660462	12/06/19 15:38	YAH	TAL EDI

Client Sample ID: TRIP BLANK-W-20191205

Lab Sample ID: 460-198100-12

Date Collected: 12/05/19 00:00

Matrix: Water

Date Received: 12/05/19 17:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662282	12/14/19 10:27	AAT	TAL EDI

Laboratory References:

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: 460-198100-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-20
DE Haz. Subst. Cleanup Act (HSCA)	State	<cert No.>	12-31-21
Georgia	State	12028 (NJ)	06-30-20
Massachusetts	State	M-NJ312	06-30-20
Massachusetts	State Program	M-NJ312	06-30-20
New Jersey	NELAP	12028	06-30-20
New York	NELAP	11452	04-01-20
Pennsylvania	NELAP	68-00522	02-28-20
Rhode Island	State	LAO00132	12-30-19
USDA	US Federal Programs	P330-18-00135	05-03-21

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	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	Identification Number	Expiration Date
New York	NELAP	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
RSK-175		Water	Ethane
RSK-175		Water	Ethene
RSK-175		Water	Methane

Method Summary

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

Job ID: 460-198100-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
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 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: 460-198100-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-198100-1	MW-24D2-W-20191205	Water	12/05/19 00:00	12/05/19 17:30	
460-198100-2	MW-24D1R-W-20191205	Water	12/05/19 00:30	12/05/19 17:30	
460-198100-3	MW-24VDR-W-20191205	Water	12/05/19 01:15	12/05/19 17:30	
460-198100-4	AMW-15D2-W-20191205	Water	12/05/19 01:35	12/05/19 17:30	
460-198100-5	AMW-15VD-W-20191205	Water	12/05/19 01:50	12/05/19 17:30	
460-198100-6	AMW-15D3-W-20191205	Water	12/05/19 02:10	12/05/19 17:30	
460-198100-7	AMW-15D1-W-20191205	Water	12/05/19 02:35	12/05/19 17:30	
460-198100-8	AMW-14VD-W-20191205	Water	12/05/19 02:55	12/05/19 17:30	
460-198100-9	AMW-14D1-W-20191205	Water	12/05/19 03:15	12/05/19 17:30	
460-198100-10	AMW-14D2-W-20191205	Water	12/05/19 03:35	12/05/19 17:30	
460-198100-11	BD-W-20191205	Water	12/05/19 00:00	12/05/19 17:30	
460-198100-12	TRIP BLANK-W-20191205	Water	12/05/19 00:00	12/05/19 17:30	

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

12/19/2019

Client Information	Sampler: Felix Conco	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-138976-26696.3
Client Contact: Loretta Kwong	Phone: 908-416-0431	E-Mail: john.schove@testamericainc.com		Page: Page 8 of 2
Company: ARCADIS U.S. Inc				Job #: 198100
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 #: DEMCFMNE.8040.W9401			
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02			
Project Name: MNA Analysis	Project #: 48016199			
Site: New York	SSOW#:			

SHORT HOLD

Analysis Requested

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

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample	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-24D2-W-20191205	12/5/19	0000	G	Water			X	X	X	X	X	X	X	X	X	X					1
MW-24DIR-W-20191205		0030	G	Water			X	X	X	X	X	X	X	X	X	X					2
MW-24VDR-W-20191205		0115	G	Water			X	X	X	X	X	X	X	X	X	X					3
AMW-15D2-W-20191205		0135	G	Water			X	X	X	X	X	X	X	X	X	X					4
AMW-15VD-W-20191205		0150	G	Water			X	X	X	X	X	X	X	X	X	X					5
AMW-15D3-W-20191205		0210	G	Water			X	X	X	X	X	X	X	X	X	X					6
AMW-15D1-W-20191205		0235	G				X	X	X	X	X	X	X	X	X	X					7
AMW-14VD-W-20191205		0255	G				X	X	X	X	X	X	X	X	X	X					8
AMW-14D1-W-20191205		0315	G				X	X	X	X	X	X	X	X	X	X					9
AMW-14D2-W-20191205		0335	G				X	X	X	X	X	X	X	X	X	X					10

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 Conco	12/5/19 / 1730		Warleny Infante	12/05/19 1730	TAL-EDI
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: 2.7°/3.0°C 3.8/3.3 °C
IA #11

Ver: 01/16/2019

460-198100 Chain of Custody

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	Sampler: Felix Corrego	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-138976-26696.3
Client Contact: Loretta Kwong	Phone: 908-416-0431	E-Mail: john.schove@testamericainc.com		Page: Page 2 of 3
Company: ARCADIS U.S. Inc		Analysis Requested		Job #: 198100
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 #: DEMCFMNE.8040.W9401			
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02			
Project Name: MNA Analysis	Project #: 48016199			
Site: New York	SSOW#:			

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					
BD-W-20191205	12/5/19	—	G	Water			X	X	X	X	X	X	X	X	X	Y				6	11
TRIP BLANK	12/5/19	—	—	Water							X									2	12
				Water																	
				Water																	
				Water																	
				Water																	

Possible Hazard Identification	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological	☐ 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 Corrego	12/5/19 / 1730		Marleny Infante	12/05/19 17:30	TA EDT
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: 2.7°/3.0°C 3.0/3.3°C

Ver: 01/16/2019

12/19/2019

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 198107

Number of Coolers: 2 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.7 ℃	3.0 ℃	Cooler #4:	℃	℃	Cooler #7:	℃	℃
Cooler #2:	3.0 ℃	3.3 ℃	Cooler #5:	℃	℃	Cooler #8:	℃	℃
Cooler #3:	℃	℃	Cooler #6:	℃	℃	Cooler #9:	℃	℃

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						

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: JCJ Date: 12/5/19

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

Chain of Custody Record

460-198100 Chain of Custody

eurofins | Environment Testing TestAmerica

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	COC No: 460-56880.1
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 #: 460-198100-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 12/17/2019		
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#:		

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:

Analysis Requested

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	RSK_175/ Dissolved Gases (MEE)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
MW-24D2-W-20191205 (460-198100-1)	12/5/19	Eastern		Water			X	X	6	
MW-24D1R-W-20191205 (460-198100-2)	12/5/19	00:30 Eastern		Water			X	X	6	
MW-24VDR-W-20191205 (460-198100-3)	12/5/19	01:15 Eastern		Water			X	X	6	
AMW-15D2-W-20191205 (460-198100-4)	12/5/19	01:35 Eastern		Water			X	X	6	
AMW-15VD-W-20191205 (460-198100-5)	12/5/19	01:50 Eastern		Water			X	X	6	
AMW-15D3-W-20191205 (460-198100-6)	12/5/19	02:10 Eastern		Water			X	X	6	
AMW-15D1-W-20191205 (460-198100-7)	12/5/19	02:35 Eastern		Water			X	X	6	
AMW-14VD-W-20191205 (460-198100-8)	12/5/19	02:55 Eastern		Water			X	X	6	
AMW-14D1-W-20191205 (460-198100-9)	12/5/19	03:15 Eastern		Water			X	X	6	

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: (signature)	Date/Time: 12/6/19 1800	Company: ETA Edi	Received by: Taylor Mohr	Date/Time: 12/7/19 1127	Company: TA Bur
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.: NA		Cooler Temperature(s) °C and Other Remarks: 0.5, 0.5, 0.3		

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: 460-56880.2
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 #: 460-198100-1
Address: 30 Community Drive, Suite 11;	**Due Date Requested:** 12/17/2019			
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	RSK_175/ Dissolved Gases (MEE)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
AMW-14D2-W-20191205 (460-198100-10)	12/5/19	03:35 Eastern		Water			X	X	6	
BD-W-20191205 (460-198100-11)	12/5/19	Eastern		Water			X	X	6	

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. I

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: [signature]	Date/Time: 12/6/19 1900	Company: EtAEdi	Received by: Taylor Mohr	Date/Time: 12/7/19 1127	Company: TABU
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.: NA		Cooler Temperature(s) °C and Other Remarks: 0.5, 0.5, 0.3		

Ver: 01/16/2019

ORIGIN ID:LDJA (732) 548-3900
CARL ARMBRUSTER
EUROFINS TESTAMERICA EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06DEC19
ACTWGT: 63.15 LB
CAD: 0358159/CAFE3211

BILL RECIPIENT

TO SAMPLE CUSTODY
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 655-1203
PO: YES

REF: 8460-122119

FedEx Express

1 of 3
TRK# 0201 1161 6399 4729
MASTER

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BTVA

05403
VT-US BTV

ORIGIN ID:LDJA (732) 548-3900
CARL ARMBRUSTER
EUROFINS TESTAMERICA EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06DEC19
ACTWGT: 47.10 LB
CAD: 0358159/CAFE3211

BILL RECIPIENT

TO SAMPLE CUSTODY
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 655-1203
PO: YES

REF: 8460-122119

FedEx Express

2 of 3
MPS# 0263 1161 6399 4730
Mstr# 1161 6399 4729 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BTVA

05403
VT-US BTV

ORIGIN ID:LDJA (732) 548-3900
CARL ARMBRUSTER
EUROFINS TESTAMERICA EDISON
777 NEW DURHAM ROAD

EDISON, NJ 08817
UNITED STATES US

SHIP DATE: 06DEC19
ACTWGT: 47.65 LB
CAD: 0358159/CAFE3211

BILL RECIPIENT

TO SAMPLE CUSTODY
TEST AMERICA BURLINGTON
30 COMMUNITY DRIVE
SUITE 11
SOUTH BURLINGTON VT 05403
(802) 655-1203
PO: YES

REF: 8460-122119

FedEx Express

3 of 3
MPS# 0263 1161 6399 4740
Mstr# 1161 6399 4729 0201

SATURDAY 12:00P
PRIORITY OVERNIGHT

XO BTVA

05403
VT-US BTV

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-198100-1

Login Number: 198100
List Number: 1
Creator: Jara, Kelly D

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.	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.	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: 460-198100-1

Login Number: 198100
List Number: 2
Creator: Mohn, Taylor J

List Source: Eurofins TestAmerica, Burlington
List Creation: 12/07/19 01:16 PM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5ºC, 0.5ºC, 0.3ºC
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	N/A	Received project as a subcontract.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	N/A	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

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ANALYTICAL REPORT

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

Laboratory Job ID: 460-198228-1
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:
12/19/2019 1:32:03 PM
Alexander Gilbert, Project Management Assistant I
alexander.gilbert@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: 460-198228-1

Qualifiers

GC/MS VOA

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

GC VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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
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)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 460-198228-1

Laboratory: Eurofins TestAmerica, Edison

Narrative

Job Narrative
460-198228-1

Comments
No additional comments.

Receipt
The samples were received on 12/6/2019 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 2 coolers at receipt time were 2.3º C and 2.8º C.

Receipt Exceptions
The following samples were received at the laboratory without a sample collection date documented on the chain of custody and were entered from the containers: MW-27D1R-W-20191205 (460-198228-2), MW-27D2-W-20191205 (460-198228-3), MW-23D1R-W-20191205 (460-198228-4), MW-23D2R-W-20191205 (460-198228-5), MW-28D1-W-20191205 (460-198228-6), MW-28D2R-W-20191206 (460-198228-7), MW-26D2-W-20191206 (460-198228-8), MW-26D1-W-20191206 (460-198228-9) and AMW-7R-W-20191206 (460-198228-10).

GC/MS VOA
Method 8260C: The continuing calibration verification (CCV) analyzed in batch 460-662315 was outside the method criteria for the following analyte(s): 1,1,1-Trichloroethane, Bromoform and Carbon tetrachloride. 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
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

GC Semi VOA
Method 300.0: The following samples were diluted to bring the concentration of Sulfate within the calibration range: MW-18R-W-20191205 (460-198228-1), MW-27D1R-W-20191205 (460-198228-2), MW-27D2-W-20191205 (460-198228-3), MW-23D1R-W-20191205 (460-198228-4), MW-23D2R-W-20191205 (460-198228-5), MW-28D1-W-20191205 (460-198228-6), MW-28D2R-W-20191206 (460-198228-7), MW-26D2-W-20191206 (460-198228-8), MW-26D1-W-20191206 (460-198228-9), AMW-7R-W-20191206 (460-198228-10) and MW-29D1-W-20191206 (460-198228-11). Elevated reporting limits (RLs) are provided.

Method 300.0: The following samples were diluted to bring the concentration of Chloride within the calibration range: MW-18R-W-20191205 (460-198228-1), MW-27D1R-W-20191205 (460-198228-2), MW-27D2-W-20191205 (460-198228-3), MW-23D1R-W-20191205 (460-198228-4), MW-23D2R-W-20191205 (460-198228-5), MW-28D1-W-20191205 (460-198228-6), MW-26D2-W-20191206 (460-198228-8), MW-26D1-W-20191206 (460-198228-9), AMW-7R-W-20191206 (460-198228-10) and MW-29D1-W-20191206 (460-198228-11). Elevated reporting limits (RLs) are provided.

Method 300.0: The following sample was diluted to bring the concentration of Chloride within the calibration range: MW-28D2R-W-20191206 (460-198228-7). Elevated reporting limits (RLs) are provided.

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

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

General Chemistry
Methods 353.2, SM 4500 NO3 F: The method blank for analytical batch 460-660603 contained Nitrate Nitrite Nitrate 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.

Method 9060A: The following sample was diluted due to the nature of the sample matrix: MW-28D1-W-20191205 (460-198228-6).

Job ID: 460-198228-1 (Continued)

Laboratory: Eurofins TestAmerica, Edison (Continued)

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.

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: 460-198228-1

Client Sample ID: MW-18R-W-20191205 — Lab Sample ID: 460-198228-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	33		5.0	1.9	ug/L	1		8260C	Total/NA
2-Hexanone	3.7	J	5.0	1.1	ug/L	1		8260C	Total/NA
4-Methyl-2-pentanone (MIBK)	2.9	J	5.0	1.3	ug/L	1		8260C	Total/NA
Acetone	130		5.0	4.4	ug/L	1		8260C	Total/NA
Benzene	74		1.0	0.20	ug/L	1		8260C	Total/NA
Carbon disulfide	2.0		1.0	0.82	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.28	J	1.0	0.22	ug/L	1		8260C	Total/NA
Cyclohexane	7.2		1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	1.6		1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	4.8		1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	14		1.0	0.47	ug/L	1		8260C	Total/NA
Methylcyclohexane	3.3		1.0	0.26	ug/L	1		8260C	Total/NA
Methylene Chloride	0.62	J	1.0	0.32	ug/L	1		8260C	Total/NA
Toluene	4.8		1.0	0.38	ug/L	1		8260C	Total/NA
Xylenes, Total	5.2		2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	3000	J	5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	21		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	0.81	J	3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	16000		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	400		18	2.1	mg/L	150		300.0	Total/NA
Sulfate	74		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	3100		150	34.2	ug/L	1		6010D	Total/NA
Manganese	30.8		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	323000		5000	460	ug/L	1		6010D	Total/NA
Nitrate as N	0.030	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.059	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.029	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	123		5.0	2.9	mg/L	5		9060A	Total/NA
Alkalinity, Total	225		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	2.8		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.28	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	15.9		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-27D1R-W-20191205 — Lab Sample ID: 460-198228-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.36	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	6.4		1.0	0.20	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.95	J	1.0	0.22	ug/L	1		8260C	Total/NA
Ethylbenzene	0.48	J	1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	39		1.0	0.47	ug/L	1		8260C	Total/NA
Toluene	1.7		1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	3.6		1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene	0.37	J	1.0	0.31	ug/L	1		8260C	Total/NA
Vinyl chloride	61		1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	1.6	J	2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	170000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	5.5		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	40		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	2600		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	3800		120	14	mg/L	1000		300.0	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-27D1R-W-20191205 (Continued) — Lab Sample ID: 460-198228-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	200		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	1310		150	34.2	ug/L	1		6010D	Total/NA
Manganese	51.9		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1920000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate as N	0.045	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.045	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Total Organic Carbon	16.6		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	762		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.3		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	45.6		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-27D2-W-20191205 — Lab Sample ID: 460-198228-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.38	J	1.0	0.26	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	4.9		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	150000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	1600		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	3600		120	14	mg/L	1000		300.0	Total/NA
Sulfate	280		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	1190		150	34.2	ug/L	1		6010D	Total/NA
Manganese	174		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1620000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate Nitrite as N	0.025	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.011	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	12.0		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	526		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	1.1		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.12	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	22.0		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-23D1R-W-20191205 — Lab Sample ID: 460-198228-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.4		1.0	0.20	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.72	J	1.0	0.22	ug/L	1		8260C	Total/NA
Cyclohexane	0.41	J	1.0	0.32	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.44	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	83		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	66000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	8.2		4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	2100		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	1300		61	7.1	mg/L	510		300.0	Total/NA
Sulfate	130		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	2020		150	34.2	ug/L	1		6010D	Total/NA
Manganese	852		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	389000		5000	460	ug/L	1		6010D	Total/NA
Nitrate as N	0.037	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.055	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.018	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	22.3		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	309		5.0	5.0	mg/L	1		SM 2320B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-23D1R-W-20191205 (Continued) — Lab Sample ID: 460-198228-4

Analyte	Result	Qualifier	RL	RL	Unit	Dil Fac	D	Method	Prep Type
Ferric Iron	1.8		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.26	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	3.5		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-23D2R-W-20191205 — Lab Sample ID: 460-198228-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	1.8		1.0	0.20	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	14		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	69000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	2.9	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	1500		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	2400		110	13	mg/L	900		300.0	Total/NA
Sulfate	160		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	26100		150	34.2	ug/L	1		6010D	Total/NA
Manganese	2120		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	1410000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate as N	0.069	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.12	B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.051	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	18.9		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	349		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	26.1		0.10	0.10	mg/L	1		SM 3500	Total/NA
Sulfide	3.8		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-28D1-W-20191205 — Lab Sample ID: 460-198228-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethane	0.40	J	1.0	0.26	ug/L	1		8260C	Total/NA
Benzene	11		1.0	0.20	ug/L	1		8260C	Total/NA
Ethylbenzene	1.1		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	21		1.0	0.47	ug/L	1		8260C	Total/NA
Toluene	0.53	J	1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.25	J	1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	0.68	J	1.0	0.17	ug/L	1		8260C	Total/NA
Xylenes, Total	1.9	J	2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	75000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	33		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	15		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	2500		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	1800		84	9.8	mg/L	700		300.0	Total/NA
Sulfate	280		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	169		150	34.2	ug/L	1		6010D	Total/NA
Manganese	10.4	J	15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	874000		25000	2300	ug/L	5		6010D	Total/NA
Nitrate as N	0.021	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.038	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.017	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	17.3		5.0	2.9	mg/L	5		9060A	Total/NA
Alkalinity, Total	337		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferrous Iron	0.10	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	1.6		1.0	0.58	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: 460-198228-1

Client Sample ID: MW-28D2R-W-20191206 — Lab Sample ID: 460-198228-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Carbon dioxide	160000		5000	1800	ug/L	1		RSK-175	Total/NA
Methane	310		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	7400		600	70	mg/L	5000		300.0	Total/NA
Sulfate	850		600	350	mg/L	1000		300.0	Total/NA
Iron	463		150	34.2	ug/L	1		6010D	Total/NA
Manganese	989		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	4430000		100000	9200	ug/L	20		6010D	Total/NA
Nitrate as N	0.025	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.040	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.015	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	6.6		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	349		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
Ferrous Iron	0.16	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	5.0		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-26D2-W-20191206 — Lab Sample ID: 460-198228-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methyl tert-butyl ether	29		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	140000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	1.1	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	1300		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	4000		120	14	mg/L	1000		300.0	Total/NA
Sulfate	280		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	54.4	J	150	34.2	ug/L	1		6010D	Total/NA
Manganese	59.8		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	2340000		100000	9200	ug/L	20		6010D	Total/NA
Total Organic Carbon	13.7		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	628		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferrous Iron	0.27	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	45.6		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-26D1-W-20191206 — Lab Sample ID: 460-198228-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	6.2		1.0	0.20	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	0.75	J	1.0	0.22	ug/L	1		8260C	Total/NA
Ethylbenzene	1.2		1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	0.56	J	1.0	0.34	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	77		1.0	0.47	ug/L	1		8260C	Total/NA
Toluene	0.40	J	1.0	0.38	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.74	J	1.0	0.24	ug/L	1		8260C	Total/NA
Vinyl chloride	12		1.0	0.17	ug/L	1		8260C	Total/NA
Carbon dioxide	64000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	5.3		4.0	0.71	ug/L	1		RSK-175	Total/NA
Ethene	21		3.0	0.53	ug/L	1		RSK-175	Total/NA
Methane	2400		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	2000		95	11	mg/L	790		300.0	Total/NA
Sulfate	230		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	364		150	34.2	ug/L	1		6010D	Total/NA
Manganese	18.0		15.0	0.99	ug/L	1		6010D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-26D1-W-20191206 (Continued) — Lab Sample ID: 460-198228-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sodium	1260000		50000	4600	ug/L	10		6010D	Total/NA
Nitrate as N	0.030	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.040	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.010	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	31.6		5.0	2.9	mg/L	5		9060A	Total/NA
Alkalinity, Total	405		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.25		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.11	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	21.0		5.0	2.9	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: AMW-7R-W-20191206 — Lab Sample ID: 460-198228-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	0.89	J	1.0	0.20	ug/L	1		8260C	Total/NA
Cyclohexane	11		1.0	0.32	ug/L	1		8260C	Total/NA
Ethylbenzene	0.49	J	1.0	0.30	ug/L	1		8260C	Total/NA
Isopropylbenzene	1.9		1.0	0.34	ug/L	1		8260C	Total/NA
Methylcyclohexane	7.7		1.0	0.26	ug/L	1		8260C	Total/NA
Xylenes, Total	0.73	J	2.0	0.65	ug/L	1		8260C	Total/NA
Carbon dioxide	47000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	1.6	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	6200		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	80		3.6	0.42	mg/L	30		300.0	Total/NA
Sulfate	84		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	4790		150	34.2	ug/L	1		6010D	Total/NA
Manganese	1420		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	93300		5000	460	ug/L	1		6010D	Total/NA
Nitrate as N	0.025	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.042	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.017	J	0.10	0.010	mg/L	1		353.2	Total/NA
Total Organic Carbon	88.4		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	462		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	4.7		0.10	0.10	mg/L	1		SM 3500	Total/NA
Ferrous Iron	0.10	HF	0.10	0.099	mg/L	1		SM 3500 FE D	Total/NA
Sulfide	1.9		1.0	0.58	mg/L	1		SM 4500 S2 F	Total/NA

Client Sample ID: MW-29D1-W-20191206 — Lab Sample ID: 460-198228-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	0.47	J	1.0	0.32	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	12		1.0	0.47	ug/L	1		8260C	Total/NA
Carbon dioxide	28000		5000	1800	ug/L	1		RSK-175	Total/NA
Ethane	1.0	J	4.0	0.71	ug/L	1		RSK-175	Total/NA
Methane	1100		2.0	0.56	ug/L	1		RSK-175	Total/NA
Chloride	130		6.0	0.70	mg/L	50		300.0	Total/NA
Sulfate	16		6.0	3.5	mg/L	10		300.0	Total/NA
Iron	673		150	34.2	ug/L	1		6010D	Total/NA
Manganese	32.1		15.0	0.99	ug/L	1		6010D	Total/NA
Sodium	75900		5000	460	ug/L	1		6010D	Total/NA
Nitrate as N	0.053	J B	0.10	0.016	mg/L	1		353.2	Total/NA
Nitrate Nitrite as N	0.089	J B	0.10	0.022	mg/L	1		353.2	Total/NA
Nitrite as N	0.036	J	0.10	0.010	mg/L	1		353.2	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MW-29D1-W-20191206 (Continued)

Lab Sample ID: 460-198228-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Organic Carbon	29.5		1.0	0.58	mg/L	1		9060A	Total/NA
Alkalinity, Total	63.5		5.0	5.0	mg/L	1		SM 2320B	Total/NA
Ferric Iron	0.67		0.10	0.10	mg/L	1		SM 3500	Total/NA

Client Sample ID: Trip Blank

Lab Sample ID: 460-198228-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	3.1		1.0	0.32	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

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

Job ID: 460-198228-1

Client Sample ID: MW-18R-W-20191205
Date Collected: 12/05/19 20:45
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-1
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			12/15/19 10:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/15/19 10:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/15/19 10:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 10:12	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/15/19 10:12	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/15/19 10:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/15/19 10:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/15/19 10:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/15/19 10:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 10:12	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/15/19 10:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/15/19 10:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/15/19 10:12	1
2-Butanone (MEK)	**33**		5.0	1.9	ug/L			12/15/19 10:12	1
2-Hexanone	**3.7**	**J**	5.0	1.1	ug/L			12/15/19 10:12	1
4-Methyl-2-pentanone (MIBK)	**2.9**	**J**	5.0	1.3	ug/L			12/15/19 10:12	1
Acetone	**130**		5.0	4.4	ug/L			12/15/19 10:12	1
Benzene	**74**		1.0	0.20	ug/L			12/15/19 10:12	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/15/19 10:12	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/15/19 10:12	1
Carbon disulfide	**2.0**		1.0	0.82	ug/L			12/15/19 10:12	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/15/19 10:12	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/15/19 10:12	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/15/19 10:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/15/19 10:12	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/15/19 10:12	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/15/19 10:12	1
cis-1,2-Dichloroethene	**0.28**	**J**	1.0	0.22	ug/L			12/15/19 10:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/15/19 10:12	1
Cyclohexane	**7.2**		1.0	0.32	ug/L			12/15/19 10:12	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/15/19 10:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/15/19 10:12	1
Ethylbenzene	**1.6**		1.0	0.30	ug/L			12/15/19 10:12	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/15/19 10:12	1
Isopropylbenzene	**4.8**		1.0	0.34	ug/L			12/15/19 10:12	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/15/19 10:12	1
Methyl tert-butyl ether	**14**		1.0	0.47	ug/L			12/15/19 10:12	1
Methylcyclohexane	**3.3**		1.0	0.26	ug/L			12/15/19 10:12	1
Methylene Chloride	**0.62**	**J**	1.0	0.32	ug/L			12/15/19 10:12	1
Styrene	1.0	U	1.0	0.42	ug/L			12/15/19 10:12	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/15/19 10:12	1
Toluene	**4.8**		1.0	0.38	ug/L			12/15/19 10:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/15/19 10:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/15/19 10:12	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/15/19 10:12	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/15/19 10:12	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/15/19 10:12	1
Xylenes, Total	**5.2**		2.0	0.65	ug/L			12/15/19 10:12	1

Client Sample ID: MW-18R-W-20191205

Lab Sample ID: 460-198228-1

Date Collected: 12/05/19 20:45

Matrix: Water

Date Received: 12/06/19 15:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*12/15/19 10:12*	*1*
4-Bromofluorobenzene	*90*		*77 - 124*		*12/15/19 10:12*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/15/19 10:12*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/15/19 10:12*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**3000**	**J**	5000	1800	ug/L			12/10/19 17:42	1
Ethane	**21**		4.0	0.71	ug/L			12/10/19 15:40	1
Ethene	**0.81**	**J**	3.0	0.53	ug/L			12/10/19 15:40	1
Methane	**16000**		2.0	0.56	ug/L			12/10/19 15:40	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**400**		18	2.1	mg/L			12/10/19 02:11	150
Sulfate	**74**		6.0	3.5	mg/L			12/09/19 21:12	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**3100**		150	34.2	ug/L		12/17/19 03:58	12/17/19 15:54	1
Manganese	**30.8**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 15:54	1
Sodium	**323000**		5000	460	ug/L		12/17/19 03:58	12/17/19 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.030**	**J B**	0.10	0.016	mg/L			12/07/19 04:43	1
Nitrate Nitrite as N	**0.059**	**J B**	0.10	0.022	mg/L			12/07/19 04:43	1
Nitrite as N	**0.029**	**J**	0.10	0.010	mg/L			12/07/19 04:43	1
Total Organic Carbon	**123**		5.0	2.9	mg/L			12/09/19 19:58	5
Ferrous Iron	**0.28**	**HF**	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**15.9**		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**225**		5.0	5.0	mg/L			12/12/19 15:05	1
Ferric Iron	**2.8**		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: MW-27D1R-W-20191205

Lab Sample ID: 460-198228-2

Date Collected: 12/05/19 21:15

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 17:10	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 17:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 17:10	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 17:10	1
1,1-Dichloroethane	**0.36**	**J**	1.0	0.26	ug/L			12/14/19 17:10	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 17:10	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 17:10	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 17:10	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 17:10	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 17:10	1

Client Sample ID: MW-27D1R-W-20191205

Date Collected: 12/05/19 21:15
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 17:10	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 17:10	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 17:10	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 17:10	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 17:10	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 17:10	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 17:10	1
Benzene	**6.4**		1.0	0.20	ug/L			12/14/19 17:10	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 17:10	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 17:10	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 17:10	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 17:10	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 17:10	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 17:10	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 17:10	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 17:10	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 17:10	1
cis-1,2-Dichloroethene	**0.95**	**J**	1.0	0.22	ug/L			12/14/19 17:10	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 17:10	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 17:10	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 17:10	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 17:10	1
Ethylbenzene	**0.48**	**J**	1.0	0.30	ug/L			12/14/19 17:10	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 17:10	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 17:10	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 17:10	1
Methyl tert-butyl ether	**39**		1.0	0.47	ug/L			12/14/19 17:10	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 17:10	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 17:10	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 17:10	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 17:10	1
Toluene	**1.7**		1.0	0.38	ug/L			12/14/19 17:10	1
trans-1,2-Dichloroethene	**3.6**		1.0	0.24	ug/L			12/14/19 17:10	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 17:10	1
Trichloroethene	**0.37**	**J**	1.0	0.31	ug/L			12/14/19 17:10	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 17:10	1
Vinyl chloride	**61**		1.0	0.17	ug/L			12/14/19 17:10	1
Xylenes, Total	**1.6**	**J**	2.0	0.65	ug/L			12/14/19 17:10	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*95*		*74 - 132*		*12/14/19 17:10*	*1*
4-Bromofluorobenzene	*90*		*77 - 124*		*12/14/19 17:10*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 131*		*12/14/19 17:10*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/14/19 17:10*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**170000**		5000	1800	ug/L			12/10/19 17:51	1
Ethane	**5.5**		4.0	0.71	ug/L			12/10/19 15:49	1
Ethene	**40**		3.0	0.53	ug/L			12/10/19 15:49	1

Client Sample ID: MW-27D1R-W-20191205

Lab Sample ID: 460-198228-2

Date Collected: 12/05/19 21:15

Matrix: Water

Date Received: 12/06/19 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	**2600**		2.0	0.56	ug/L			12/10/19 15:49	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3800**		120	14	mg/L			12/10/19 02:25	1000
Sulfate	**200**		6.0	3.5	mg/L			12/09/19 21:27	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1310**		150	34.2	ug/L		12/17/19 03:58	12/17/19 15:58	1
Manganese	**51.9**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 15:58	1
Sodium	**1920000**		50000	4600	ug/L		12/17/19 03:58	12/17/19 20:37	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.045**	**J B**	0.10	0.016	mg/L			12/07/19 04:44	1
Nitrate Nitrite as N	**0.045**	**J B**	0.10	0.022	mg/L			12/07/19 04:44	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/07/19 04:44	1
Total Organic Carbon	**16.6**		1.0	0.58	mg/L			12/09/19 20:23	1
Ferrous Iron	0.10	U HF	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**45.6**		5.0	2.9	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**762**		5.0	5.0	mg/L			12/12/19 15:18	1
Ferric Iron	**1.3**		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: MW-27D2-W-20191205

Lab Sample ID: 460-198228-3

Date Collected: 12/05/19 21:45

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 17:34	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 17:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 17:34	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 17:34	1
1,1-Dichloroethane	**0.38**	**J**	1.0	0.26	ug/L			12/14/19 17:34	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 17:34	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 17:34	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 17:34	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 17:34	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 17:34	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 17:34	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 17:34	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 17:34	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 17:34	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 17:34	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 17:34	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 17:34	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 17:34	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 17:34	1

Client Sample ID: MW-27D2-W-20191205

Date Collected: 12/05/19 21:45
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 17:34	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 17:34	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 17:34	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 17:34	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 17:34	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 17:34	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 17:34	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 17:34	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 17:34	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 17:34	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 17:34	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 17:34	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 17:34	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 17:34	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 17:34	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 17:34	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 17:34	1
Methyl tert-butyl ether	**4.9**		1.0	0.47	ug/L			12/14/19 17:34	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 17:34	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 17:34	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 17:34	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 17:34	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 17:34	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 17:34	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 17:34	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 17:34	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 17:34	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 17:34	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 17:34	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*74 - 132*		*12/14/19 17:34*	*1*
4-Bromofluorobenzene	*86*		*77 - 124*		*12/14/19 17:34*	*1*
Dibromofluoromethane (Surr)	*90*		*72 - 131*		*12/14/19 17:34*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/14/19 17:34*	*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			12/10/19 17:59	1
Ethane	4.0	U	4.0	0.71	ug/L			12/10/19 15:58	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 15:58	1
Methane	**1600**		2.0	0.56	ug/L			12/10/19 15:58	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**3600**		120	14	mg/L			12/10/19 02:40	1000
Sulfate	**280**		6.0	3.5	mg/L			12/09/19 21:42	10

Client Sample ID: MW-27D2-W-20191205

Lab Sample ID: 460-198228-3

Date Collected: 12/05/19 21:45

Matrix: Water

Date Received: 12/06/19 15:30

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**1190**		150	34.2	ug/L		12/17/19 03:58	12/17/19 16:02	1
Manganese	**174**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 16:02	1
Sodium	**1620000**		50000	4600	ug/L		12/17/19 03:58	12/17/19 20:41	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/07/19 04:50	1
Nitrate Nitrite as N	**0.025**	**J B**	0.10	0.022	mg/L			12/07/19 04:50	1
Nitrite as N	**0.011**	**J**	0.10	0.010	mg/L			12/07/19 04:50	1
Total Organic Carbon	**12.0**		1.0	0.58	mg/L			12/09/19 21:37	1
Ferrous Iron	**0.12**	**HF**	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**22.0**		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**526**		5.0	5.0	mg/L			12/12/19 15:29	1
Ferric Iron	**1.1**		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: MW-23D1R-W-20191205

Lab Sample ID: 460-198228-4

Date Collected: 12/05/19 23:00

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 17:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 17:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 17:59	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 17:59	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 17:59	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 17:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 17:59	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 17:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 17:59	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 17:59	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 17:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 17:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 17:59	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 17:59	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 17:59	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 17:59	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 17:59	1
Benzene	**1.4**		1.0	0.20	ug/L			12/14/19 17:59	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 17:59	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 17:59	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 17:59	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 17:59	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 17:59	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 17:59	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 17:59	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 17:59	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 17:59	1
cis-1,2-Dichloroethene	**0.72**	**J**	1.0	0.22	ug/L			12/14/19 17:59	1

Client Sample ID: MW-23D1R-W-20191205
Date Collected: 12/05/19 23:00
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 17:59	1
Cyclohexane	**0.41**	**J**	1.0	0.32	ug/L			12/14/19 17:59	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 17:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 17:59	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 17:59	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 17:59	1
Isopropylbenzene	**0.44**	**J**	1.0	0.34	ug/L			12/14/19 17:59	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 17:59	1
Methyl tert-butyl ether	**83**		1.0	0.47	ug/L			12/14/19 17:59	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 17:59	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 17:59	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 17:59	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 17:59	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 17:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 17:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 17:59	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 17:59	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 17:59	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 17:59	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 17:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*12/14/19 17:59*	*1*
4-Bromofluorobenzene	*88*		*77 - 124*		*12/14/19 17:59*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 131*		*12/14/19 17:59*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/14/19 17:59*	*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			12/10/19 18:08	1
Ethane	**8.2**		4.0	0.71	ug/L			12/10/19 16:06	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 16:06	1
Methane	**2100**		2.0	0.56	ug/L			12/10/19 16:06	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1300**		61	7.1	mg/L			12/10/19 02:55	510
Sulfate	**130**		6.0	3.5	mg/L			12/09/19 21:57	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**2020**		150	34.2	ug/L		12/17/19 03:58	12/17/19 16:06	1
Manganese	**852**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 16:06	1
Sodium	**389000**		5000	460	ug/L		12/17/19 03:58	12/17/19 16:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.037**	**J B**	0.10	0.016	mg/L			12/07/19 04:50	1
Nitrate Nitrite as N	**0.055**	**J B**	0.10	0.022	mg/L			12/07/19 04:50	1
Nitrite as N	**0.018**	**J**	0.10	0.010	mg/L			12/07/19 04:50	1
Total Organic Carbon	**22.3**		1.0	0.58	mg/L			12/09/19 22:03	1

Client Sample ID: MW-23D1R-W-20191205

Lab Sample ID: 460-198228-4

Date Collected: 12/05/19 23:00

Matrix: Water

Date Received: 12/06/19 15:30

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.26**	**HF**	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**3.5**		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**309**		5.0	5.0	mg/L			12/12/19 15:37	1
Ferric Iron	**1.8**		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: MW-23D2R-W-20191205

Lab Sample ID: 460-198228-5

Date Collected: 12/05/19 22:30

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 18:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 18:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 18:23	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 18:23	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 18:23	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 18:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 18:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 18:23	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 18:23	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 18:23	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 18:23	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 18:23	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 18:23	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 18:23	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 18:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 18:23	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 18:23	1
Benzene	**1.8**		1.0	0.20	ug/L			12/14/19 18:23	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 18:23	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 18:23	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 18:23	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 18:23	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 18:23	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 18:23	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 18:23	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 18:23	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 18:23	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 18:23	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 18:23	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 18:23	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 18:23	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 18:23	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 18:23	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 18:23	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 18:23	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 18:23	1
Methyl tert-butyl ether	**14**		1.0	0.47	ug/L			12/14/19 18:23	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 18:23	1

Client Sample ID: MW-23D2R-W-20191205
Date Collected: 12/05/19 22:30
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-5
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 18:23	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 18:23	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 18:23	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 18:23	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 18:23	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 18:23	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 18:23	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 18:23	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 18:23	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 18:23	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*88*		*74 - 132*		*12/14/19 18:23*	*1*
4-Bromofluorobenzene	*85*		*77 - 124*		*12/14/19 18:23*	*1*
Dibromofluoromethane (Surr)	*91*		*72 - 131*		*12/14/19 18:23*	*1*
Toluene-d8 (Surr)	*92*		*80 - 120*		*12/14/19 18:23*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**69000**		5000	1800	ug/L			12/10/19 18:17	1
Ethane	**2.9**	**J**	4.0	0.71	ug/L			12/10/19 16:15	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 16:15	1
Methane	**1500**		2.0	0.56	ug/L			12/10/19 16:15	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2400**		110	13	mg/L			12/10/19 03:09	900
Sulfate	**160**		6.0	3.5	mg/L			12/09/19 22:12	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**26100**		150	34.2	ug/L		12/17/19 03:58	12/17/19 16:10	1
Manganese	**2120**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 16:10	1
Sodium	**1410000**		50000	4600	ug/L		12/17/19 03:58	12/17/19 20:45	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.069**	**J B**	0.10	0.016	mg/L			12/07/19 04:51	1
Nitrate Nitrite as N	**0.12**	**B**	0.10	0.022	mg/L			12/07/19 04:51	1
Nitrite as N	**0.051**	**J**	0.10	0.010	mg/L			12/07/19 04:51	1
Total Organic Carbon	**18.9**		1.0	0.58	mg/L			12/09/19 22:28	1
Ferrous Iron	0.10	U HF	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**3.8**		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**349**		5.0	5.0	mg/L			12/12/19 15:45	1
Ferric Iron	**26.1**		0.10	0.10	mg/L			12/18/19 06:30	1

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

Job ID: 460-198228-1

Client Sample ID: MW-28D1-W-20191205

Lab Sample ID: 460-198228-6

Date Collected: 12/05/19 23:30

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 18:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 18:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 18:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 18:48	1
1,1-Dichloroethane	**0.40**	**J**	1.0	0.26	ug/L			12/14/19 18:48	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 18:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 18:48	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 18:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 18:48	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 18:48	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 18:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 18:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 18:48	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 18:48	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 18:48	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 18:48	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 18:48	1
Benzene	**11**		1.0	0.20	ug/L			12/14/19 18:48	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 18:48	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 18:48	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 18:48	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 18:48	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 18:48	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 18:48	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 18:48	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 18:48	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 18:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 18:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 18:48	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 18:48	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 18:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 18:48	1
Ethylbenzene	**1.1**		1.0	0.30	ug/L			12/14/19 18:48	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 18:48	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 18:48	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 18:48	1
Methyl tert-butyl ether	**21**		1.0	0.47	ug/L			12/14/19 18:48	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 18:48	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 18:48	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 18:48	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 18:48	1
Toluene	**0.53**	**J**	1.0	0.38	ug/L			12/14/19 18:48	1
trans-1,2-Dichloroethene	**0.25**	**J**	1.0	0.24	ug/L			12/14/19 18:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 18:48	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 18:48	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 18:48	1
Vinyl chloride	**0.68**	**J**	1.0	0.17	ug/L			12/14/19 18:48	1
Xylenes, Total	**1.9**	**J**	2.0	0.65	ug/L			12/14/19 18:48	1

Client Sample ID: MW-28D1-W-20191205

Lab Sample ID: 460-198228-6

Date Collected: 12/05/19 23:30

Matrix: Water

Date Received: 12/06/19 15:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*74 - 132*		*12/14/19 18:48*	*1*
4-Bromofluorobenzene	*96*		*77 - 124*		*12/14/19 18:48*	*1*
Dibromofluoromethane (Surr)	*102*		*72 - 131*		*12/14/19 18:48*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*		*12/14/19 18:48*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**75000**		5000	1800	ug/L			12/10/19 18:26	1
Ethane	**33**		4.0	0.71	ug/L			12/10/19 16:24	1
Ethene	**15**		3.0	0.53	ug/L			12/10/19 16:24	1
Methane	**2500**		2.0	0.56	ug/L			12/10/19 16:24	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1800**		84	9.8	mg/L			12/10/19 03:54	700
Sulfate	**280**		6.0	3.5	mg/L			12/09/19 22:57	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**169**		150	34.2	ug/L		12/17/19 03:58	12/17/19 16:14	1
Manganese	**10.4**	**J**	15.0	0.99	ug/L		12/17/19 03:58	12/17/19 16:14	1
Sodium	**874000**		25000	2300	ug/L		12/17/19 03:58	12/17/19 20:49	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.021**	**J B**	0.10	0.016	mg/L			12/07/19 04:52	1
Nitrate Nitrite as N	**0.038**	**J B**	0.10	0.022	mg/L			12/07/19 04:52	1
Nitrite as N	**0.017**	**J**	0.10	0.010	mg/L			12/07/19 04:52	1
Total Organic Carbon	**17.3**		5.0	2.9	mg/L			12/09/19 22:53	5
Ferrous Iron	**0.10**	**HF**	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**1.6**		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**337**		5.0	5.0	mg/L			12/12/19 15:55	1
Ferric Iron	0.10	U	0.10	0.10	mg/L			12/25/19 06:30	1

Client Sample ID: MW-28D2R-W-20191206

Lab Sample ID: 460-198228-7

Date Collected: 12/06/19 00:20

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 19:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 19:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 19:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 19:12	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 19:12	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 19:12	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 19:12	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 19:12	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 19:12	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 19:12	1

Client Sample ID: MW-28D2R-W-20191206
Date Collected: 12/06/19 00:20
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 19:12	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 19:12	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 19:12	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 19:12	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 19:12	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 19:12	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 19:12	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 19:12	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 19:12	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 19:12	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 19:12	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 19:12	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 19:12	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 19:12	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 19:12	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 19:12	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 19:12	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 19:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 19:12	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 19:12	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 19:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 19:12	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 19:12	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 19:12	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 19:12	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 19:12	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/14/19 19:12	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 19:12	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 19:12	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 19:12	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 19:12	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 19:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 19:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 19:12	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 19:12	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 19:12	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 19:12	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 19:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*74 - 132*		*12/14/19 19:12*	*1*
4-Bromofluorobenzene	*88*		*77 - 124*		*12/14/19 19:12*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/14/19 19:12*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/14/19 19:12*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**160000**		5000	1800	ug/L			12/10/19 18:34	1
Ethane	4.0	U	4.0	0.71	ug/L			12/10/19 16:32	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 16:32	1

Client Sample ID: MW-28D2R-W-20191206

Lab Sample ID: 460-198228-7

Date Collected: 12/06/19 00:20

Matrix: Water

Date Received: 12/06/19 15:30

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methane	310		2.0	0.56	ug/L			12/10/19 16:32	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7400		600	70	mg/L			12/10/19 15:13	5000
Sulfate	850		600	350	mg/L			12/10/19 04:09	1000

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	463		150	34.2	ug/L		12/17/19 03:58	12/17/19 16:18	1
Manganese	989		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 16:18	1
Sodium	4430000		100000	9200	ug/L		12/17/19 03:58	12/17/19 20:53	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.025	J B	0.10	0.016	mg/L			12/07/19 04:53	1
Nitrate Nitrite as N	0.040	J B	0.10	0.022	mg/L			12/07/19 04:53	1
Nitrite as N	0.015	J	0.10	0.010	mg/L			12/07/19 04:53	1
Total Organic Carbon	6.6		1.0	0.58	mg/L			12/09/19 23:17	1
Ferrous Iron	0.16	HF	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	5.0		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	349		5.0	5.0	mg/L			12/12/19 16:04	1
Ferric Iron	0.30		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: MW-26D2-W-20191206

Lab Sample ID: 460-198228-8

Date Collected: 12/06/19 00:45

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 19:37	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 19:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 19:37	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 19:37	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 19:37	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 19:37	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 19:37	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 19:37	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 19:37	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 19:37	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 19:37	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 19:37	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 19:37	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 19:37	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 19:37	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 19:37	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 19:37	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 19:37	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 19:37	1

Client Sample ID: MW-26D2-W-20191206
Date Collected: 12/06/19 00:45
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 19:37	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 19:37	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 19:37	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 19:37	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 19:37	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 19:37	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 19:37	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 19:37	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 19:37	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 19:37	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 19:37	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 19:37	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 19:37	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 19:37	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 19:37	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 19:37	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 19:37	1
Methyl tert-butyl ether	**29**		1.0	0.47	ug/L			12/14/19 19:37	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 19:37	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 19:37	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 19:37	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 19:37	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 19:37	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 19:37	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 19:37	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 19:37	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 19:37	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 19:37	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 19:37	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*12/14/19 19:37*	*1*
4-Bromofluorobenzene	*90*		*77 - 124*		*12/14/19 19:37*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*12/14/19 19:37*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*12/14/19 19:37*	*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			12/10/19 18:43	1
Ethane	**1.1**	**J**	4.0	0.71	ug/L			12/10/19 16:41	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 16:41	1
Methane	**1300**		2.0	0.56	ug/L			12/10/19 16:41	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**4000**		120	14	mg/L			12/10/19 04:23	1000
Sulfate	**280**		6.0	3.5	mg/L			12/09/19 23:27	10

Client Sample ID: MW-26D2-W-20191206

Lab Sample ID: 460-198228-8

Date Collected: 12/06/19 00:45

Matrix: Water

Date Received: 12/06/19 15:30

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**54.4**	**J**	150	34.2	ug/L		12/17/19 03:58	12/17/19 16:22	1
Manganese	**59.8**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 16:22	1
Sodium	**2340000**		100000	9200	ug/L		12/17/19 03:58	12/17/19 20:57	20

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.10	U	0.10	0.016	mg/L			12/07/19 04:53	1
Nitrate Nitrite as N	0.10	U	0.10	0.022	mg/L			12/07/19 04:53	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/07/19 04:53	1
Total Organic Carbon	**13.7**		1.0	0.58	mg/L			12/09/19 23:41	1
Ferrous Iron	**0.27**	**HF**	0.10	0.099	mg/L			12/11/19 12:36	1
Sulfide	**45.6**		5.0	2.9	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**628**		5.0	5.0	mg/L			12/12/19 16:15	1
Ferric Iron	0.10	U	0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: MW-26D1-W-20191206

Lab Sample ID: 460-198228-9

Date Collected: 12/06/19 01:10

Matrix: Water

Date Received: 12/06/19 15:30

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			12/15/19 09:02	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/15/19 09:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/15/19 09:02	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 09:02	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/15/19 09:02	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/15/19 09:02	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/15/19 09:02	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/15/19 09:02	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/15/19 09:02	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 09:02	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/15/19 09:02	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/15/19 09:02	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/15/19 09:02	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/15/19 09:02	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/15/19 09:02	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/15/19 09:02	1
Acetone	5.0	U	5.0	4.4	ug/L			12/15/19 09:02	1
Benzene	**6.2**		1.0	0.20	ug/L			12/15/19 09:02	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/15/19 09:02	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/15/19 09:02	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/15/19 09:02	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/15/19 09:02	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/15/19 09:02	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/15/19 09:02	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/15/19 09:02	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/15/19 09:02	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/15/19 09:02	1
cis-1,2-Dichloroethene	**0.75**	**J**	1.0	0.22	ug/L			12/15/19 09:02	1

Client Sample ID: MW-26D1-W-20191206
Date Collected: 12/06/19 01:10
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-9
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/15/19 09:02	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/15/19 09:02	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/15/19 09:02	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/15/19 09:02	1
Ethylbenzene	**1.2**		1.0	0.30	ug/L			12/15/19 09:02	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/15/19 09:02	1
Isopropylbenzene	**0.56**	**J**	1.0	0.34	ug/L			12/15/19 09:02	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/15/19 09:02	1
Methyl tert-butyl ether	**77**		1.0	0.47	ug/L			12/15/19 09:02	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/15/19 09:02	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/15/19 09:02	1
Styrene	1.0	U	1.0	0.42	ug/L			12/15/19 09:02	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/15/19 09:02	1
Toluene	**0.40**	**J**	1.0	0.38	ug/L			12/15/19 09:02	1
trans-1,2-Dichloroethene	**0.74**	**J**	1.0	0.24	ug/L			12/15/19 09:02	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/15/19 09:02	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/15/19 09:02	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/15/19 09:02	1
Vinyl chloride	**12**		1.0	0.17	ug/L			12/15/19 09:02	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/15/19 09:02	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*74 - 132*		*12/15/19 09:02*	*1*
4-Bromofluorobenzene	*89*		*77 - 124*		*12/15/19 09:02*	*1*
Dibromofluoromethane (Surr)	*97*		*72 - 131*		*12/15/19 09:02*	*1*
Toluene-d8 (Surr)	*96*		*80 - 120*		*12/15/19 09:02*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**64000**		5000	1800	ug/L			12/10/19 18:52	1
Ethane	**5.3**		4.0	0.71	ug/L			12/10/19 16:50	1
Ethene	**21**		3.0	0.53	ug/L			12/10/19 16:50	1
Methane	**2400**		2.0	0.56	ug/L			12/10/19 16:50	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2000**		95	11	mg/L			12/10/19 04:38	790
Sulfate	**230**		6.0	3.5	mg/L			12/09/19 23:42	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**364**		150	34.2	ug/L		12/17/19 03:58	12/17/19 18:23	1
Manganese	**18.0**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 18:23	1
Sodium	**1260000**		50000	4600	ug/L		12/17/19 03:58	12/17/19 21:01	10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.030**	**J B**	0.10	0.016	mg/L			12/07/19 05:05	1
Nitrate Nitrite as N	**0.040**	**J B**	0.10	0.022	mg/L			12/07/19 05:05	1
Nitrite as N	**0.010**	**J**	0.10	0.010	mg/L			12/07/19 05:05	1
Total Organic Carbon	**31.6**		5.0	2.9	mg/L			12/10/19 00:06	5

Client Sample ID: MW-26D1-W-20191206

Lab Sample ID: 460-198228-9

Date Collected: 12/06/19 01:10

Matrix: Water

Date Received: 12/06/19 15:30

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ferrous Iron	**0.11**	**HF**	0.10	0.099	mg/L			12/11/19 12:41	1
Sulfide	**21.0**		5.0	2.9	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**405**		5.0	5.0	mg/L			12/12/19 16:24	1
Ferric Iron	**0.25**		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: AMW-7R-W-20191206

Lab Sample ID: 460-198228-10

Date Collected: 12/06/19 01:40

Matrix: Water

Date Received: 12/06/19 15:30

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			12/15/19 09:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/15/19 09:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/15/19 09:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 09:26	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/15/19 09:26	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/15/19 09:26	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/15/19 09:26	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/15/19 09:26	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/15/19 09:26	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 09:26	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/15/19 09:26	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/15/19 09:26	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/15/19 09:26	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/15/19 09:26	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/15/19 09:26	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/15/19 09:26	1
Acetone	5.0	U	5.0	4.4	ug/L			12/15/19 09:26	1
Benzene	**0.89**	**J**	1.0	0.20	ug/L			12/15/19 09:26	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/15/19 09:26	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/15/19 09:26	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/15/19 09:26	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/15/19 09:26	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/15/19 09:26	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/15/19 09:26	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/15/19 09:26	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/15/19 09:26	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/15/19 09:26	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/15/19 09:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/15/19 09:26	1
Cyclohexane	**11**		1.0	0.32	ug/L			12/15/19 09:26	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/15/19 09:26	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/15/19 09:26	1
Ethylbenzene	**0.49**	**J**	1.0	0.30	ug/L			12/15/19 09:26	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/15/19 09:26	1
Isopropylbenzene	**1.9**		1.0	0.34	ug/L			12/15/19 09:26	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/15/19 09:26	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/15/19 09:26	1
Methylcyclohexane	**7.7**		1.0	0.26	ug/L			12/15/19 09:26	1

Client Sample ID: AMW-7R-W-20191206
Date Collected: 12/06/19 01:40
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-10
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/15/19 09:26	1
Styrene	1.0	U	1.0	0.42	ug/L			12/15/19 09:26	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/15/19 09:26	1
Toluene	1.0	U	1.0	0.38	ug/L			12/15/19 09:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/15/19 09:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/15/19 09:26	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/15/19 09:26	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/15/19 09:26	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/15/19 09:26	1
Xylenes, Total	**0.73**	**J**	2.0	0.65	ug/L			12/15/19 09:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*12/15/19 09:26*	*1*
4-Bromofluorobenzene	*89*		*77 - 124*		*12/15/19 09:26*	*1*
Dibromofluoromethane (Surr)	*95*		*72 - 131*		*12/15/19 09:26*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/15/19 09:26*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**47000**		5000	1800	ug/L			12/10/19 19:00	1
Ethane	**1.6**	**J**	4.0	0.71	ug/L			12/10/19 16:58	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 16:58	1
Methane	**6200**		2.0	0.56	ug/L			12/10/19 16:58	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**80**		3.6	0.42	mg/L			12/10/19 04:53	30
Sulfate	**84**		6.0	3.5	mg/L			12/09/19 23:57	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**4790**		150	34.2	ug/L		12/17/19 03:58	12/17/19 18:27	1
Manganese	**1420**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 18:27	1
Sodium	**93300**		5000	460	ug/L		12/17/19 03:58	12/17/19 18:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.025**	**J B**	0.10	0.016	mg/L			12/07/19 05:06	1
Nitrate Nitrite as N	**0.042**	**J B**	0.10	0.022	mg/L			12/07/19 05:06	1
Nitrite as N	**0.017**	**J**	0.10	0.010	mg/L			12/07/19 05:06	1
Total Organic Carbon	**88.4**		1.0	0.58	mg/L			12/10/19 00:30	1
Ferrous Iron	**0.10**	**HF**	0.10	0.099	mg/L			12/11/19 12:41	1
Sulfide	**1.9**		1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**462**		5.0	5.0	mg/L			12/12/19 16:34	1
Ferric Iron	**4.7**		0.10	0.10	mg/L			12/25/19 06:30	1

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

Job ID: 460-198228-1

Client Sample ID: MW-29D1-W-20191206
Date Collected: 12/06/19 02:05
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-11
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			12/15/19 09:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/15/19 09:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/15/19 09:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 09:49	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/15/19 09:49	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/15/19 09:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/15/19 09:49	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/15/19 09:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/15/19 09:49	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 09:49	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/15/19 09:49	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/15/19 09:49	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/15/19 09:49	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/15/19 09:49	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/15/19 09:49	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/15/19 09:49	1
Acetone	5.0	U	5.0	4.4	ug/L			12/15/19 09:49	1
Benzene	1.0	U	1.0	0.20	ug/L			12/15/19 09:49	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/15/19 09:49	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/15/19 09:49	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/15/19 09:49	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/15/19 09:49	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/15/19 09:49	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/15/19 09:49	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/15/19 09:49	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/15/19 09:49	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/15/19 09:49	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/15/19 09:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/15/19 09:49	1
Cyclohexane	**0.47**	**J**	1.0	0.32	ug/L			12/15/19 09:49	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/15/19 09:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/15/19 09:49	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/15/19 09:49	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/15/19 09:49	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/15/19 09:49	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/15/19 09:49	1
Methyl tert-butyl ether	**12**		1.0	0.47	ug/L			12/15/19 09:49	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/15/19 09:49	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/15/19 09:49	1
Styrene	1.0	U	1.0	0.42	ug/L			12/15/19 09:49	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/15/19 09:49	1
Toluene	1.0	U	1.0	0.38	ug/L			12/15/19 09:49	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/15/19 09:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/15/19 09:49	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/15/19 09:49	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/15/19 09:49	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/15/19 09:49	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/15/19 09:49	1

Client Sample ID: MW-29D1-W-20191206

Lab Sample ID: 460-198228-11

Date Collected: 12/06/19 02:05

Matrix: Water

Date Received: 12/06/19 15:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*12/15/19 09:49*	*1*
4-Bromofluorobenzene	*90*		*77 - 124*		*12/15/19 09:49*	*1*
Dibromofluoromethane (Surr)	*96*		*72 - 131*		*12/15/19 09:49*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/15/19 09:49*	*1*

Method: RSK-175 - Dissolved Gases (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon dioxide	**28000**		5000	1800	ug/L			12/10/19 19:09	1
Ethane	**1.0**	**J**	4.0	0.71	ug/L			12/10/19 17:07	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 17:07	1
Methane	**1100**		2.0	0.56	ug/L			12/10/19 17:07	1

Method: 300.0 - Anions, Ion Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**130**		6.0	0.70	mg/L			12/10/19 05:08	50
Sulfate	**16**		6.0	3.5	mg/L			12/10/19 00:12	10

Method: 6010D - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	**673**		150	34.2	ug/L		12/17/19 03:58	12/17/19 18:31	1
Manganese	**32.1**		15.0	0.99	ug/L		12/17/19 03:58	12/17/19 18:31	1
Sodium	**75900**		5000	460	ug/L		12/17/19 03:58	12/17/19 18:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	**0.053**	**J B**	0.10	0.016	mg/L			12/07/19 05:05	1
Nitrate Nitrite as N	**0.089**	**J B**	0.10	0.022	mg/L			12/07/19 05:05	1
Nitrite as N	**0.036**	**J**	0.10	0.010	mg/L			12/07/19 05:05	1
Total Organic Carbon	**29.5**		1.0	0.58	mg/L			12/10/19 00:55	1
Ferrous Iron	0.10	U HF	0.10	0.099	mg/L			12/11/19 12:41	1
Sulfide	1.0	U	1.0	0.58	mg/L			12/11/19 16:05	1

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	**63.5**		5.0	5.0	mg/L			12/12/19 16:42	1
Ferric Iron	**0.67**		0.10	0.10	mg/L			12/18/19 06:30	1

Client Sample ID: Trip Blank

Lab Sample ID: 460-198228-12

Date Collected: 12/06/19 00:00

Matrix: Water

Date Received: 12/06/19 15:30

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			12/14/19 12:51	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 12:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:51	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:51	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 12:51	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 12:51	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 12:51	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 12:51	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 12:51	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:51	1

Client Sample ID: Trip Blank
Date Collected: 12/06/19 00:00
Date Received: 12/06/19 15:30

Lab Sample ID: 460-198228-12
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 12:51	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:51	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 12:51	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 12:51	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 12:51	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 12:51	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 12:51	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 12:51	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 12:51	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 12:51	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 12:51	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 12:51	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 12:51	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 12:51	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:51	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 12:51	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 12:51	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 12:51	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 12:51	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 12:51	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 12:51	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:51	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 12:51	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 12:51	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:51	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 12:51	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/14/19 12:51	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 12:51	1
Methylene Chloride	**3.1**		1.0	0.32	ug/L			12/14/19 12:51	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 12:51	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 12:51	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 12:51	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 12:51	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 12:51	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 12:51	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:51	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 12:51	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 12:51	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*91*		*74 - 132*		*12/14/19 12:51*	*1*
4-Bromofluorobenzene	*87*		*77 - 124*		*12/14/19 12:51*	*1*
Dibromofluoromethane (Surr)	*92*		*72 - 131*		*12/14/19 12:51*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*12/14/19 12:51*	*1*

Surrogate Summary

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

Job ID: 460-198228-1

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)
460-198228-1	MW-18R-W-20191205	93	90	95	98
460-198228-2	MW-27D1R-W-20191205	95	90	96	99
460-198228-3	MW-27D2-W-20191205	89	86	90	92
460-198228-4	MW-23D1R-W-20191205	92	88	96	98
460-198228-5	MW-23D2R-W-20191205	88	85	91	92
460-198228-6	MW-28D1-W-20191205	97	96	102	104
460-198228-7	MW-28D2R-W-20191206	94	88	95	97
460-198228-8	MW-26D2-W-20191206	93	90	97	99
460-198228-9	MW-26D1-W-20191206	92	89	97	96
460-198228-10	AMW-7R-W-20191206	93	89	95	98
460-198228-11	MW-29D1-W-20191206	91	90	96	98
460-198228-12	Trip Blank	91	87	92	97
LCS 460-662315/5	Lab Control Sample	97	97	100	107
LCS 460-662462/4	Lab Control Sample	90	82	89	96
LCSD 460-662462/5	Lab Control Sample Dup	90	88	95	101
MB 460-662315/9	Method Blank	90	89	90	96
MB 460-662462/9	Method Blank	93	88	94	98

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 460-662315/9
Matrix: Water
Analysis Batch: 662315

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			12/14/19 12:28	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/14/19 12:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:28	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:28	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/14/19 12:28	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/14/19 12:28	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/14/19 12:28	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/14/19 12:28	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/14/19 12:28	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/14/19 12:28	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/14/19 12:28	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:28	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/14/19 12:28	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/14/19 12:28	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/14/19 12:28	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/14/19 12:28	1
Acetone	5.0	U	5.0	4.4	ug/L			12/14/19 12:28	1
Benzene	1.0	U	1.0	0.20	ug/L			12/14/19 12:28	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/14/19 12:28	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/14/19 12:28	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/14/19 12:28	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/14/19 12:28	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/14/19 12:28	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/14/19 12:28	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:28	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/14/19 12:28	1
Chloromethane	1.0	U	1.0	0.40	ug/L			12/14/19 12:28	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/14/19 12:28	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/14/19 12:28	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/14/19 12:28	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/14/19 12:28	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/14/19 12:28	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/14/19 12:28	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/14/19 12:28	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/14/19 12:28	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/14/19 12:28	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/14/19 12:28	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/14/19 12:28	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/14/19 12:28	1
Styrene	1.0	U	1.0	0.42	ug/L			12/14/19 12:28	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/14/19 12:28	1
Toluene	1.0	U	1.0	0.38	ug/L			12/14/19 12:28	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/14/19 12:28	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/14/19 12:28	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/14/19 12:28	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/14/19 12:28	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/14/19 12:28	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/14/19 12:28	1

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

Lab Sample ID: MB 460-662315/9
Matrix: Water
Analysis Batch: 662315

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

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	90		74 - 132		12/14/19 12:28	1
4-Bromofluorobenzene	89		77 - 124		12/14/19 12:28	1
Dibromofluoromethane (Surr)	90		72 - 131		12/14/19 12:28	1
Toluene-d8 (Surr)	96		80 - 120		12/14/19 12:28	1

Lab Sample ID: LCS 460-662315/5
Matrix: Water
Analysis Batch: 662315

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	15.7		ug/L		78	75 - 125
1,1,2,2-Tetrachloroethane	20.0	21.3		ug/L		106	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	17.8		ug/L		89	59 - 150
1,1,2-Trichloroethane	20.0	18.9		ug/L		94	78 - 120
1,1-Dichloroethane	20.0	18.8		ug/L		94	77 - 123
1,1-Dichloroethene	20.0	17.0		ug/L		85	74 - 123
1,2,4-Trichlorobenzene	20.0	19.8		ug/L		99	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	18.3		ug/L		91	55 - 134
1,2-Dichlorobenzene	20.0	19.4		ug/L		97	80 - 120
1,2-Dichloroethane	20.0	17.3		ug/L		86	76 - 121
1,2-Dichloropropane	20.0	18.6		ug/L		93	77 - 123
1,3-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 120
1,4-Dichlorobenzene	20.0	19.3		ug/L		97	80 - 120
2-Butanone (MEK)	100	93.8		ug/L		94	64 - 120
2-Hexanone	100	92.9		ug/L		93	71 - 125
4-Methyl-2-pentanone (MIBK)	100	96.3		ug/L		96	78 - 124
Acetone	100	101		ug/L		101	39 - 150
Benzene	20.0	20.4		ug/L		102	77 - 121
Bromoform	20.0	16.2		ug/L		81	53 - 120
Bromomethane	20.0	16.6		ug/L		83	10 - 150
Carbon disulfide	20.0	18.2		ug/L		91	69 - 133
Carbon tetrachloride	20.0	14.8		ug/L		74	70 - 132
Chlorobenzene	20.0	18.4		ug/L		92	80 - 120
Chlorodibromomethane	20.0	15.9		ug/L		79	73 - 120
Chloroethane	20.0	18.9		ug/L		95	52 - 150
Chloroform	20.0	18.3		ug/L		92	80 - 120
Chloromethane	20.0	20.9		ug/L		104	56 - 131
cis-1,2-Dichloroethene	20.0	17.8		ug/L		89	80 - 120
cis-1,3-Dichloropropene	20.0	18.0		ug/L		90	77 - 120
Cyclohexane	20.0	20.1		ug/L		100	56 - 150
Dichlorobromomethane	20.0	17.0		ug/L		85	76 - 120
Dichlorodifluoromethane	20.0	20.3		ug/L		101	50 - 131
Ethylbenzene	20.0	18.5		ug/L		93	80 - 120
Ethylene Dibromide	20.0	18.5		ug/L		92	80 - 120
Isopropylbenzene	20.0	19.7		ug/L		99	80 - 123
Methyl acetate	40.0	39.8		ug/L		100	66 - 144
Methyl tert-butyl ether	20.0	18.5		ug/L		93	79 - 122
Methylcyclohexane	20.0	19.2		ug/L		96	61 - 145

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

Lab Sample ID: LCS 460-662315/5
Matrix: Water
Analysis Batch: 662315

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	17.9		ug/L		90	77 - 123
Styrene	20.0	18.7		ug/L		94	80 - 120
Tetrachloroethene	20.0	16.5		ug/L		83	78 - 122
Toluene	20.0	19.4		ug/L		97	80 - 120
trans-1,2-Dichloroethene	20.0	18.7		ug/L		93	79 - 120
trans-1,3-Dichloropropene	20.0	16.4		ug/L		82	76 - 120
Trichloroethene	20.0	16.9		ug/L		84	77 - 120
Trichlorofluoromethane	20.0	17.5		ug/L		87	71 - 143
Vinyl chloride	20.0	18.9		ug/L		95	62 - 138
Xylenes, Total	40.0	37.5		ug/L		94	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*74 - 132*
4-Bromofluorobenzene	*97*		*77 - 124*
Dibromofluoromethane (Surr)	*100*		*72 - 131*
Toluene-d8 (Surr)	*107*		*80 - 120*

Lab Sample ID: MB 460-662462/9
Matrix: Water
Analysis Batch: 662462

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			12/15/19 07:05	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			12/15/19 07:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.31	ug/L			12/15/19 07:05	1
1,1,2-Trichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 07:05	1
1,1-Dichloroethane	1.0	U	1.0	0.26	ug/L			12/15/19 07:05	1
1,1-Dichloroethene	1.0	U	1.0	0.26	ug/L			12/15/19 07:05	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.37	ug/L			12/15/19 07:05	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	0.38	ug/L			12/15/19 07:05	1
1,2-Dichlorobenzene	1.0	U	1.0	0.43	ug/L			12/15/19 07:05	1
1,2-Dichloroethane	1.0	U	1.0	0.43	ug/L			12/15/19 07:05	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			12/15/19 07:05	1
1,3-Dichlorobenzene	1.0	U	1.0	0.34	ug/L			12/15/19 07:05	1
1,4-Dichlorobenzene	1.0	U	1.0	0.33	ug/L			12/15/19 07:05	1
2-Butanone (MEK)	5.0	U	5.0	1.9	ug/L			12/15/19 07:05	1
2-Hexanone	5.0	U	5.0	1.1	ug/L			12/15/19 07:05	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	1.3	ug/L			12/15/19 07:05	1
Acetone	5.0	U	5.0	4.4	ug/L			12/15/19 07:05	1
Benzene	1.0	U	1.0	0.20	ug/L			12/15/19 07:05	1
Bromoform	1.0	U	1.0	0.54	ug/L			12/15/19 07:05	1
Bromomethane	1.0	U	1.0	0.55	ug/L			12/15/19 07:05	1
Carbon disulfide	1.0	U	1.0	0.82	ug/L			12/15/19 07:05	1
Carbon tetrachloride	1.0	U	1.0	0.21	ug/L			12/15/19 07:05	1
Chlorobenzene	1.0	U	1.0	0.38	ug/L			12/15/19 07:05	1
Chlorodibromomethane	1.0	U	1.0	0.28	ug/L			12/15/19 07:05	1
Chloroethane	1.0	U	1.0	0.32	ug/L			12/15/19 07:05	1
Chloroform	1.0	U	1.0	0.33	ug/L			12/15/19 07:05	1

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

Lab Sample ID: MB 460-662462/9
Matrix: Water
Analysis Batch: 662462

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0	0.40	ug/L			12/15/19 07:05	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.22	ug/L			12/15/19 07:05	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			12/15/19 07:05	1
Cyclohexane	1.0	U	1.0	0.32	ug/L			12/15/19 07:05	1
Dichlorobromomethane	1.0	U	1.0	0.34	ug/L			12/15/19 07:05	1
Dichlorodifluoromethane	1.0	U	1.0	0.31	ug/L			12/15/19 07:05	1
Ethylbenzene	1.0	U	1.0	0.30	ug/L			12/15/19 07:05	1
Ethylene Dibromide	1.0	U	1.0	0.50	ug/L			12/15/19 07:05	1
Isopropylbenzene	1.0	U	1.0	0.34	ug/L			12/15/19 07:05	1
Methyl acetate	5.0	U	5.0	0.79	ug/L			12/15/19 07:05	1
Methyl tert-butyl ether	1.0	U	1.0	0.47	ug/L			12/15/19 07:05	1
Methylcyclohexane	1.0	U	1.0	0.26	ug/L			12/15/19 07:05	1
Methylene Chloride	1.0	U	1.0	0.32	ug/L			12/15/19 07:05	1
Styrene	1.0	U	1.0	0.42	ug/L			12/15/19 07:05	1
Tetrachloroethene	1.0	U	1.0	0.25	ug/L			12/15/19 07:05	1
Toluene	1.0	U	1.0	0.38	ug/L			12/15/19 07:05	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.24	ug/L			12/15/19 07:05	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.49	ug/L			12/15/19 07:05	1
Trichloroethene	1.0	U	1.0	0.31	ug/L			12/15/19 07:05	1
Trichlorofluoromethane	1.0	U	1.0	0.32	ug/L			12/15/19 07:05	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			12/15/19 07:05	1
Xylenes, Total	2.0	U	2.0	0.65	ug/L			12/15/19 07:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*93*		*74 - 132*		*12/15/19 07:05*	*1*
4-Bromofluorobenzene	*88*		*77 - 124*		*12/15/19 07:05*	*1*
Dibromofluoromethane (Surr)	*94*		*72 - 131*		*12/15/19 07:05*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*12/15/19 07:05*	*1*

Lab Sample ID: LCS 460-662462/4
Matrix: Water
Analysis Batch: 662462

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	18.6		ug/L		93	75 - 125
1,1,2,2-Tetrachloroethane	20.0	23.9		ug/L		119	74 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	20.6		ug/L		103	59 - 150
1,1,2-Trichloroethane	20.0	21.8		ug/L		109	78 - 120
1,1-Dichloroethane	20.0	21.0		ug/L		105	77 - 123
1,1-Dichloroethene	20.0	19.3		ug/L		97	74 - 123
1,2,4-Trichlorobenzene	20.0	20.6		ug/L		103	80 - 124
1,2-Dibromo-3-Chloropropane	20.0	23.1		ug/L		116	55 - 134
1,2-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
1,2-Dichloroethane	20.0	19.9		ug/L		100	76 - 121
1,2-Dichloropropane	20.0	20.8		ug/L		104	77 - 123
1,3-Dichlorobenzene	20.0	20.2		ug/L		101	80 - 120
1,4-Dichlorobenzene	20.0	20.6		ug/L		103	80 - 120
2-Butanone (MEK)	100	92.7		ug/L		93	64 - 120

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

Lab Sample ID: LCS 460-662462/4
Matrix: Water
Analysis Batch: 662462

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
2-Hexanone	100	97.3		ug/L		97	71 - 125
4-Methyl-2-pentanone (MIBK)	100	100		ug/L		100	78 - 124
Acetone	100	112		ug/L		112	39 - 150
Benzene	20.0	22.9		ug/L		114	77 - 121
Bromoform	20.0	19.8		ug/L		99	53 - 120
Bromomethane	20.0	17.7		ug/L		88	10 - 150
Carbon disulfide	20.0	22.3		ug/L		111	69 - 133
Carbon tetrachloride	20.0	18.0		ug/L		90	70 - 132
Chlorobenzene	20.0	20.0		ug/L		100	80 - 120
Chlorodibromomethane	20.0	19.0		ug/L		95	73 - 120
Chloroethane	20.0	20.7		ug/L		104	52 - 150
Chloroform	20.0	20.0		ug/L		100	80 - 120
Chloromethane	20.0	21.5		ug/L		108	56 - 131
cis-1,2-Dichloroethene	20.0	19.6		ug/L		98	80 - 120
cis-1,3-Dichloropropene	20.0	20.2		ug/L		101	77 - 120
Cyclohexane	20.0	24.1		ug/L		121	56 - 150
Dichlorobromomethane	20.0	19.8		ug/L		99	76 - 120
Dichlorodifluoromethane	20.0	17.4		ug/L		87	50 - 131
Ethylbenzene	20.0	19.9		ug/L		99	80 - 120
Ethylene Dibromide	20.0	20.2		ug/L		101	80 - 120
Isopropylbenzene	20.0	21.3		ug/L		106	80 - 123
Methyl acetate	40.0	46.9		ug/L		117	66 - 144
Methyl tert-butyl ether	20.0	19.9		ug/L		99	79 - 122
Methylcyclohexane	20.0	21.3		ug/L		107	61 - 145
Methylene Chloride	20.0	19.7		ug/L		98	77 - 123
Styrene	20.0	20.2		ug/L		101	80 - 120
Tetrachloroethene	20.0	17.6		ug/L		88	78 - 122
Toluene	20.0	21.7		ug/L		109	80 - 120
trans-1,2-Dichloroethene	20.0	20.7		ug/L		104	79 - 120
trans-1,3-Dichloropropene	20.0	19.2		ug/L		96	76 - 120
Trichloroethene	20.0	19.1		ug/L		95	77 - 120
Trichlorofluoromethane	20.0	18.4		ug/L		92	71 - 143
Vinyl chloride	20.0	20.2		ug/L		101	62 - 138
Xylenes, Total	40.0	40.8		ug/L		102	80 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*
4-Bromofluorobenzene	*82*		*77 - 124*
Dibromofluoromethane (Surr)	*89*		*72 - 131*
Toluene-d8 (Surr)	*96*		*80 - 120*

Lab Sample ID: LCSD 460-662462/5
Matrix: Water
Analysis Batch: 662462

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	17.2		ug/L		86	75 - 125	8	30
1,1,2,2-Tetrachloroethane	20.0	21.9		ug/L		110	74 - 120	8	30

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

Lab Sample ID: LCSD 460-662462/5
Matrix: Water
Analysis Batch: 662462

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
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	18.9		ug/L		95	59 - 150	8	30
1,1,2-Trichloroethane	20.0	20.5		ug/L		103	78 - 120	6	30
1,1-Dichloroethane	20.0	19.4		ug/L		97	77 - 123	8	30
1,1-Dichloroethene	20.0	18.0		ug/L		90	74 - 123	7	30
1,2,4-Trichlorobenzene	20.0	20.6		ug/L		103	80 - 124	0	30
1,2-Dibromo-3-Chloropropane	20.0	19.8		ug/L		99	55 - 134	15	30
1,2-Dichlorobenzene	20.0	19.6		ug/L		98	80 - 120	5	30
1,2-Dichloroethane	20.0	17.9		ug/L		89	76 - 121	11	30
1,2-Dichloropropane	20.0	19.1		ug/L		96	77 - 123	8	30
1,3-Dichlorobenzene	20.0	19.2		ug/L		96	80 - 120	5	30
1,4-Dichlorobenzene	20.0	19.5		ug/L		97	80 - 120	5	30
2-Butanone (MEK)	100	93.5		ug/L		93	64 - 120	1	30
2-Hexanone	100	92.0		ug/L		92	71 - 125	6	30
4-Methyl-2-pentanone (MIBK)	100	95.5		ug/L		96	78 - 124	5	30
Acetone	100	110		ug/L		110	39 - 150	1	30
Benzene	20.0	21.6		ug/L		108	77 - 121	6	30
Bromoform	20.0	19.7		ug/L		99	53 - 120	1	30
Bromomethane	20.0	16.7		ug/L		83	10 - 150	6	30
Carbon disulfide	20.0	20.4		ug/L		102	69 - 133	9	30
Carbon tetrachloride	20.0	16.9		ug/L		84	70 - 132	7	30
Chlorobenzene	20.0	19.9		ug/L		100	80 - 120	0	30
Chlorodibromomethane	20.0	18.5		ug/L		92	73 - 120	3	30
Chloroethane	20.0	18.5		ug/L		93	52 - 150	11	30
Chloroform	20.0	19.1		ug/L		96	80 - 120	4	30
Chloromethane	20.0	19.4		ug/L		97	56 - 131	10	30
cis-1,2-Dichloroethene	20.0	18.7		ug/L		93	80 - 120	5	30
cis-1,3-Dichloropropene	20.0	19.4		ug/L		97	77 - 120	4	30
Cyclohexane	20.0	21.4		ug/L		107	56 - 150	12	30
Dichlorobromomethane	20.0	19.2		ug/L		96	76 - 120	3	30
Dichlorodifluoromethane	20.0	16.2		ug/L		81	50 - 131	7	30
Ethylbenzene	20.0	19.3		ug/L		97	80 - 120	3	30
Ethylene Dibromide	20.0	19.5		ug/L		97	80 - 120	4	30
Isopropylbenzene	20.0	20.5		ug/L		102	80 - 123	4	30
Methyl acetate	40.0	42.1		ug/L		105	66 - 144	11	30
Methyl tert-butyl ether	20.0	19.0		ug/L		95	79 - 122	5	30
Methylcyclohexane	20.0	20.2		ug/L		101	61 - 145	5	30
Methylene Chloride	20.0	18.3		ug/L		92	77 - 123	7	30
Styrene	20.0	19.6		ug/L		98	80 - 120	3	30
Tetrachloroethene	20.0	17.9		ug/L		90	78 - 122	2	30
Toluene	20.0	20.5		ug/L		103	80 - 120	6	30
trans-1,2-Dichloroethene	20.0	19.6		ug/L		98	79 - 120	6	30
trans-1,3-Dichloropropene	20.0	18.2		ug/L		91	76 - 120	5	30
Trichloroethene	20.0	17.8		ug/L		89	77 - 120	7	30
Trichlorofluoromethane	20.0	17.4		ug/L		87	71 - 143	6	30
Vinyl chloride	20.0	18.1		ug/L		91	62 - 138	11	30
Xylenes, Total	40.0	39.0		ug/L		98	80 - 120	4	30

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

Lab Sample ID: LCSD 460-662462/5
Matrix: Water
Analysis Batch: 662462

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

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*90*		*74 - 132*
4-Bromofluorobenzene	*88*		*77 - 124*
Dibromofluoromethane (Surr)	*95*		*72 - 131*
Toluene-d8 (Surr)	*101*		*80 - 120*

Method: RSK-175 - Dissolved Gases (GC)

Lab Sample ID: MB 200-150547/4
Matrix: Water
Analysis Batch: 150547

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			12/10/19 17:33	1

Lab Sample ID: LCS 200-150547/2
Matrix: Water
Analysis Batch: 150547

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	37800		ug/L		95	70 - 130

Lab Sample ID: LCSD 200-150547/3
Matrix: Water
Analysis Batch: 150547

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	40600		ug/L		102	70 - 130	7	30

Lab Sample ID: MB 200-150548/4
Matrix: Water
Analysis Batch: 150548

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethane	4.0	U	4.0	0.71	ug/L			12/10/19 15:32	1
Ethene	3.0	U	3.0	0.53	ug/L			12/10/19 15:32	1
Methane	2.0	U	2.0	0.56	ug/L			12/10/19 15:32	1

Lab Sample ID: LCS 200-150548/2
Matrix: Water
Analysis Batch: 150548

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Ethane	515	482		ug/L		94	70 - 130
Ethene	450	418		ug/L		93	70 - 130
Methane	518	494		ug/L		95	70 - 130

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

Lab Sample ID: LCSD 200-150548/3
Matrix: Water
Analysis Batch: 150548

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	515	494		ug/L		96	70 - 130	2	30
Ethene	450	433		ug/L		96	70 - 130	3	30
Methane	518	507		ug/L		98	70 - 130	2	30

Method: 300.0 - Anions, Ion Chromatography

Lab Sample ID: MB 460-661235/3
Matrix: Water
Analysis Batch: 661235

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			12/09/19 15:48	1
Sulfate	0.60	U	0.60	0.35	mg/L			12/09/19 15:48	1

Lab Sample ID: LCS 460-661235/5
Matrix: Water
Analysis Batch: 661235

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	1.47		mg/L		98	90 - 110
Sulfate	7.50	7.74		mg/L		103	90 - 110

Lab Sample ID: LCSD 460-661235/6
Matrix: Water
Analysis Batch: 661235

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	1.47		mg/L		98	90 - 110	0	15
Sulfate	7.50	7.66		mg/L		102	90 - 110	1	15

Lab Sample ID: MB 460-661270/3
Matrix: Water
Analysis Batch: 661270

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			12/10/19 12:59	1
Sulfate	0.60	U	0.60	0.35	mg/L			12/10/19 12:59	1

Lab Sample ID: LCS 460-661270/5
Matrix: Water
Analysis Batch: 661270

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	1.49		mg/L		99	90 - 110
Sulfate	7.50	7.99		mg/L		107	90 - 110

Method: 300.0 - Anions, Ion Chromatography (Continued)

Lab Sample ID: LCSD 460-661270/6
Matrix: Water
Analysis Batch: 661270

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	1.49		mg/L		99	90 - 110	0	15
Sulfate	7.50	7.94		mg/L		106	90 - 110	1	15

Method: 6010D - Metals (ICP)

Lab Sample ID: MB 460-662921/1-A
Matrix: Water
Analysis Batch: 663038

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 662921

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Iron	150	U	150	34.2	ug/L		12/17/19 03:58	12/17/19 13:21	1
Manganese	15.0	U	15.0	0.99	ug/L		12/17/19 03:58	12/17/19 13:21	1
Sodium	5000	U	5000	460	ug/L		12/17/19 03:58	12/17/19 13:21	1

Lab Sample ID: LCS 460-662921/2-A
Matrix: Water
Analysis Batch: 663038

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 662921

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Iron	1000	946.5		ug/L		95	80 - 120
Manganese	500	480.3		ug/L		96	80 - 120
Sodium	20000	18650		ug/L		93	80 - 120

Method: 353.2 - Nitrogen, Nitrate-Nitrite

Lab Sample ID: MB 460-660603/11
Matrix: Water
Analysis Batch: 660603

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0297	J	0.10	0.016	mg/L			12/07/19 04:29	1
Nitrate Nitrite as N	0.0297	J	0.10	0.022	mg/L			12/07/19 04:29	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/07/19 04:29	1

Lab Sample ID: MB 460-660603/41
Matrix: Water
Analysis Batch: 660603

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nitrate as N	0.0308	J	0.10	0.016	mg/L			12/07/19 04:54	1
Nitrate Nitrite as N	0.0308	J	0.10	0.022	mg/L			12/07/19 04:54	1
Nitrite as N	0.10	U	0.10	0.010	mg/L			12/07/19 04:54	1

Lab Sample ID: LCSSRM 460-660603/12
Matrix: Water
Analysis Batch: 660603

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	1.13	1.07		mg/L		95.1	83.6 - 115.1

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

Lab Sample ID: LCSSRM 460-660603/12
Matrix: Water
Analysis Batch: 660603

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Nitrate Nitrite as N	1.13	1.07		mg/L		95.1	83.6 - 115.1

Lab Sample ID: LCSSRM 460-660603/13
Matrix: Water
Analysis Batch: 660603

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	0.647	0.616		mg/L		95.2	76.8 - 122.7

Lab Sample ID: LCSSRM 460-660603/42
Matrix: Water
Analysis Batch: 660603

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	1.13	1.03		mg/L		91.4	83.6 - 115.1
Nitrate Nitrite as N	1.13	1.04		mg/L		92.4	83.6 - 115.1

Lab Sample ID: LCSSRM 460-660603/43
Matrix: Water
Analysis Batch: 660603

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	0.647	0.622		mg/L		96.1	76.8 - 122.7

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

Lab Sample ID: MB 460-661205/3
Matrix: Water
Analysis Batch: 661205

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Organic Carbon	1.0	U	1.0	0.58	mg/L			12/09/19 16:40	1

Lab Sample ID: LCSSRM 460-661205/4
Matrix: Water
Analysis Batch: 661205

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	42.3	44.89		mg/L		106.1	83.0 - 116.5

Method: SM 2320B - Alkalinity

Lab Sample ID: MB 460-661885/25
Matrix: Water
Analysis Batch: 661885

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

Analyte	MB Result	MB Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Alkalinity, Total	5.0	U	5.0	5.0	mg/L			12/12/19 14:10	1

Lab Sample ID: LCSSRM 460-661885/26
Matrix: Water
Analysis Batch: 661885

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Alkalinity, Total	64.8	62.69		mg/L		96.7	85.0 - 115.1

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

Lab Sample ID: MB 460-661517/3
Matrix: Water
Analysis Batch: 661517

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	0.099	mg/L			12/11/19 12:36	1

Lab Sample ID: LCS 460-661517/4
Matrix: Water
Analysis Batch: 661517

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	0.455		mg/L		91	87 - 116

Lab Sample ID: 460-198228-4 MS
Matrix: Water
Analysis Batch: 661517

Client Sample ID: MW-23D1R-W-20191205
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Ferrous Iron	0.26	HF	2.00	2.42		mg/L		108	87 - 116

Lab Sample ID: 460-198228-4 MSD
Matrix: Water
Analysis Batch: 661517

Client Sample ID: MW-23D1R-W-20191205
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	0.26	HF	2.00	2.39		mg/L		106	87 - 116	1	10

Method: SM 4500 S2 F - Sulfide, Total

Lab Sample ID: MB 460-661566/1
Matrix: Water
Analysis Batch: 661566

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			12/11/19 16:05	1

Method: SM 4500 S2 F - Sulfide, Total (Continued)

Lab Sample ID: LCSSRM 460-661566/3
Matrix: Water
Analysis Batch: 661566

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

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfide	5.97	4.59		mg/L		76.8	44.2 - 144.7

GC/MS VOA

Analysis Batch: 662315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	8260C	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	8260C	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	8260C	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	8260C	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	8260C	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	8260C	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	8260C	
460-198228-12	Trip Blank	Total/NA	Water	8260C	
MB 460-662315/9	Method Blank	Total/NA	Water	8260C	
LCS 460-662315/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 662462

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	8260C	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	8260C	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	8260C	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	8260C	
MB 460-662462/9	Method Blank	Total/NA	Water	8260C	
LCS 460-662462/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 460-662462/5	Lab Control Sample Dup	Total/NA	Water	8260C	

GC VOA

Analysis Batch: 150547

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	RSK-175	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	RSK-175	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	RSK-175	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	RSK-175	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	RSK-175	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	RSK-175	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	RSK-175	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	RSK-175	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	RSK-175	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	RSK-175	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	RSK-175	
MB 200-150547/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-150547/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-150547/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

Analysis Batch: 150548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	RSK-175	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	RSK-175	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	RSK-175	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	RSK-175	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	RSK-175	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	RSK-175	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	RSK-175	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	RSK-175	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	RSK-175	

GC VOA (Continued)

Analysis Batch: 150548 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	RSK-175	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	RSK-175	
MB 200-150548/4	Method Blank	Total/NA	Water	RSK-175	
LCS 200-150548/2	Lab Control Sample	Total/NA	Water	RSK-175	
LCSD 200-150548/3	Lab Control Sample Dup	Total/NA	Water	RSK-175	

HPLC/IC

Analysis Batch: 661235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	300.0	
460-198228-1	MW-18R-W-20191205	Total/NA	Water	300.0	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	300.0	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	300.0	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	300.0	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	300.0	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	300.0	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	300.0	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	300.0	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	300.0	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	300.0	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	300.0	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	300.0	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	300.0	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	300.0	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	300.0	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	300.0	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	300.0	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	300.0	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	300.0	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	300.0	
MB 460-661235/3	Method Blank	Total/NA	Water	300.0	
LCS 460-661235/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-661235/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Analysis Batch: 661270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	300.0	
MB 460-661270/3	Method Blank	Total/NA	Water	300.0	
LCS 460-661270/5	Lab Control Sample	Total/NA	Water	300.0	
LCSD 460-661270/6	Lab Control Sample Dup	Total/NA	Water	300.0	

Metals

Prep Batch: 662921

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	3010A	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	3010A	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	3010A	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	3010A	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	3010A	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	3010A	

Metals (Continued)

Prep Batch: 662921 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	3010A	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	3010A	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	3010A	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	3010A	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	3010A	
MB 460-662921/1-A	Method Blank	Total/NA	Water	3010A	
LCS 460-662921/2-A	Lab Control Sample	Total/NA	Water	3010A	

Analysis Batch: 663038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	6010D	662921
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	6010D	662921
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	6010D	662921
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	6010D	662921
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	6010D	662921
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	6010D	662921
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	6010D	662921
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	6010D	662921
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	6010D	662921
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	6010D	662921
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	6010D	662921
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	6010D	662921
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	6010D	662921
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	6010D	662921
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	6010D	662921
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	6010D	662921
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	6010D	662921
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	6010D	662921
MB 460-662921/1-A	Method Blank	Total/NA	Water	6010D	662921
LCS 460-662921/2-A	Lab Control Sample	Total/NA	Water	6010D	662921

General Chemistry

Analysis Batch: 660603

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	353.2	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	353.2	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	353.2	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	353.2	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	353.2	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	353.2	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	353.2	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	353.2	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	353.2	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	353.2	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	353.2	
MB 460-660603/11	Method Blank	Total/NA	Water	353.2	
MB 460-660603/41	Method Blank	Total/NA	Water	353.2	
LCSSRM 460-660603/12	Lab Control Sample	Total/NA	Water	353.2	
LCSSRM 460-660603/13	Lab Control Sample	Total/NA	Water	353.2	
LCSSRM 460-660603/42	Lab Control Sample	Total/NA	Water	353.2	

General Chemistry (Continued)

Analysis Batch: 660603 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCSSRM 460-660603/43	Lab Control Sample	Total/NA	Water	353.2	

Analysis Batch: 661205

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	9060A	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	9060A	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	9060A	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	9060A	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	9060A	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	9060A	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	9060A	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	9060A	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	9060A	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	9060A	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	9060A	
MB 460-661205/3	Method Blank	Total/NA	Water	9060A	
LCSSRM 460-661205/4	Lab Control Sample	Total/NA	Water	9060A	

Analysis Batch: 661517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	SM 3500 FE D	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	SM 3500 FE D	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	SM 3500 FE D	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	SM 3500 FE D	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	SM 3500 FE D	
MB 460-661517/3	Method Blank	Total/NA	Water	SM 3500 FE D	
LCS 460-661517/4	Lab Control Sample	Total/NA	Water	SM 3500 FE D	
460-198228-4 MS	MW-23D1R-W-20191205	Total/NA	Water	SM 3500 FE D	
460-198228-4 MSD	MW-23D1R-W-20191205	Total/NA	Water	SM 3500 FE D	

Analysis Batch: 661560

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	SM 3500	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	SM 3500	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	SM 3500	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	SM 3500	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	SM 3500	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	SM 3500	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	SM 3500	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	SM 3500	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	SM 3500	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	SM 3500	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	SM 3500	

General Chemistry

Analysis Batch: 661566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	SM 4500 S2 F	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	SM 4500 S2 F	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	SM 4500 S2 F	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	SM 4500 S2 F	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	SM 4500 S2 F	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	SM 4500 S2 F	
MB 460-661566/1	Method Blank	Total/NA	Water	SM 4500 S2 F	
LCSSRM 460-661566/3	Lab Control Sample	Total/NA	Water	SM 4500 S2 F	

Analysis Batch: 661885

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
460-198228-1	MW-18R-W-20191205	Total/NA	Water	SM 2320B	
460-198228-2	MW-27D1R-W-20191205	Total/NA	Water	SM 2320B	
460-198228-3	MW-27D2-W-20191205	Total/NA	Water	SM 2320B	
460-198228-4	MW-23D1R-W-20191205	Total/NA	Water	SM 2320B	
460-198228-5	MW-23D2R-W-20191205	Total/NA	Water	SM 2320B	
460-198228-6	MW-28D1-W-20191205	Total/NA	Water	SM 2320B	
460-198228-7	MW-28D2R-W-20191206	Total/NA	Water	SM 2320B	
460-198228-8	MW-26D2-W-20191206	Total/NA	Water	SM 2320B	
460-198228-9	MW-26D1-W-20191206	Total/NA	Water	SM 2320B	
460-198228-10	AMW-7R-W-20191206	Total/NA	Water	SM 2320B	
460-198228-11	MW-29D1-W-20191206	Total/NA	Water	SM 2320B	
MB 460-661885/25	Method Blank	Total/NA	Water	SM 2320B	
LCSSRM 460-661885/26	Lab Control Sample	Total/NA	Water	SM 2320B	

Client Sample ID: MW-18R-W-20191205

Lab Sample ID: 460-198228-1

Date Collected: 12/05/19 20:45

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662462	12/15/19 10:12	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 15:40	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 17:42	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 21:12	VMI	TAL EDI
Total/NA	Analysis	300.0		150	661235	12/10/19 02:11	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 15:54	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:43	AXH	TAL EDI
Total/NA	Analysis	9060A		5	661205	12/09/19 19:58	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 15:05	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-27D1R-W-20191205

Lab Sample ID: 460-198228-2

Date Collected: 12/05/19 21:15

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 17:10	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 15:49	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 17:51	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 21:27	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	661235	12/10/19 02:25	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 15:58	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		10	663038	12/17/19 20:37	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:44	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/09/19 20:23	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 15:18	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-27D2-W-20191205

Lab Sample ID: 460-198228-3

Date Collected: 12/05/19 21:45

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 17:34	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 15:58	MJZ	TAL BUR

Client Sample ID: MW-27D2-W-20191205

Lab Sample ID: 460-198228-3

Date Collected: 12/05/19 21:45

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	RSK-175		1	150547	12/10/19 17:59	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 21:42	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	661235	12/10/19 02:40	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 16:02	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		10	663038	12/17/19 20:41	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:50	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/09/19 21:37	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 15:29	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-23D1R-W-20191205

Lab Sample ID: 460-198228-4

Date Collected: 12/05/19 23:00

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 17:59	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:06	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 18:08	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 21:57	VMI	TAL EDI
Total/NA	Analysis	300.0		510	661235	12/10/19 02:55	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 16:06	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:50	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/09/19 22:03	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 15:37	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-23D2R-W-20191205

Lab Sample ID: 460-198228-5

Date Collected: 12/05/19 22:30

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 18:23	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:15	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 18:17	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 22:12	VMI	TAL EDI

Client Sample ID: MW-23D2R-W-20191205

Lab Sample ID: 460-198228-5

Date Collected: 12/05/19 22:30

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		900	661235	12/10/19 03:09	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 16:10	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		10	663038	12/17/19 20:45	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:51	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/09/19 22:28	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 15:45	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-28D1-W-20191205

Lab Sample ID: 460-198228-6

Date Collected: 12/05/19 23:30

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 18:48	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:24	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 18:26	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 22:57	VMI	TAL EDI
Total/NA	Analysis	300.0		700	661235	12/10/19 03:54	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 16:14	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		5	663038	12/17/19 20:49	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:52	AXH	TAL EDI
Total/NA	Analysis	9060A		5	661205	12/09/19 22:53	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 15:55	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/25/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-28D2R-W-20191206

Lab Sample ID: 460-198228-7

Date Collected: 12/06/19 00:20

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 19:12	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:32	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 18:34	MJZ	TAL BUR
Total/NA	Analysis	300.0		1000	661235	12/10/19 04:09	VMI	TAL EDI

Client Sample ID: MW-28D2R-W-20191206

Lab Sample ID: 460-198228-7

Date Collected: 12/06/19 00:20

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		5000	661270	12/10/19 15:13	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 16:18	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		20	663038	12/17/19 20:53	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:53	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/09/19 23:17	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 16:04	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-26D2-W-20191206

Lab Sample ID: 460-198228-8

Date Collected: 12/06/19 00:45

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 19:37	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:41	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 18:43	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 23:27	VMI	TAL EDI
Total/NA	Analysis	300.0		1000	661235	12/10/19 04:23	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 16:22	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		20	663038	12/17/19 20:57	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 04:53	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/09/19 23:41	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 16:15	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:36	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-26D1-W-20191206

Lab Sample ID: 460-198228-9

Date Collected: 12/06/19 01:10

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662462	12/15/19 09:02	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:50	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 18:52	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 23:42	VMI	TAL EDI

Client Sample ID: MW-26D1-W-20191206

Lab Sample ID: 460-198228-9

Date Collected: 12/06/19 01:10

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	300.0		790	661235	12/10/19 04:38	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 18:23	CDC	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		10	663038	12/17/19 21:01	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 05:05	AXH	TAL EDI
Total/NA	Analysis	9060A		5	661205	12/10/19 00:06	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 16:24	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:41	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: AMW-7R-W-20191206

Lab Sample ID: 460-198228-10

Date Collected: 12/06/19 01:40

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662462	12/15/19 09:26	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 16:58	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 19:00	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/09/19 23:57	VMI	TAL EDI
Total/NA	Analysis	300.0		30	661235	12/10/19 04:53	VMI	TAL EDI
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 18:27	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 05:06	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/10/19 00:30	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 16:34	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/25/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:41	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: MW-29D1-W-20191206

Lab Sample ID: 460-198228-11

Date Collected: 12/06/19 02:05

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662462	12/15/19 09:49	AAT	TAL EDI
Total/NA	Analysis	RSK-175		1	150548	12/10/19 17:07	MJZ	TAL BUR
Total/NA	Analysis	RSK-175		1	150547	12/10/19 19:09	MJZ	TAL BUR
Total/NA	Analysis	300.0		10	661235	12/10/19 00:12	VMI	TAL EDI
Total/NA	Analysis	300.0		50	661235	12/10/19 05:08	VMI	TAL EDI

Lab Chronicle

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

Job ID: 460-198228-1

Client Sample ID: MW-29D1-W-20191206

Lab Sample ID: 460-198228-11

Date Collected: 12/06/19 02:05

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3010A			662921	12/17/19 03:58	GMC	TAL EDI
Total/NA	Analysis	6010D		1	663038	12/17/19 18:31	CDC	TAL EDI
Total/NA	Analysis	353.2		1	660603	12/07/19 05:05	AXH	TAL EDI
Total/NA	Analysis	9060A		1	661205	12/10/19 00:55	AJP	TAL EDI
Total/NA	Analysis	SM 2320B		1	661885	12/12/19 16:42	AJP	TAL EDI
Total/NA	Analysis	SM 3500		1	661560	12/18/19 06:30	TJW	TAL EDI
Total/NA	Analysis	SM 3500 FE D		1	661517	12/11/19 12:41	RAK	TAL EDI
Total/NA	Analysis	SM 4500 S2 F		1	661566	12/11/19 16:05	YAH	TAL EDI

Client Sample ID: Trip Blank

Lab Sample ID: 460-198228-12

Date Collected: 12/06/19 00:00

Matrix: Water

Date Received: 12/06/19 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	662315	12/14/19 12:51	AAT	TAL EDI

Laboratory References:

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: 460-198228-1

Laboratory: Eurofins TestAmerica, Edison

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

Authority	Program	Identification Number	Expiration Date
Connecticut	State	PH-0200	09-30-20
DE Haz. Subst. Cleanup Act (HSCA)	State	<cert No.>	12-31-21
Georgia	State	12028 (NJ)	06-30-20
Massachusetts	State	M-NJ312	06-30-20
Massachusetts	State Program	M-NJ312	06-30-20
New Jersey	NELAP	12028	06-30-20
New York	NELAP	11452	04-01-20
Pennsylvania	NELAP	68-00522	02-28-20
Rhode Island	State	LAO00132	12-30-19
USDA	US Federal Programs	P330-18-00135	05-03-21

Laboratory: Eurofins TestAmerica, Buffalo

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

Authority	Program	Identification Number	Expiration Date
New York	NELAP	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	Identification Number	Expiration Date
New York	NELAP	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
RSK-175		Water	Ethane
RSK-175		Water	Ethene
RSK-175		Water	Methane

Method Summary

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

Job ID: 460-198228-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL EDI
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 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: 460-198228-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
460-198228-1	MW-18R-W-20191205	Water	12/05/19 20:45	12/06/19 15:30	
460-198228-2	MW-27D1R-W-20191205	Water	12/05/19 21:15	12/06/19 15:30	
460-198228-3	MW-27D2-W-20191205	Water	12/05/19 21:45	12/06/19 15:30	
460-198228-4	MW-23D1R-W-20191205	Water	12/05/19 23:00	12/06/19 15:30	
460-198228-5	MW-23D2R-W-20191205	Water	12/05/19 22:30	12/06/19 15:30	
460-198228-6	MW-28D1-W-20191205	Water	12/05/19 23:30	12/06/19 15:30	
460-198228-7	MW-28D2R-W-20191206	Water	12/06/19 00:20	12/06/19 15:30	
460-198228-8	MW-26D2-W-20191206	Water	12/06/19 00:45	12/06/19 15:30	
460-198228-9	MW-26D1-W-20191206	Water	12/06/19 01:10	12/06/19 15:30	
460-198228-10	AMW-7R-W-20191206	Water	12/06/19 01:40	12/06/19 15:30	
460-198228-11	MW-29D1-W-20191206	Water	12/06/19 02:05	12/06/19 15:30	
460-198228-12	Trip Blank	Water	12/06/19 00:00	12/06/19 15:30	

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	Sampler: Felix CONGO	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-138976-26696.3
Client Contact: Loretta Kwong	Phone: 908-416-0431	E-Mail: john.schove@testamericainc.com		Page: Page 1 of 2
Company: ARCADIS U.S. Inc				Job #: 198228
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 #: DEMCFMNE.8040.W9401			
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=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	AC	A	CB	N	N	N		
MW-8R-W-20191205	12/5/19	2045	G	Water			X	X	X	X	X	X	X	X	X	X		1
MW-27D1R-W-20191205		2115	G	Water			X	X	X	X	X	X	X	X	X	X		2
MW-27D2-W-20191205		2145	G	Water			X	X	X	X	X	X	X	X	X	X		3
MW-23D1R-W-20191205		2300	G	Water			X	X	X	X	X	X	X	X	X	X		4
MW-23D2R-W-20191205		2230	G	Water			X	X	X	X	X	X	X	X	X	X		5
MW-28D1-W-20191205		2330	G	Water			X	X	X	X	X	X	X	X	X	X		6
MW-28D2R-W-20191206		0020	G				X	X	X	X	X	X	X	X	X	X		7
MW-26D2-W-20191206		0045	G				X	X	X	X	X	X	X	X	X	X		8
MW-26D1-W-20191206		0110	G				X	X	X	X	X	X	X	X	X	X		9
AMW-7R-W-20191206		0140	G				X	X	X	X	X	X	X	X	X	X		10

460-198228 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	12-6-19 / 1530	ARCADIS	Isaiah Lemora	ETA 12/6/19	1530
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: ① 2.0°C / 2.3°C ② 2.5°C / 2.8°C

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	Sampler: Felix Cortes	Lab PM: Schove, John R	Carrier Tracking No(s):	COC No: 480-138976-26696.3
Client Contact: Loretta Kwong	Phone: 908-416-0471	E-Mail: john.schove@testamericainc.com		Page: Page 2 of 2
Company: ARCADIS U.S. Inc				Job #: 198228

Address: 655 Third Avenue 12th Floor	Due Date Requested:	Analysis Requested
City: New York City	TAT Requested (days):	
State, Zip: NY, 10017-9118		
Phone: 646-760-0584(Tel)	PO #: DEMCFMNE.8040.W9401	
Email: Loretta.Kwong@arcadis-us.com	WO #: NWENV-06518040-0-08.02	
Project Name: MNA Analysis	Project #: 48016199	
Site: New York	SSOW#:	

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:		X	X	N	N	D	A	A	A	CB	N	N	N				X	
MW-28 MW-29D1-W-20191206	12-6-19	0205	G	Water			X	X	X	X	X	X	X	X	X	X	X	X	X	11	
TRIP BLANK	12-6-19	—		Water							X									12	
				Water																	
				Water																	
				Water																	
				Water																	

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

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

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

Special Instructions/QC Requirements:

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

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Felix Cortes	12-6-19 / 1530	ARCADIS	Sarah Demarta	12/6/19 1830	ESA
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

12/19/2019

Eurofins TestAmerica Edison
Receipt Temperature and pH Log

Job Number: 198228

Number of Coolers: 2 IR Gun # 11

Cooler Temperatures

	RAW	CORRECTED		RAW	CORRECTED		RAW	CORRECTED
Cooler #1:	2.0 °C	2.3 °C	Cooler #4:	°C	°C	Cooler #7:	°C	°C
Cooler #2:	2.5 °C	2.8 °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					>9		<2				
2				<2					>9		<2				
3				<2					>9		<2				
4				<2					>9		<2				
5				<2					79		<2				
6				<2					>9		<2				
7				<2					>9		<2				
8				<2					>9		<2				
9				<2					>9		<2				
10				<2					>9		<2				
11				<2					>9		<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: _____

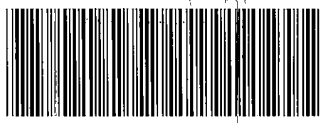
The appropriate Project Manager and Department Manager should be notified about the samples which were pH adjusted.

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

Initials: _____ **Date:** 12/6/19

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

Chain of Custody Record


460-198228 Chain of Custody

Client Information (Sub Contract Lab)	Sampler:	Lab PM: Schove, John R	190.1
Client Contact: Shipping/Receiving	Phone:	E-Mail: john.schove@testamericainc.com	New York / Page 1 of 2
Company: TestAmerica Laboratories, Inc.		Accreditations Required (See note): NELAP - New York	Job #: 460-198228-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 12/18/2019		
City: South Burlington	TAT Requested (days):		
State, Zip: VT, 05403			
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:		
Email:	WO #:		
Project Name: New York	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	RSK_175/ Dissolved Gases (MEE)	Total Number of Containers	Special Instructions/Note:
			Preservation Code:							
MW-18R-W-20191205 (460-198228-1)	12/5/19	20:45 Eastern		Water			X	X	6	
MW-27D1R-W-20191205 (460-198228-2)	12/5/19	21:15 Eastern		Water			X	X	6	
MW-27D2-W-20191205 (460-198228-3)	12/5/19	21:45 Eastern		Water			X	X	6	
MW-23D1R-W-20191205 (460-198228-4)	12/5/19	23:00 Eastern		Water			X	X	6	
MW-23D2R-W-20191205 (460-198228-5)	12/5/19	22:30 Eastern		Water			X	X	6	
MW-28D1-W-20191205 (460-198228-6)	12/5/19	23:30 Eastern		Water			X	X	6	
MW-28D2R-W-20191206 (460-198228-7)	12/6/19	00:20 Eastern		Water			X	X	6	
MW-26D2-W-20191206 (460-198228-8)	12/6/19	00:45 Eastern		Water			X	X	6	
MW-26D1-W-20191206 (460-198228-9)	12/6/19	01:10 Eastern		Water			X	X	6	

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:	Date/Time: 12/9/19 1900	Company ETAS	Received by:	Date/Time: 12/10/19 10:35	Company TAL
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: 2.9 1.4, 0.4

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: 460-56890.2
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 #: 460-198228-1
Address: 30 Community Drive, Suite 11,	Due Date Requested: 12/18/2019			
City: South Burlington	TAT Requested (days):			
State, Zip: VT, 05403				
Phone: 802-660-1990(Tel) 802-660-1919(Fax)	PO #:			
Email:	WO #:			
Project Name: New York	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	RSK_175/ Dissolved Gases (MEE)	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
AMW-7R-W-20191206 (460-198228-10)	12/6/19	01:40 Eastern		Water			X	X	6	
MW-29D1-W-20191206 (460-198228-11)	12/6/19	02:05 Eastern		Water			X	X	6	

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. I

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:

	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	12/9/19 1900	ETA		12/10/19 10:35	TAL
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: 2.9, 1.4 0.9

Ver: 01/16/2019


ORIGIN ID:LDJA (732) 549-3900
KENNETH RIVERA
EUROFINS TESTAMERICA EDISON
777 NEW DURHAM ROAD
EDISON, NJ 08817
UNITED STATES US
SHIP DATE: 09DEC19
ACTWGT: 45.85 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: 8460-122177
PO: YES
FedEx Express
1 of 3
TRK# 0201 1161 6399 4924
MASTER
XH BTVA
TUE - 10 DEC 10:30A
PRIORITY OVERNIGHT
05403
VT-US BTV
2 of 3
1161 6399 4935
Mstr# 1161 6399 4924
3 of 3
MPS# 1161 6399 4946
Mstr# 1161 6399 4924

Login Sample Receipt Checklist

Client: ARCADIS U.S. Inc

Job Number: 460-198228-1

Login Number: 198228
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.	False	No date or time on COC, logged in per container labels.
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: 460-198228-1

Login Number: 198228
List Number: 3
Creator: Mohn, Taylor J

List Source: Eurofins TestAmerica, Burlington
List Creation: 12/10/19 11:45 AM

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.	N/A	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	2.9ºC, 1.4ºC, 0.9ºC
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	