TETRA TECH

Former Lockheed Martin French Road Facility
Utica, New York
Solvent Dock Site
(NYSDEC Site ID #633036A)

Data Summary and Observations
Annual 2017 Groundwater Monitoring

General Notes

- Annual groundwater gauging and sampling was performed during the period January 16-18, 2017. Of the 68 wells subject to water level gauging, 65 wells were gauged [two wells were dry (PZ-21 and PZ-33) and one was inaccessible because the cover could not be opened (IW-1)], and sixteen wells were sampled. The attached Tables 4-1 and 4-2 summarize gauging data and analytical results, respectively. Note that analytical data qualifiers have been included in Table 4-2 according to results of the attached Data Usability Summary Report.
- On January 16, prior to purging and field parameter measurement, extra 40 milliliter (mL) sample vials of well water were collected from PZ-5, PZ-6 and PZ-8, in case the wells did not recharge after purging. The water levels were checked January 17 (PZ-8) and 18 (PZ-5 and PZ-6), and there was sufficient recharge to collect additional sample from all three piezometers. Both sets of samples (i.e., collected prior to well purging, and after purging and well recharge) were sent to the laboratory with instructions on the Chain of Custody that only the samples collected on January 17 and 18 (i.e., after recharge) be analyzed. The laboratory analyzed and reported both sets, however only the after recharge samples have been used in this summary.

Contaminant of Concern (COC) Observations

- Chlorinated volatile organic compounds (CVOCs) are the predominant contaminants of concern (COCs). Certain CVOCs continue to be detected in some wells at concentrations greater than NYSDEC Technical Operational Guidance Series (TOGS) 1.1.1: *Ambient Water Quality Standards and Guidance Values* (SGVs). The ranges of detected COC levels were generally similar to those observed in previous sampling events. Analytical results are summarized on Table 4-2 and depicted graphically for the January 2017 sampling event on Figure D-3A.
- The predominant constituents detected at concentrations greater than the SGVs continue to be PCE, TCE, cis-1,2-DCE, 1,1-DCA, and VC. Additionally, 1,1-DCE and 1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113), were also detected above SGVs at A2-PZ-1.
- A Mann-Kendall trend analysis was performed using data from the January 2017 sampling event and the seven previous rounds of sampling (see Table 4-4 and Figures 4-3a through 4-3o). No sudden increases were identified, and at A2-PZ-1 (Objective 1 location) a historic maximum for trans-1,2-dichloroethene was identified. A statistically-significant increasing trend was observed at MW-1 (Objective 1 location) for cis-1,2-DCE. Statistically-significant decreasing trends were identified for PCE at PZ-5 and MW-3 (Objective 1 locations); cis-1,2-DCE at MW-18 (Objective 1 location) and MW-2 (Objective 3 location); and for 1,1-DCA and VC at MW-2 (Objective 3 location).

Objective 1 Wells

- Piezometer A2-PZ-1 continues to exhibit the highest total VOC concentrations at the site, including SGV exceedances of TCE; cis-1,2-DCE; trans-1,2-DCE; VC; 1,1-DCA; 1,1-DCE; and Freon 113. The January 2017 analytical results for this well are generally consistent with VOC levels observed throughout the previous sampling year (2016). As noted above a historic maximum was observed for trans-1,2-DCE (69 ug/L) this sampling event. A review of the whole data set for trans-1,2-DCE shows out of the 22 results obtained since sampling began in September 2011, 13 of the 22 where reported as not detected with detection limints ranging from 100 ug/L to 450 ug/L, well above the current results of 69 ug/L. Additionally, A2-PZ-1 is located in a source-area where soils are planned to be removed, it is anticipated that the removal of source-area soils will address groundwater impacts.

- No SGV exceedances were observed in MW-20, A1-PZ-2, PZ-11R, and PZ-13R. The concentration of TCE in PZ-11R has been fluctuating slightly above and below the SGV level since 2011, potentially associated with drier periods and subsequent lower water levels.

- MW-1, MW-18, PZ-5, PZ-6, PZ-8, and A2-PZ-2 have consistently exhibited SGV exceedances of PCE, TCE, and cis-1,2-DCE; the concentrations reported for this annual sampling event are generally consistent with results of the previous sampling year for these wells with the exception of cis-1,2-DCE at MW-1. As noted above, the Mann-Kendall analysis indicates an increasing trend in the concentration of cis-1.2-DCE at MW-1. The increasing trend was first noted in the Mann-Kendall analysis in October 2016, but prior to this the concentration trend of 1,2-DCE at MW-1 was decreasing or no trend observed. The highest concentration of 1,2-DCE in this brief increasing trend (24 ug/L) is approximately 45% less than the highest concentration (44 ug/l) observed since sampling began in 2011 and a review of the whole data set suggests an overall decreasing trend. Additionally, the January 2017 results (13.6 ug/L) is the lowest since October 2015 and is 43% less than the 24 ug/L-the highest concentration of 1,2-DCE observed in this brief increasing trend. Given the overall decreasing trend, the January 2017 result and the limited exposure to groundwater at MW-1, this trend is not indicative of an imminent risk to human health or the environment. Groundwater monitoring will continue at MW-1, but these results do not warrant additional sampling or installations within the current monitoring network. During this sampling event, PZ-6 PCE concentration was below its SGV. 1,1,-DCA and VC exceeded their respective SGVs in the sample collected from A2-PZ-2. MW-3 continues to exhibit exceedance of cis-1,2-DCE; the concentrations of PCE and TCE were below SGVs, and VC has been fluctuating above and below SGV since 2013, but exceeded its SGV during this sampling event.

Objective 2 Wells

- Monitoring well MW-21 was the only Objective 2 well sampled in January 2017. The concentration of VC in MW-21 during this sampling round (1.9 µg/L) was slightly below the SGV of 2.0 µg/L.

Objective 3 Wells

- Two of the three Objective 3 wells sampled exhibited SGV exceedances for cis-1,2-DCE and VC (MW-2 and MW-10).

- The exceedance concentrations were like concentrations reported for these locations during previous annual sampling events. Monitoring well MW-4 exhibited no SGV exceedances.

Geochemical Observations

Geochemical analyses during the January 2017 sampling event included pH, conductivity, dissolved oxygen (DO), and oxidation-reduction potential (ORP). Field parameters were collected at the monitoring wells by bailing and measurement at the surface. Downhole DO and ORP were measured at all locations where there was sufficient recharge, except at A1-PZ-2; piezometer A1-PZ-2 is too narrow to accommodate the downhole probes available. Thus, DO and ORP measured at A1-PZ-2, and at those locations with insufficient water column (PZ-11R and PZ-13R), may not accurately reflect *in situ* conditions.

The attached Table 4-3 summarizes the measured field parameters. The following observations are made relative to these data:

- Measured pH levels in groundwater site-wide ranged from 5.30 to 8.11 SU; indicating conditions range from slightly acidic to slightly basic.
- DO values ranged from 0.91 to 8.94 mg/L; this range of values is consistent with previous sampling events, and is within the historical range observed for each of the sampled wells. These data indicate that groundwater varies from oxygen rich to oxygen deprived depending on location.
- ORP values ranged from -144 to 2 mV; ORP was negative in fifteen of the sixteen wells sampled for ORP. All of the ORP measurements were within the historical range of values observed. The majority of ORP results from this sampling event indicate most likely mildly reducing groundwater conditions.

Groundwater Elevation Measurements

Groundwater elevations in monitoring wells in the Solvent Dock Area were relatively consistent with historical measurements at the site. In general, the groundwater elevations indicated a higher water table when compared to both the Q4 2016 event and the Q1 2016 event. Most of the groundwater elevations were within the historical ranges observed. The following location exhibited new historical minima: MW-13S. The following six locations exhibited new historical maxima: A2-PZ-2, MW-14BR, PZ-7, MW-13BR, MW-15BR and A2-PZ-5. Bedrock well MW-15BR exceeded its previous maximum (October 2016, 490.97 ft amsl) by approximately 0.4 ft. Historical data indicate that the groundwater elevation at this location has been increasing since September 2011; the other two bedrock wells (MW-13BR and MW-14BR) historically have not followed this same pattern, but both exceeded their previous maximums this event.

As shown on the attached groundwater contour plan (Figure D-2A), the highest overburden groundwater levels continue to be in the area immediately north of the pole barn. Groundwater flow direction continues to maintain an overall east-southeast trend, with localized groundwater capture by the Groundwater Collection and Treatment System. Note that bedrock well water levels are not used in the development of the contour plan.

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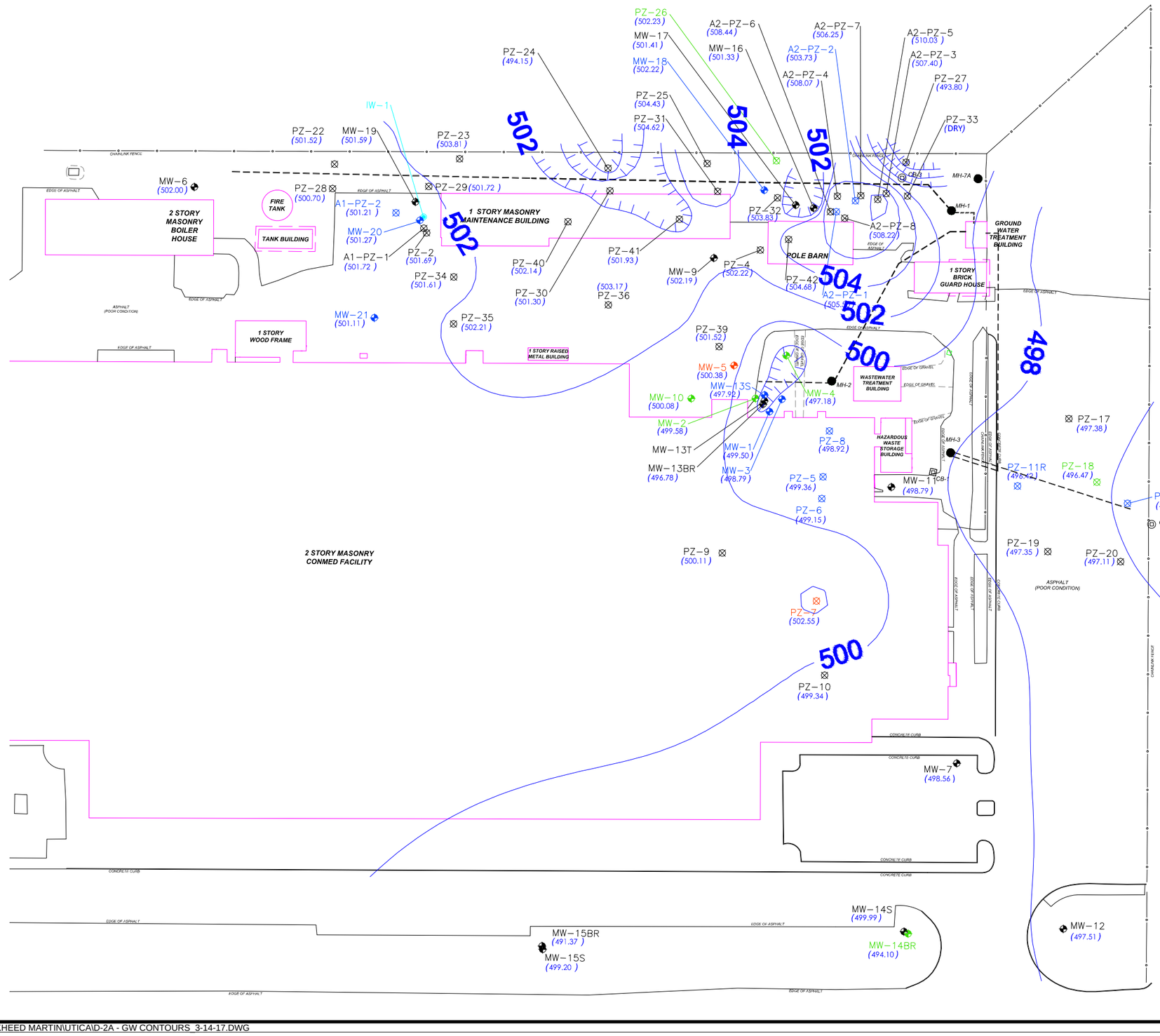
FIGURES



LEGEND:

- IW-1 — INJECTION WELL LOCATION
- MW-10 — MONITORING WELL LOCATION
- PZ-9 — PIEZOMETER LOCATION
- QUARTERLY SAMPLING LOCATION
- SEMI-ANNUAL SAMPLING LOCATION
- ANNUAL SAMPLING LOCATION
- (501.52) — QUARTERLY GROUNDWATER ELEVATION POINT (AMSL)
- 500 — GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER COLLECTION TRENCH AND PIPING
- FENCE LINE
- MH-2 — GROUNDWATER COLLECTION MANHOLE LOCATION
- CB-2 — CATCH BASIN WITH INLET GRATE LOCATION

NOTES:

1. BASE PLAN ADAPTED FROM DRAWING ENTITLED ?2013 ANNUAL GROUNDWATER MONITORING REPORT, JANUARY 2013 GROUNDWATER CONTOURS? PREPARED BY ACRCADIS.
2. THIS DRAWING IS REFERENCED HORIZONTALLY TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) AND PROJECTED ON THE NEW YORK STATE PLAN COORDINATE SYSTEM (CENTRAL ZONE).
3. THE REFERENCED HORIZONTAL CONTROL STATION IS A GPS CONTINUOUSLY OPERATING REFERENCE STATION (CORS) DESIGNATED AS "ROME CORS ARP" (NYRM). NYRM IS A SPECIAL HORIZONTAL AND VERTICAL CONTROL STATION ESTABLISHED BY NATIONAL GEODETIC SURVEY IN JULY 1997.
4. CONTOURS DEVELOPED USING WATER LEVEL DATA FROM JANUARY 16, 2017.
5. PZ-21 and PZ-33 WERE GAUGED BUT WERE DRY. IW-1 WAS NOT ACCESSIBLE.

2017 ANNUAL SITE MANAGEMENT REPORT
APPENDIX D: Groundwater Monitoring Report
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

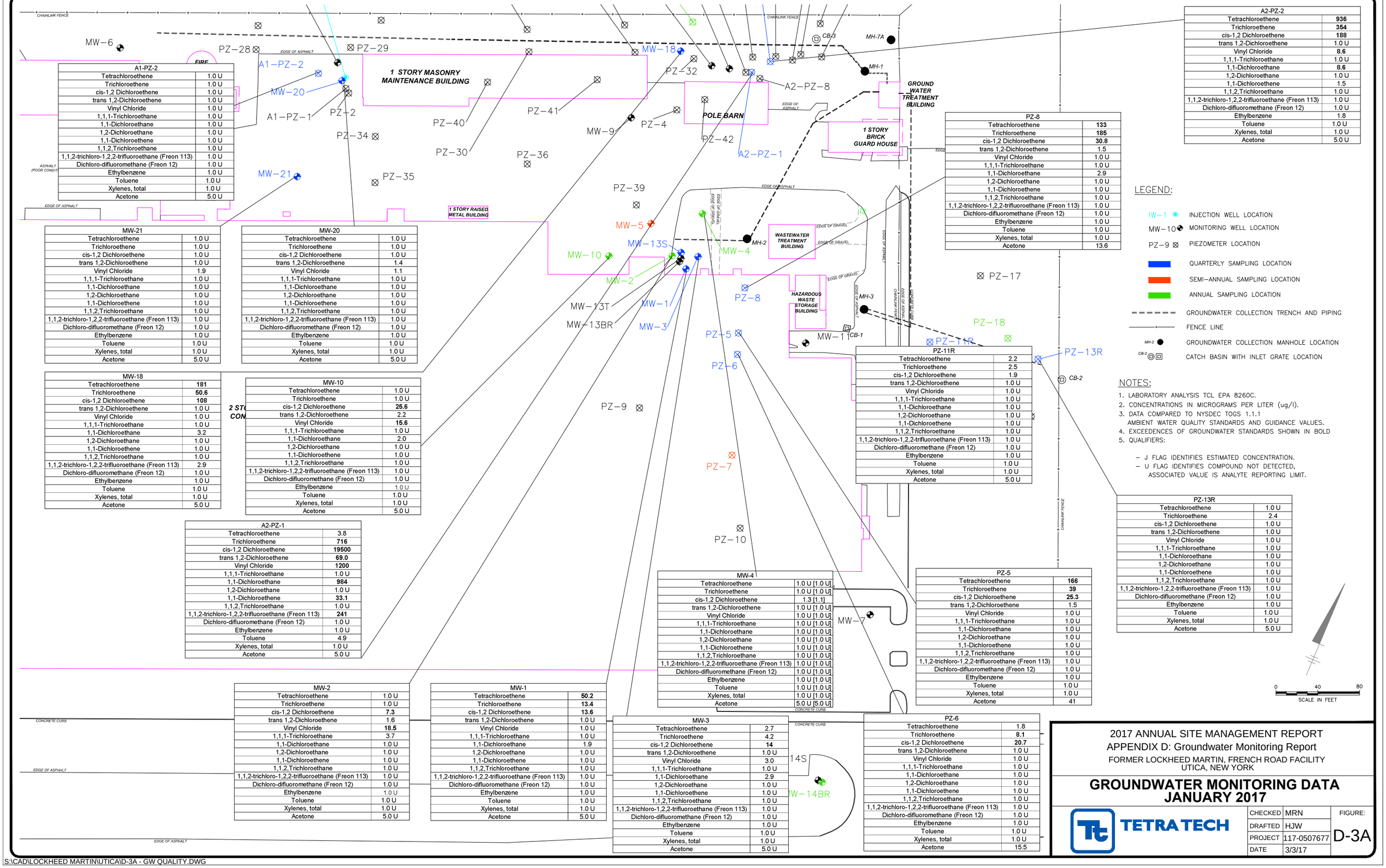
GROUNDWATER CONTOURS JANUARY 2017

TETRA TECH

CHECKED	MRN
DRAFTED	HJW
PROJECT	117-0507677
DATE	3/14/17

FIGURE: D-2A

S:\CAD\LOCKHEED MARTIN\UTICA\D-2A - GW CONTOURS_3-14-17.DWG



A1-PZ-2	
Tetrachloroethene	1.0 U
Trichloroethene	1.0 U
cis-1,2 Dichloroethene	1.0 U
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-21	
Tetrachloroethene	1.0 U
Trichloroethene	1.0 U
cis-1,2 Dichloroethene	1.0 U
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.9
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-20	
Tetrachloroethene	1.0 U
Trichloroethene	1.0 U
cis-1,2 Dichloroethene	1.0 U
trans 1,2-Dichloroethene	1.4
Vinyl Chloride	1.1
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-18	
Tetrachloroethene	**181**
Trichloroethene	**50.6**
cis-1,2 Dichloroethene	**108**
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	3.2
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	2.9
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-10	
Tetrachloroethene	1.0 U
Trichloroethene	1.0 U
cis-1,2 Dichloroethene	**25.6**
trans 1,2-Dichloroethene	2.2
Vinyl Chloride	**15.6**
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	2.0
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

A2-PZ-1	
Tetrachloroethene	3.8
Trichloroethene	**716**
cis-1,2 Dichloroethene	**19500**
trans 1,2-Dichloroethene	**69.0**
Vinyl Chloride	**1200**
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	**984**
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	**33.1**
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	**241**
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	4.9
Xylenes, total	1.0 U
Acetone	5.0 U

MW-2	
Tetrachloroethene	1.0 U
Trichloroethene	1.0 U
cis-1,2 Dichloroethene	**7.3**
trans 1,2-Dichloroethene	1.6
Vinyl Chloride	**18.5**
1,1,1-Trichloroethane	3.7
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-1	
Tetrachloroethene	**50.2**
Trichloroethene	**13.4**
cis-1,2 Dichloroethene	**13.6**
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.9
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-3	
Tetrachloroethene	2.7
Trichloroethene	4.2
cis-1,2 Dichloroethene	**14**
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	3.0
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	2.9
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethane	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

MW-4	
Tetrachloroethene	1.0 U [1.0 U]
Trichloroethene	1.0 U [1.0 U]
cis-1,2 Dichloroethene	1.3 [1.1]
trans 1,2-Dichloroethene	1.0 U [1.0 U]
Vinyl Chloride	1.0 U [1.0 U]
1,1,1-Trichloroethane	1.0 U [1.0 U]
1,1-Dichloroethane	1.0 U [1.0 U]
1,2-Dichloroethane	1.0 U [1.0 U]
1,1-Dichloroethene	1.0 U [1.0 U]
1,1,2,Trichloroethene	1.0 U [1.0 U]
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U [1.0 U]
Dichloro-difluoromethane (Freon 12)	1.0 U [1.0 U]
Ethylbenzene	1.0 U [1.0 U]
Toluene	1.0 U [1.0 U]
Xylenes, total	1.0 U [1.0 U]
Acetone	5.0 U [5.0 U]

PZ-11R	
Tetrachloroethene	2.2
Trichloroethene	2.5
cis-1,2 Dichloroethene	1.9
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethene	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

PZ-6	
Tetrachloroethene	1.8
Trichloroethene	**8.1**
cis-1,2 Dichloroethene	**20.7**
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethene	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	15.5

PZ-5	
Tetrachloroethene	**166**
Trichloroethene	**39**
cis-1,2 Dichloroethene	**25.3**
trans 1,2-Dichloroethene	1.5
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethene	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	41

PZ-8	
Tetrachloroethene	**133**
Trichloroethene	**185**
cis-1,2 Dichloroethene	**30.8**
trans 1,2-Dichloroethene	1.5
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	2.9
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethene	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	13.6

A2-PZ-2	
Tetrachloroethene	**936**
Trichloroethene	**354**
cis-1,2 Dichloroethene	**188**
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	**8.6**
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	**8.6**
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.5
1,1,2,Trichloroethene	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.8
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

PZ-13R	
Tetrachloroethene	1.0 U
Trichloroethene	2.4
cis-1,2 Dichloroethene	1.0 U
trans 1,2-Dichloroethene	1.0 U
Vinyl Chloride	1.0 U
1,1,1-Trichloroethane	1.0 U
1,1-Dichloroethane	1.0 U
1,2-Dichloroethane	1.0 U
1,1-Dichloroethene	1.0 U
1,1,2,Trichloroethene	1.0 U
1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)	1.0 U
Dichloro-difluoromethane (Freon 12)	1.0 U
Ethylbenzene	1.0 U
Toluene	1.0 U
Xylenes, total	1.0 U
Acetone	5.0 U

LEGEND:

- IW-1 — INJECTION WELL LOCATION
- MW-10 — MONITORING WELL LOCATION
- PZ-9 — PIEZOMETER LOCATION
- QUARTERLY SAMPLING LOCATION
- SEMI-ANNUAL SAMPLING LOCATION
- ANNUAL SAMPLING LOCATION
- GROUNDWATER COLLECTION TRENCH AND PIPING
- FENCE LINE
- MH-2 — GROUNDWATER COLLECTION MANHOLE LOCATION
- CB-2 — CATCH BASIN WITH INLET GRATE LOCATION

NOTES:

1. LABORATORY ANALYSIS TCL EPA 8260C.
2. CONCENTRATIONS IN MICROGRAMS PER LITER (ug/l).
3. DATA COMPARED TO NYSDEC TOGS 1.1.1 AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES.
4. EXCEEDENCES OF GROUNDWATER STANDARDS SHOWN IN BOLD
5. QUALIFIERS:
   - J FLAG IDENTIFIES ESTIMATED CONCENTRATION.
   - U FLAG IDENTIFIES COMPOUND NOT DETECTED, ASSOCIATED VALUE IS ANALYTE REPORTING LIMIT.

0 40 80
SCALE IN FEET

2017 ANNUAL SITE MANAGEMENT REPORT
APPENDIX D: Groundwater Monitoring Report
FORMER LOCKHEED MARTIN, FRENCH ROAD FACILITY
UTICA, NEW YORK

GROUNDWATER MONITORING DATA JANUARY 2017

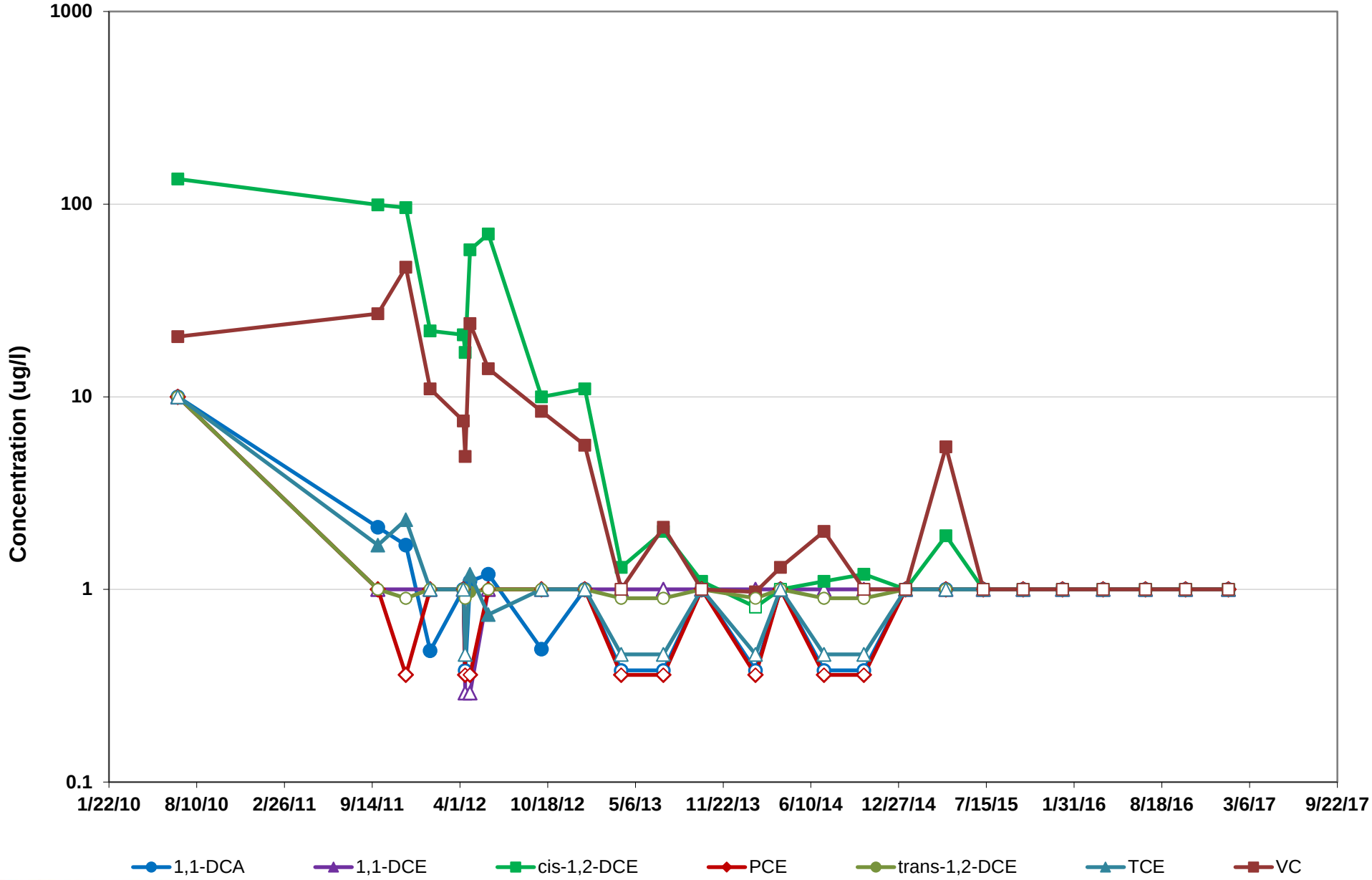
TETRA TECH

CHECKED	MRN
DRAFTED	HJW
PROJECT	117-0507677
DATE	3/3/17

FIGURE: D-3A

S:\CAD\LOCKHEED MARTIN\UTICA\D-3A - GW QUALITY.DWG

Figure 4-3a: Well A1-PZ-2 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



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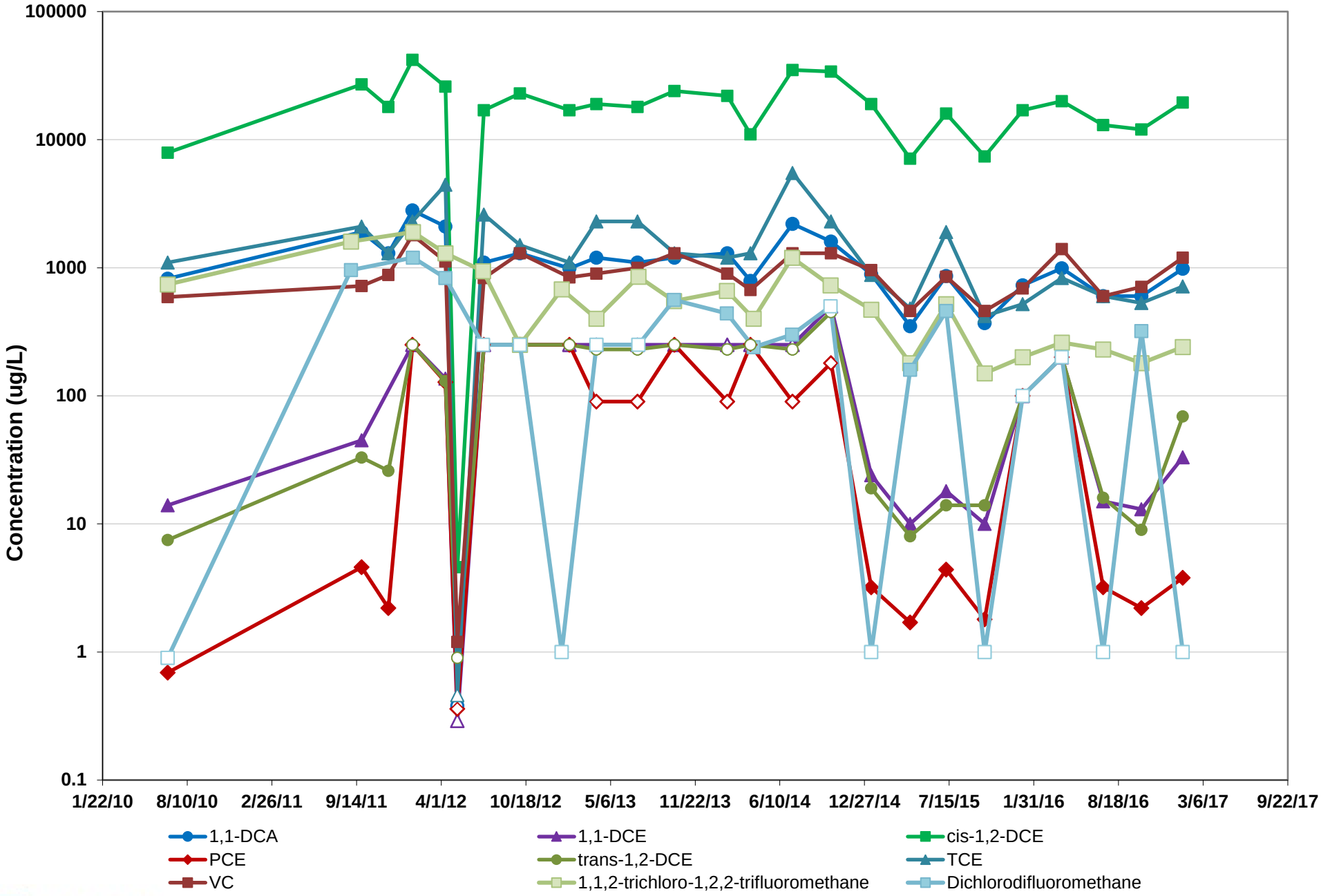
Non-detect sample results are represented with open symbols.

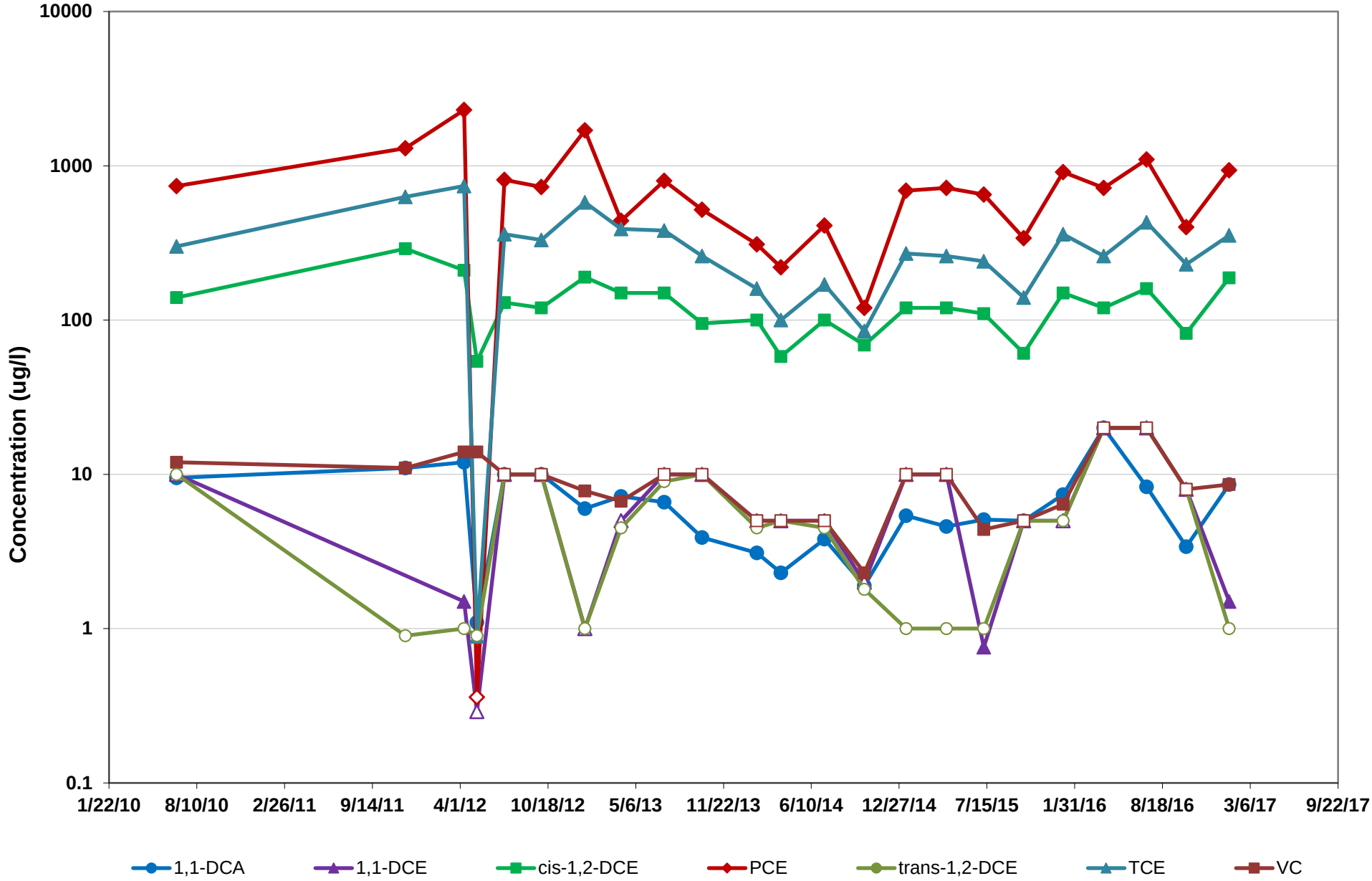
Figure 4-3b: Well A2-PZ-1 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

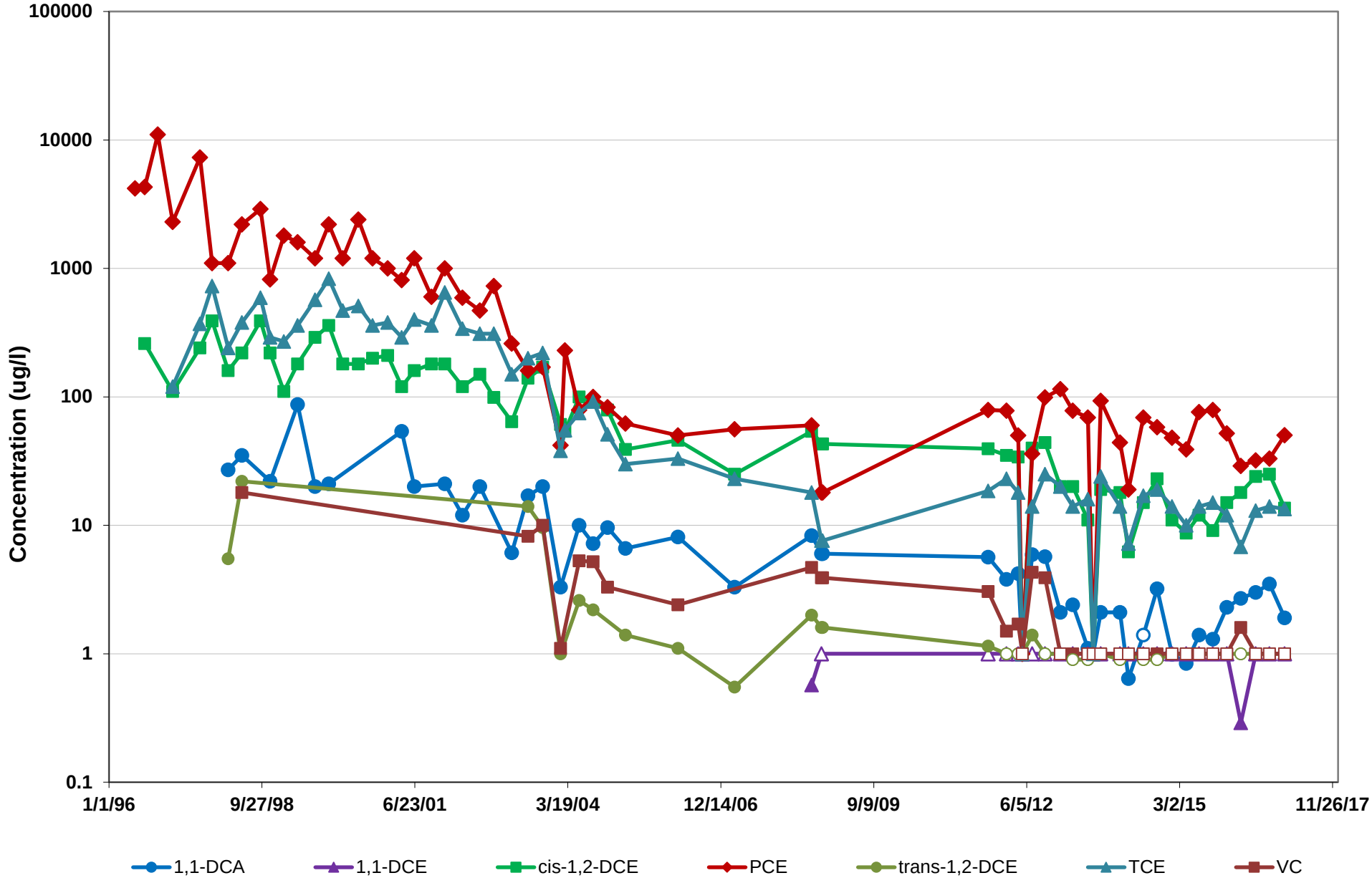
Figure 4-3c: Well A2-PZ-2 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

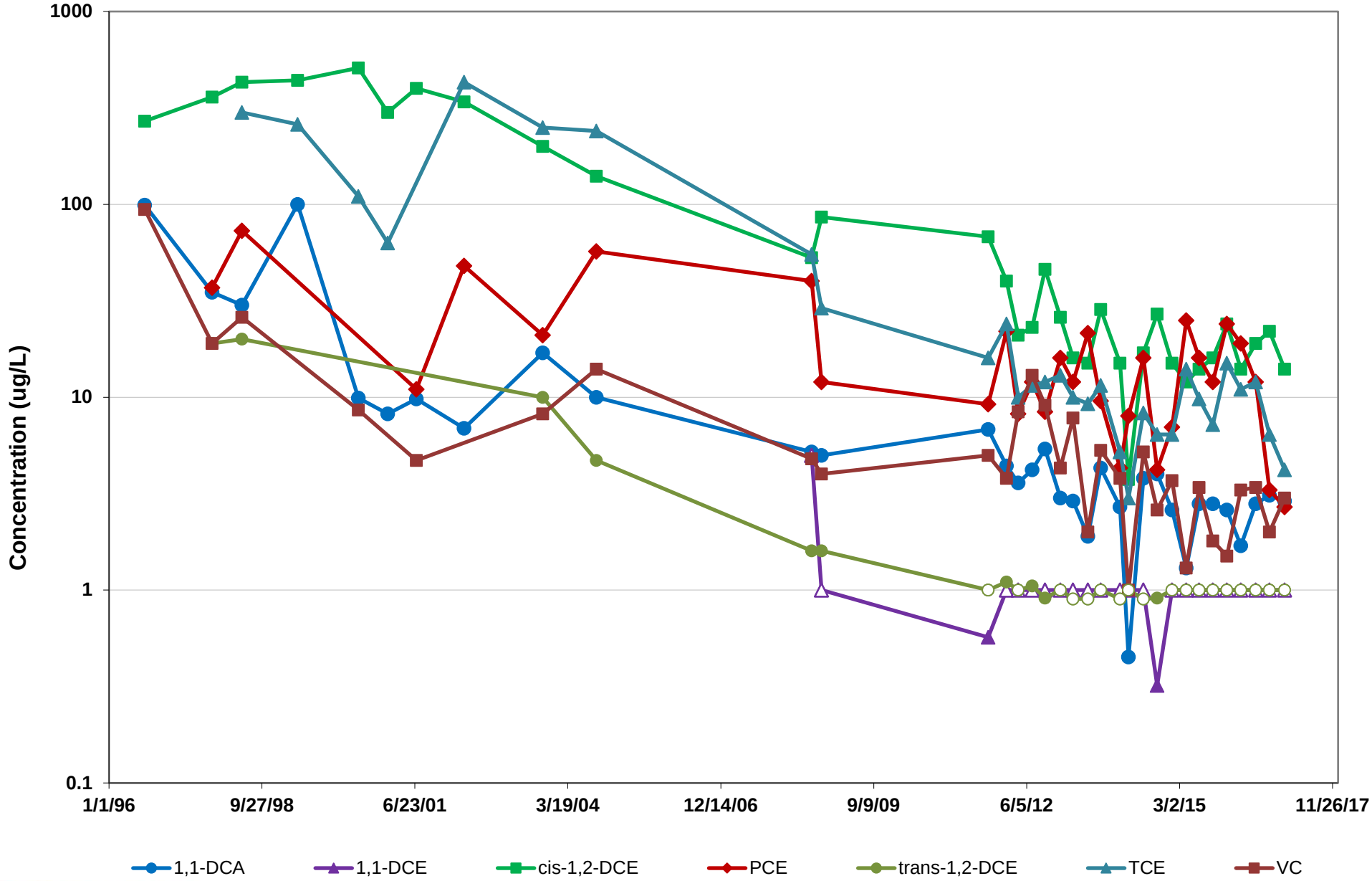
Figure 4-3d: Well MW-1 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

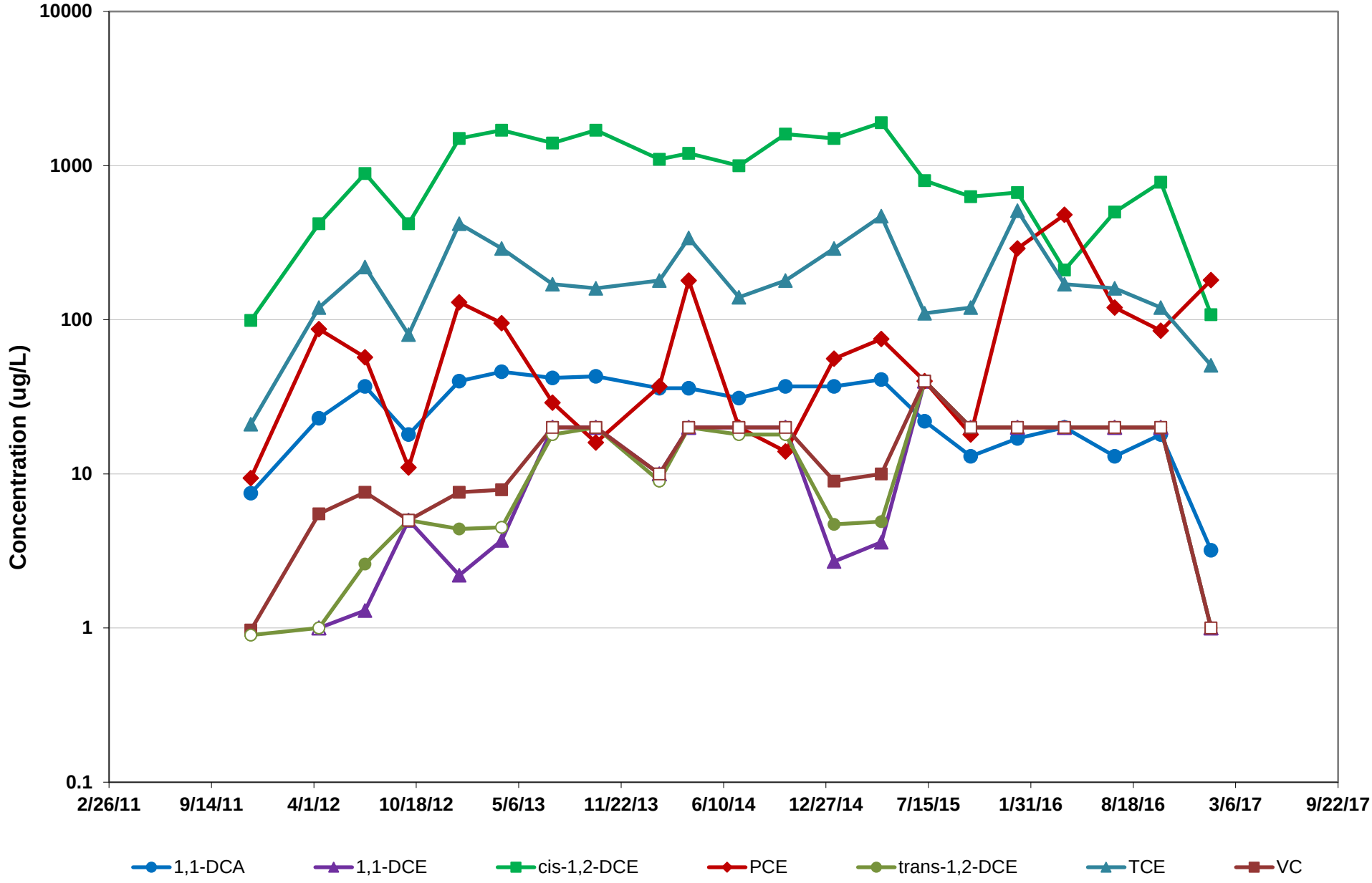
Figure 4-3e: Well MW-3 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

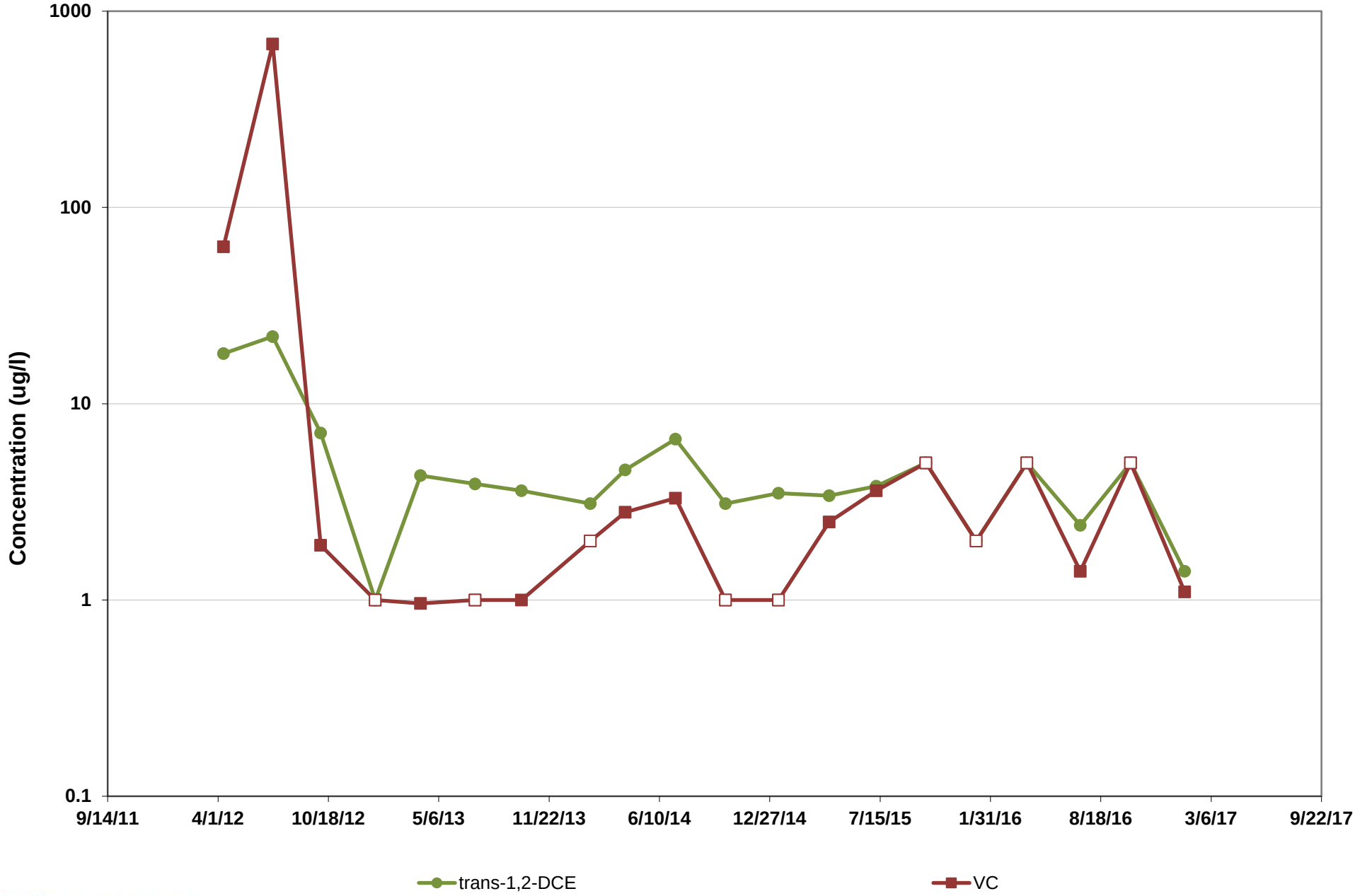
Figure 4-3f: Well MW-18 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

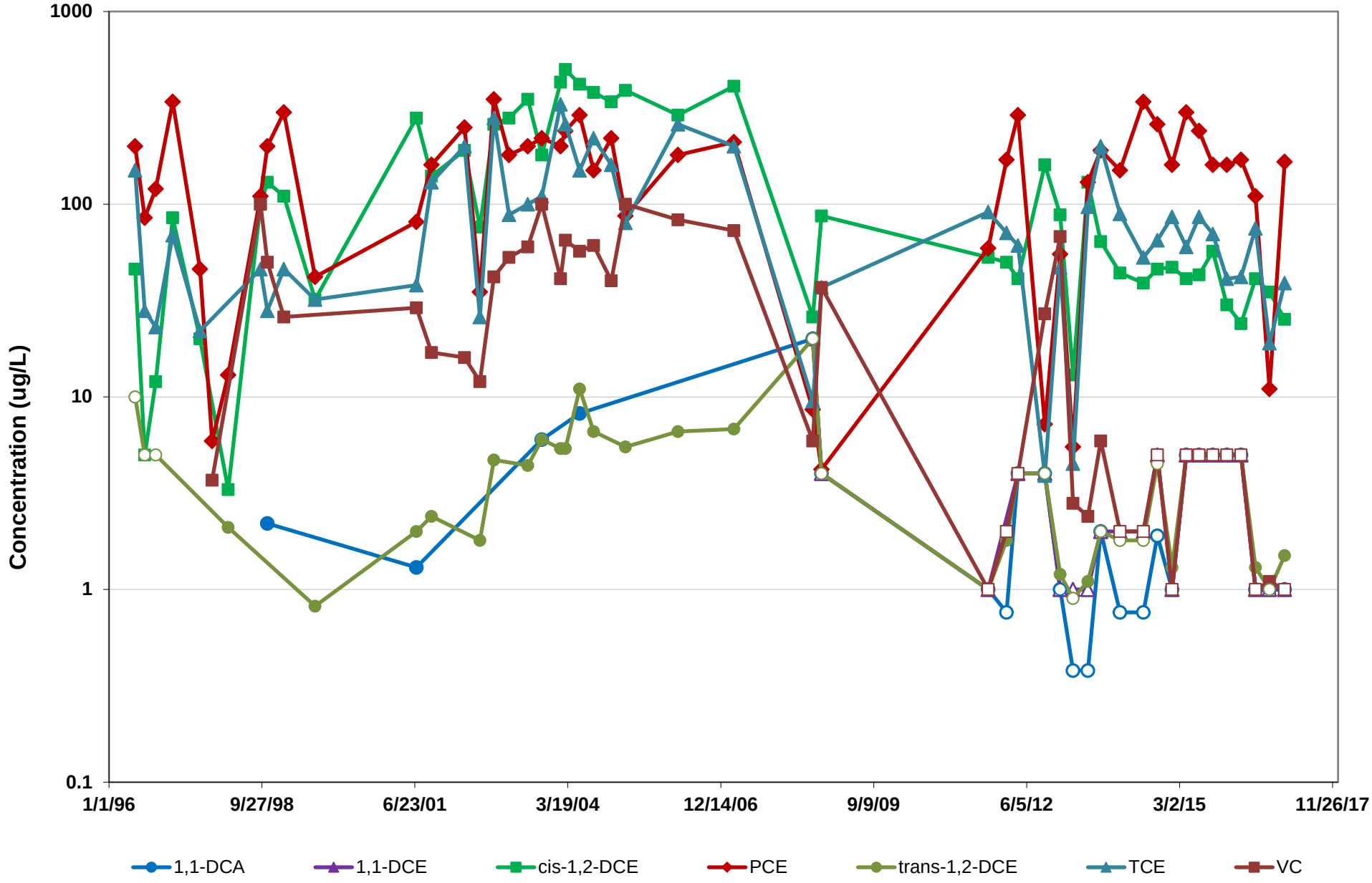
Figure 4-3g: Well MW-20 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

Figure 4-3h: Well PZ-5 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

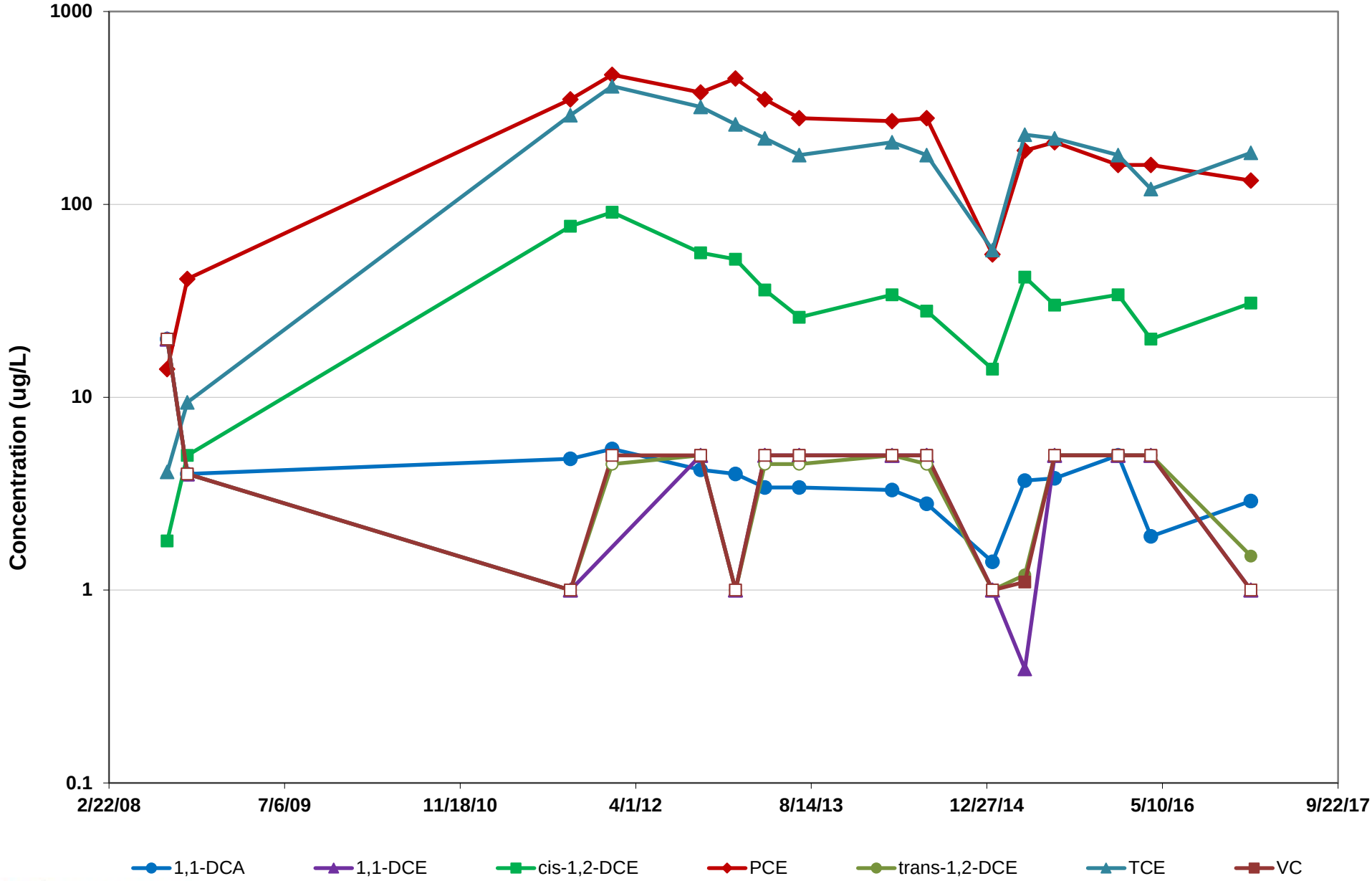
Non-detect sample results are represented with open symbols.

Figure 4-3i: Well PZ-6 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York

TETRA TECH

Non-detect sample results are represented with open symbols.

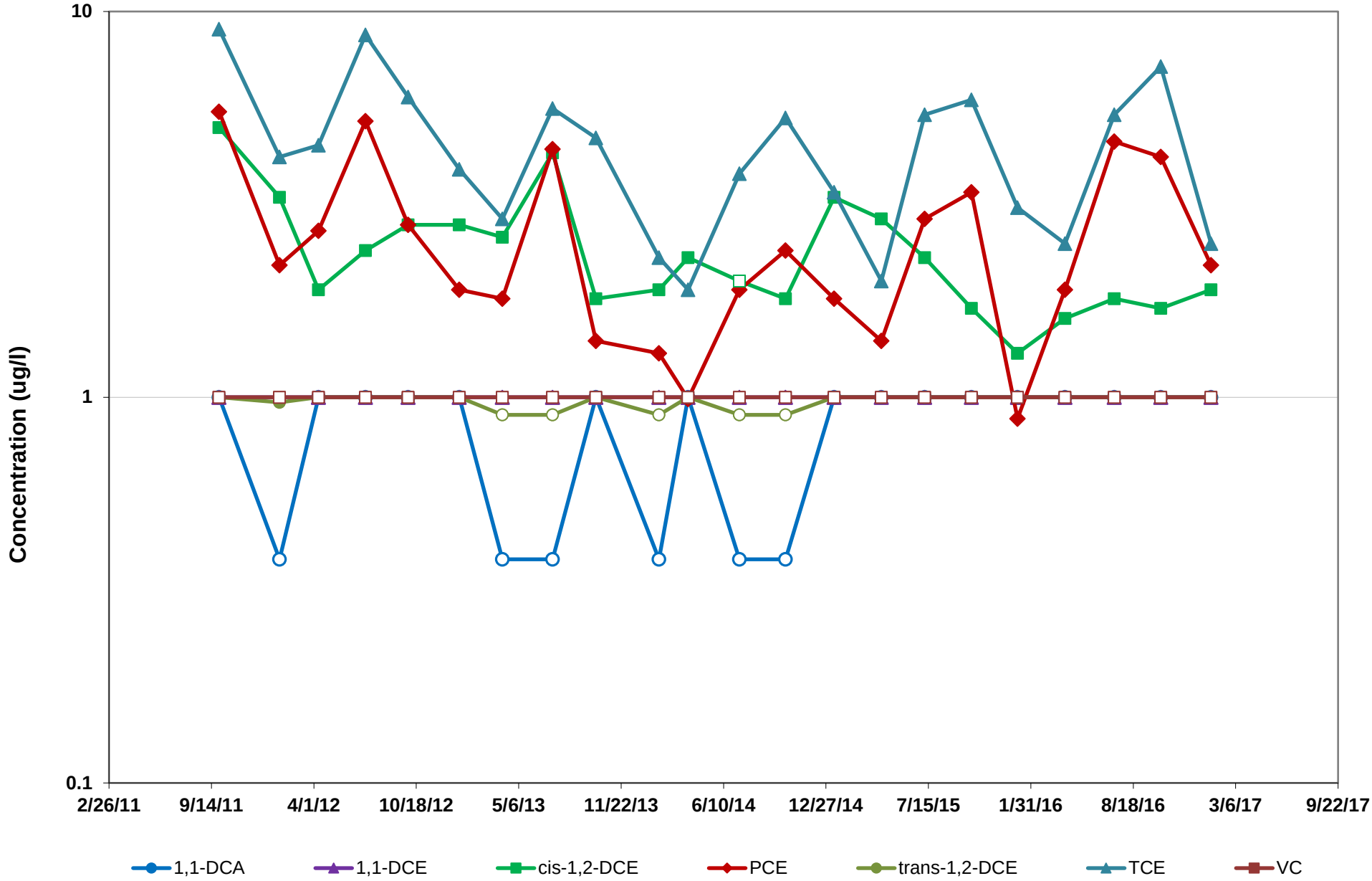
Figure 4-3j: Well PZ-8 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

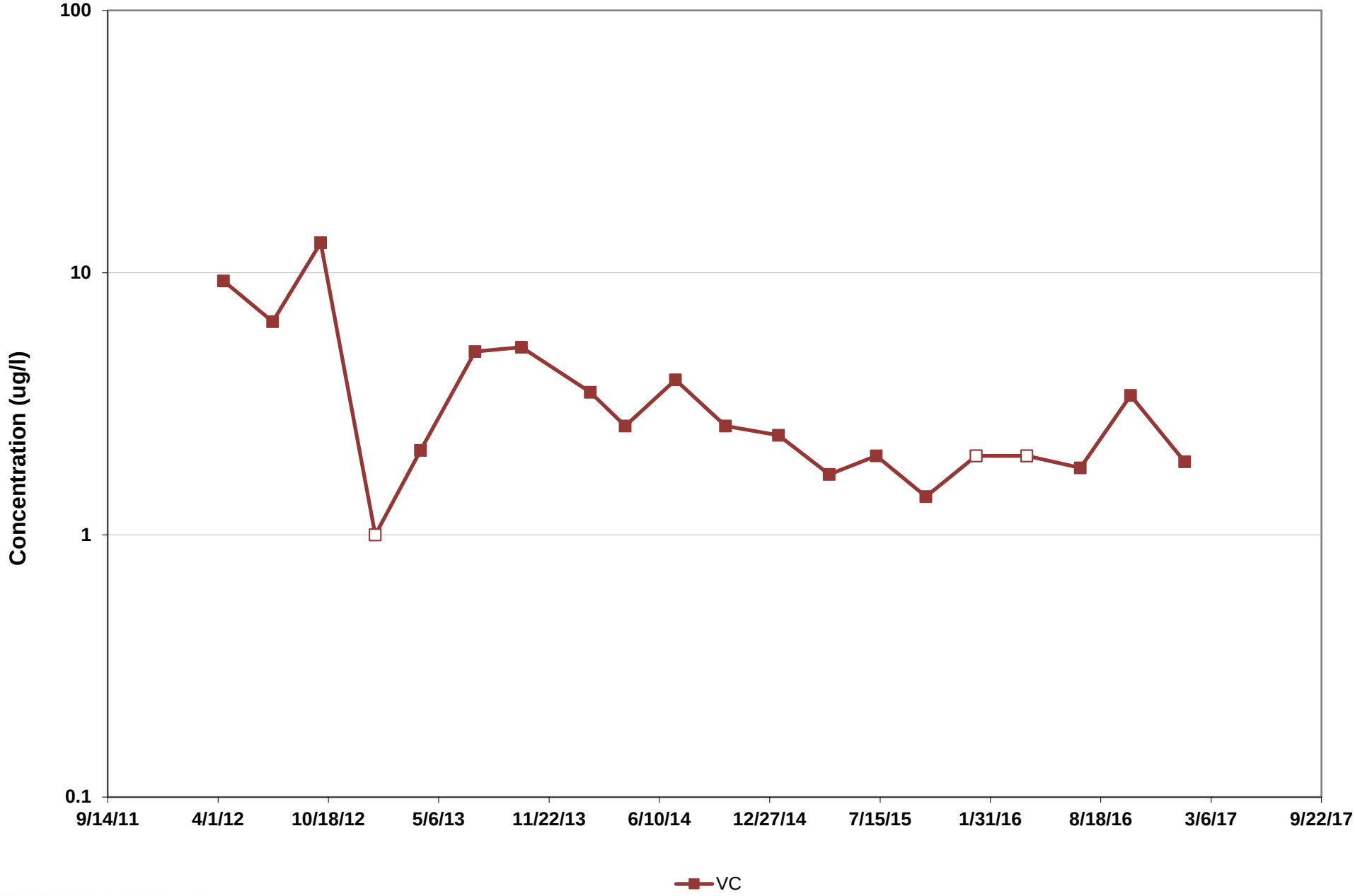
Figure 4-3k: Well PZ-11R Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

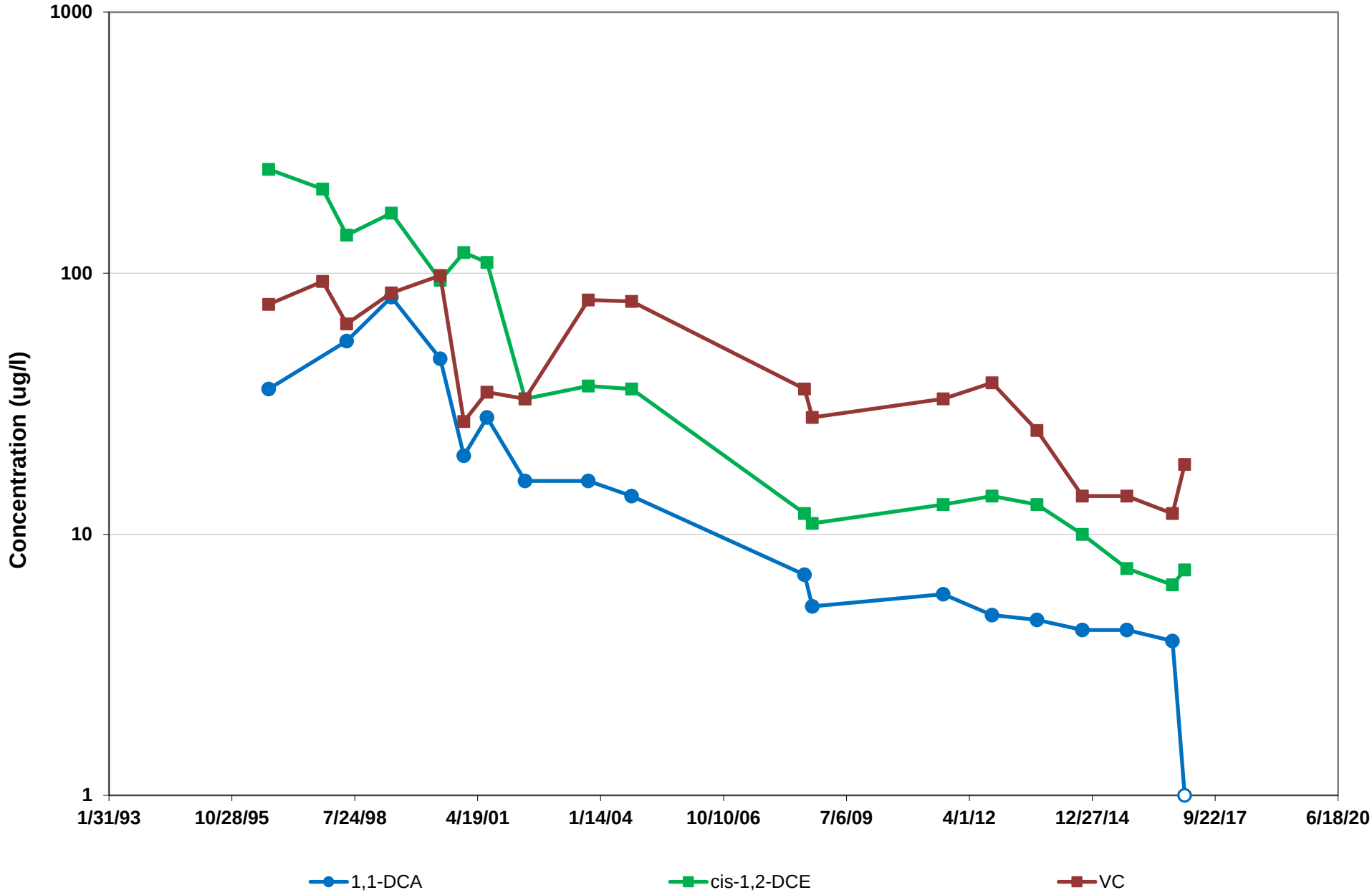
Figure 4-3l: Well MW-21 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

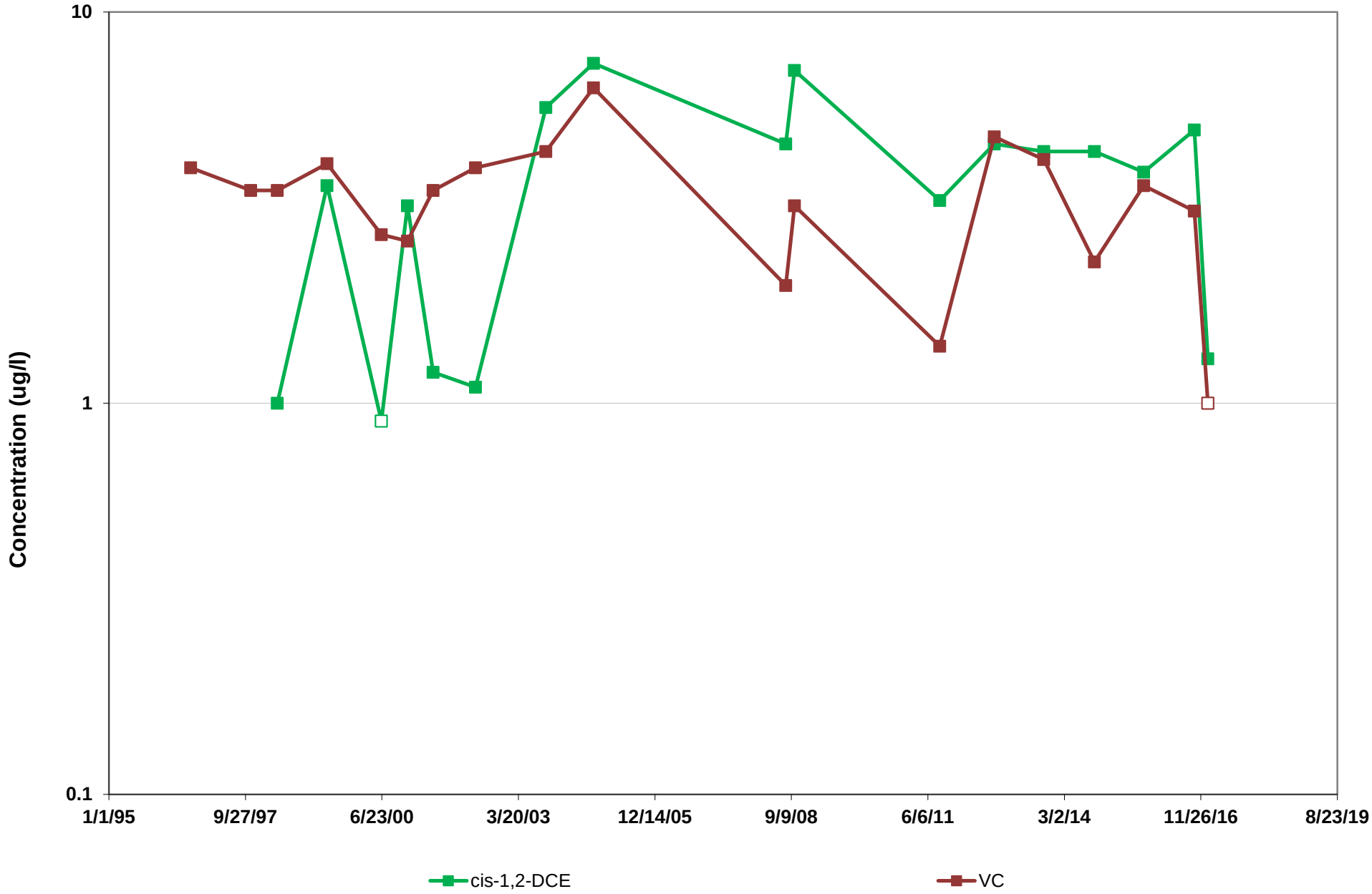
Figure 4-3m: Well MW-2 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

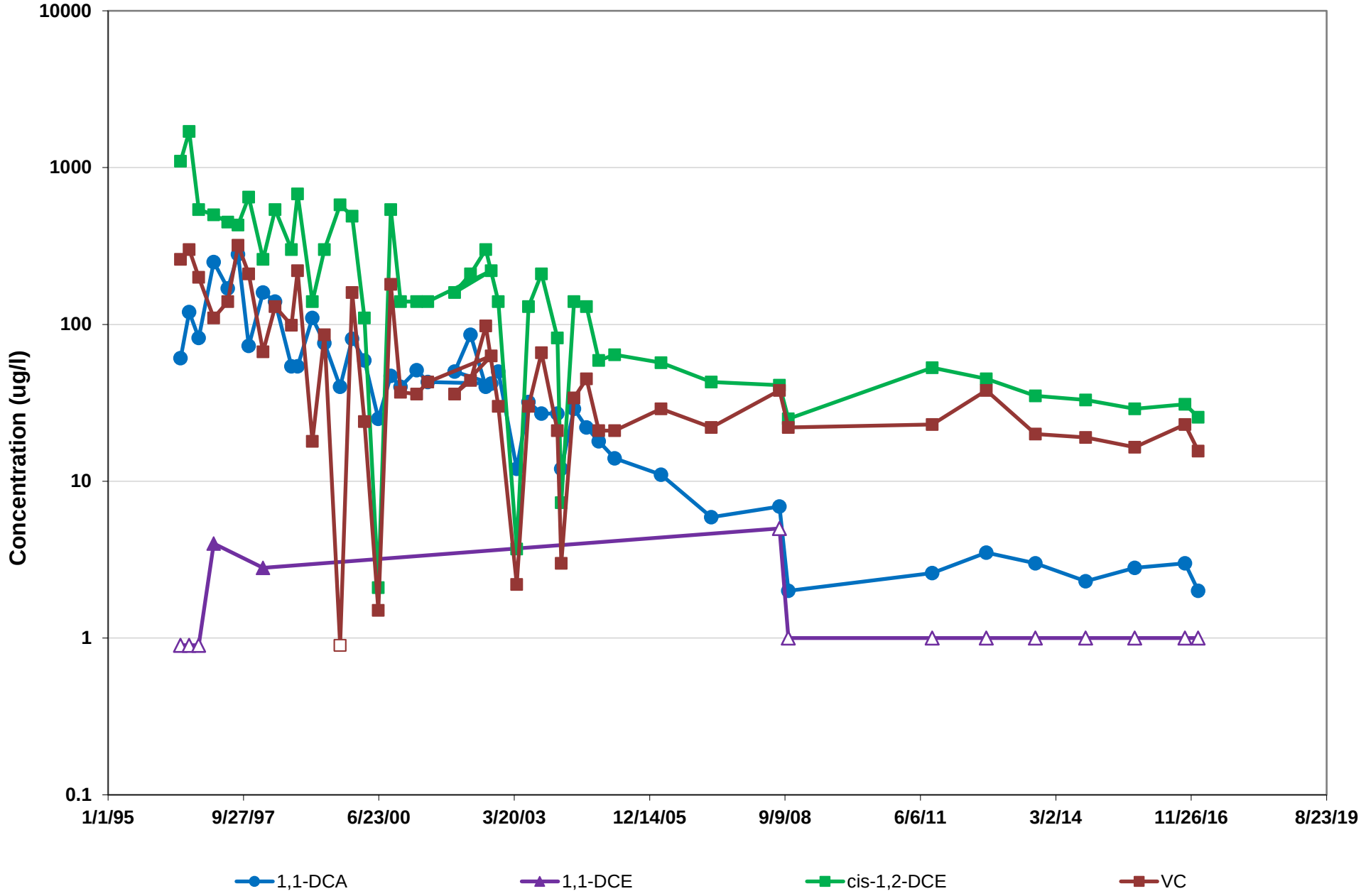
Figure 4-3n: Well MW-4 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

Figure 4-3o: Well MW-10 Groundwater Volatile Organic Compound Concentration Trends
Former Lockheed Martin Facility, Utica, New York



TETRA TECH

Non-detect sample results are represented with open symbols.

TETRA TECH

TABLES

Table 4-1
Groundwater Elevation Measurements
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Well ID	Top of Casing Elevation (ft)	Ground Water Elevation (ft)								
		Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1										
MW-1	507.27	500.45	500.85	499.41	498.93	499.32	499.52	499.06	498.32	499.50
MW-3	509.45	499.57	499.85	498.87	498.55	498.78	498.88	497.56	497.91	498.79
MW-18	504.97	502.29	502.12	501.89	501.58	502.19	502.00	501.62	501.43	502.22
MW-20	503.40	501.86	502.01	501.28	501.00	501.35	501.40	501.06	500.49	501.27
PZ-5*	508.20	498.70	498.46	498.73	498.98	499.98	499.31	498.60	498.89	499.27
PZ-6*	508.28	499.12	499.01	499.13	499.07	499.99	499.11	499.03	499.05	499.06
PZ-8	508.23	499.60	499.68	499.10	498.86	499.21	498.81	498.70	498.53	498.92
PZ-11R	504.88	496.83	496.90	496.39	496.32	496.50	496.52	496.24	496.13	496.62
PZ-13R	503.98	495.98	495.96	495.81	495.83	495.89	496.00	495.85	495.82	495.98
A1-PZ-2	503.00	--	501.73	501.40	500.77	501.15	501.56	500.89	500.62	501.33
A2-PZ-1	509.00	--	505.83	504.88	504.40	504.87	505.06	504.78	504.70	505.50
A2-PZ-2	509.74	503.59	503.45	503.39	503.32	503.28	503.09	503.16	503.03	503.73
Objective 2										
MW-5	504.33	500.78	501.77	500.02	499.49	500.03	500.44	499.46	500.10	500.38
MW-13S	505.81	500.21	500.68	499.37	498.93	499.30	499.52	499.06	DRY	497.92
MW-14BR	507.95	447.55	453.44	459.39	464.31	447.89	452.18	458.24	462.85	494.10
MW-21	503.66	501.41	501.73	501.48	501.09	499.64	500.74	501.15	500.96	501.11
PZ-18	504.85	497.27	497.22	496.99	496.94	497.15	497.16	496.94	496.86	497.17
PZ-26	510.95	502.23	502.14	501.98	501.68	501.93	501.70	501.66	501.46	502.23
Objective 3										
MW-2	504.60	500.43	501.05	499.50	498.95	499.39	499.67	499.15	498.38	499.58
MW-4	506.73	497.11	497.02	495.91	495.28	496.08	496.58	495.61	495.13	497.18
PZ-7*	508.26	499.44	499.49	499.50	499.48	499.57	499.38	499.38	499.45	502.45
MW-10	504.48	501.33	501.86	499.98	499.34	500.02	500.25	499.56	498.71	500.08
Others										
IW-1	506.80	505.25	505.73	504.96	505.03	505.19	505.41	504.86	504.48	--
MW-6	508.06	502.27	502.22	502.00	501.62	502.00	502.06	501.77	501.24	502.00
MW-7	506.94	--	498.80	498.96	499.08	498.49	498.41	498.86	498.94	498.56
MW-9	504.84	501.73	502.09	501.21	500.93	502.04	502.15	501.40	500.59	502.19
MW-11	507.03	499.31	498.70	499.06	499.09	499.18	498.61	498.91	499.03	498.79
MW-12	508.30	496.67	497.92	496.64	496.27	496.83	496.92	496.23	495.97	497.51
MW-13BR	506.12	495.73	495.28	494.69	495.52	495.20	496.17	495.40	496.17	496.78
MW-14S	507.85	498.05	500.13	499.04	498.12	499.32	499.47	498.08	497.27	499.99
MW-15S	507.26	--	499.35	498.99	498.92	499.30	499.08	498.78	498.74	499.20
MW-15BR	507.24	--	488.47	488.88	489.39	489.84	490.23	490.65	490.97	491.37
MW-16	504.69	501.03	503.46	500.76	500.87	501.09	504.14	501.72	500.71	501.33
MW-17	504.64	500.95	501.49	500.71	500.95	501.49	501.73	500.95	500.68	501.41
MW-19*	503.07	502.58	502.17	502.32	501.83	501.84	501.80	501.94	501.89	501.59
PZ-2*	503.76	501.85	502.14	501.46	501.14	501.36	501.79	501.40	500.87	501.69
PZ-4	506.13	504.13	504.16	503.74	503.63	503.78	503.76	503.38	502.97	503.22
PZ-9	508.08	500.07	499.99	500.22	500.16	500.11	500.07	500.19	500.17	500.11
PZ-10	508.14	499.44	499.50	499.30	499.28	499.46	499.11	499.23	499.23	499.34
PZ-17	504.05	497.85	497.66	497.06	497.03	497.34	497.09	496.61	496.66	497.38
PZ-19	504.60	--	498.06	497.33	497.40	497.55	497.49	497.22	497.13	497.35
PZ-20	503.85	--	497.66	497.01	497.02	497.20	497.28	496.92	496.72	497.11
PZ-21	505.70	DRY	496.77	DRY	DRY	DRY	DRY	DRY	DRY	DRY
PZ-22	508.57	502.02	501.86	501.18	499.80	501.58	501.34	500.34	499.39	501.52
PZ-23	510.07	503.96	503.91	503.59	503.31	503.62	503.05	503.18	503.05	503.81
PZ-24	504.77	494.49	494.52	494.12	493.79	494.19	494.18	493.83	493.77	494.15
PZ-25	510.62	504.56	504.58	504.23	503.86	504.21	503.86	503.83	503.57	504.43
PZ-27	504.12	--	495.36	493.70	492.70	494.09	493.64	492.74	492.57	493.80
PZ-28	504.12	500.85	500.74	500.42	500.30	500.58	500.77	497.02	500.05	500.70
PZ-29	503.84	--	501.80	501.67	501.61	501.64	501.79	501.68	501.19	501.72
PZ-30	504.72	501.44	501.45	501.24	500.92	501.17	501.18	500.86	500.77	501.30
PZ-31	506.17	505.86	505.87	505.06	505.67	505.77	505.87	505.11	505.47	505.62
PZ-32	504.90	504.15	504.11	503.40	503.44	503.51	504.38	502.88	503.53	503.83
PZ-33	510.00	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
PZ-34	503.88	502.00	502.09	501.59	501.19	501.36	501.78	501.06	500.77	501.61
PZ-35	503.98	502.32	503.30	502.27	501.86	501.74	502.81	501.86	501.54	502.21
PZ-36	504.23	--	503.36	502.90	502.51	502.93	503.47	502.79	502.24	503.17
PZ-39	504.51	502.49	503.15	501.54	500.93	501.26	501.87	500.92	500.30	501.52
PZ-40	506.68	502.51	502.54	502.09	501.83	501.98	502.23	501.87	501.41	502.14
PZ-41	506.27	501.97	502.51	502.01	501.58	501.84	501.95	501.63	501.25	501.93
PZ-42	505.18	504.63	504.49	504.53	504.63	504.53	504.73	504.53	504.49	504.68
A1-PZ-1	503.77	--	502.70	502.62	502.12	501.82	502.75	502.47	502.15	501.72
A2-PZ-3	509.46	508.23	508.05	506.98	506.15	507.64	507.53	505.82	505.36	507.40
A2-PZ-4	509.40	--	509.20	507.81	507.97	508.12	508.95	507.27	507.62	508.07
A2-PZ-5	510.03	--	508.35	503.13	502.38	506.61	508.49	502.33	502.07	510.03
A2-PZ-6	509.74	509.24	509.57	508.39	509.09	509.04	509.38	508.90	508.82	508.44
A2-PZ-7	509.59	508.85	508.46	503.94	503.41	506.52	507.69	503.47	503.20	506.25
A2-PZ-8	509.70	509.50	509.27	506.42	507.75	508.12	509.36	508.53	507.94	508.22

Notes:
1. "--" - Not measured due to access
2. DRY - No measurable water
3. All measurements presented above are given in feet Above Mean Sea Level (AMSL), as measured from the July 1997 National Geodetic Survey datum.
4. PZ-11R, MW-2 and MW-19 measurements were unable to be collected on 10/1/2013. The values presented above were calculated from the initial water level collected during the sampling event between 10/2 and 10/4/2013.
5. The Oct. 2014 MW-14BR groundwater elevation was recorded immediately prior to sampling and not during the earlier gauging event, due to instrument malfunction.
6. PZ-11R was inaccessible on 7/11/16 during gauging (car parked on top of piezometer); the water level was measured the next day on 7/12/16 at 7:40 AM.
7. * Indicates a monitoring well or piezometer with an adjusted TOC elevation following the cutting of casing (MW-19, PZ-5, PZ-6, and PZ-7) or the replacement of PVC top (PZ-2) for improved well cover fitting. Repairs were performed on May 27, 2015 (MW-19), June 17, 2015 (PZ-2), and July 11, 2016 (PZ-5, PZ-6, and PZ-7). The casings were re-surveyed on January 21, 2016 (MW-19 and PZ-2) or re-measured on July 11, 2016 (PZ-5, PZ-6, PZ-7). Note that groundwater elevations calculated prior to the July 2015 monitoring event are based on the previous [surveyed] TOC elevations for MW-19 and PZ-2; the groundwater elevations calculated prior to the October 2016 monitoring event are based on the previous [surveyed] TOC elevations for PZ-5, PZ-6, and PZ-7.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Tetrachloroethene																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	**77 [81]**	**78**	**50**	**36**	**99**	**110D [120D]**	**70 [78]**	**69**	**93**	**43 [44]**	**19**	**69 [66]**	**58 [57]**	**48 [48]**	**37 [39]**	**76**	**79**	**48 [52]**	**29**	**32**	**29 [33]**	**50.2**
	MW-3	**9.2**	**22**	**8.2**	**12[12]**	**8.4**	**16**	**12**	**21 [22]**	**9.6 [9.5]**	4.3	**7.9 [8.1]**	**16**	4.2	**7.0**	**25**	**16 [16]**	**12**	**24**	**19 [17]**	**12**	3.3	2.7
	MW-18	--	--	**64 D**	**57**	**11**	**130 D**	**95**	**29**	**16 J**	**37**	**180**	**20**	**14**	**56**	**75**	40 U	**18 J**	**290**	**480**	**120**	**85**	**181**
	MW-20	--	--	7.2U	5.0 U	1.0 U	1.0 U	0.36 U	0.36 U	1.0 UJ	0.72 U	2.0 U	0.72 U	0.36 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	**59**	**170**	**290**	NS	**7.2**	**55**	**5.5**	**130**	**190**	**150**	NS	**340**	**260**	**160**	**300**	**240**	**160**	**160**	**170**	**110**	**11**	**166**
	PZ-6	**72**	**--**	**49**	**--**	**7.2**	--	**8.9**	--	**100 D**	--	**19**	--	**81**	**81**	**85**	4.0	**14**	**50**	**33**	--	**7.0**	1.8
	PZ-8	**350 D**	**470**	NS	NS	**380**	**450 D**	**350**	**280**	NS	NS	**270**	**280**	NS	**55**	**190**	**210**	NS	**160**	**160**	NS	NS	**133**
	PZ-11R	**5.5**	2.2	2.7	**5.2**	2.8	1.9	1.8	4.4	1.4	1.3	0.99 J	1.9	2.4	1.8	1.4	2.9	3.4	2.4	1.9	4.6	4.2	2.2
	PZ-13R	1.7	0.98 J	0.75 J	1.1	0.59 J	1.0 U	0.57	0.92	0.59 J	0.49	1.0 U	0.67	0.89	0.66	1.0 U	0.83 J	1.1	0.88 J	0.59 J	1.2	1.3	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.36 U	0.36 U	1.0 U	0.36 U	1.0 U	0.36 U	0.36 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	5	250 U	250 U **[5.3]**	250 U	250 U	1.0 U	90 U	90 U	250 U	90 U	250 U	90 U	180 U	3.2	1.7	4.4	1.8	100 U	200 U	3.2	2.2	3.8
	A2-PZ-2	--	--	**2300 D**	**810**	**730**	**1700 D**	**440 D**	**800**	**520**	**310**	**220**	**410**	**120**	**690**	**720**	**650 T**	**340**	**910**	**720**	**1100**	**400**	**936**
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	0.55 J	--	0.36 U	--	1.0 UJ	--	1.0 U	--	0.36 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.36 U	0.36 U	NS	NS	1.0 U	0.36 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--		1.0 U	--	--	--	0.36 U	--	--	--	1.0 U	--	--	--	--	--	--
	MW-21	--	**--**	1.0 U	1.0 U	1.0 U	1.0 U	0.36 U	0.36 U	1.0 U	0.36 U	1.0 U	0.36 U	0.36 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	0.41 J	--	--	--	1.0 U	--	--	--	0.36 U	--	--	--	0.36 J	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.36 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.36 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.36 U [3.6 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	0.36 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	0.36 U	--	1.0 U	--	1.0 U	--	0.36 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

TETRA TECH

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Trichloroethene																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	**18 [19]**	**23**	**18**	**14**	**25**	**20 [20]**	**14 [14]**	**16**	**24**	**13 [14]**	**7.2**	**17 [16]**	**19 [19]**	**14 [13]**	**9.7 [10]**	**14**	**15**	**12 [11]**	**6.8**	**13**	**12 [14]**	**13.4**
	MW-3	**16**	**24**	**10**	**12 [11]**	**12**	**13**	**10**	**8.9 [9.6]**	**11 [12]**	**5.2**	3.0 [3.0]	**8.3**	**6.4**	**6.4**	**14**	**9.5 [9.8]**	**7.2**	**15**	**11 [11]**	**12**	**6.4**	4.2
	MW-18	--	--	**120 D**	**220**	**80**	**420 D**	**290**	**170**	**160**	**180**	**340**	**140**	**180**	**290**	**470**	**110**	**120**	**510**	**170**	**160**	**120**	**50.6**
	MW-20	--	--	**170**	2.6 J	1.0 U	1.0 U	0.46 U	0.46 U	1.0 UJ	0.92 U	2.0 U	0.92 U	0.46 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	**91 D**	**52**	**61**	NS	3.9 J	47	4.5	**97**	**200**	**89**	NS	**53**	**65**	**86**	**60**	**86**	**70**	**41**	**42**	**75**	**19**	**39**
	PZ-6	**20**	**--**	**44**	**--**	**20**	--	**21**	--	**25**	--	**28**	--	**42**	**38**	**36**	**5.8**	**14**	**11**	**14**	--	**19**	**8.1**
	PZ-8	**290 D**	**410**	NS	NS	**320**	**260 D**	**220**	**180**	NS	NS	**210**	**180**	NS	**58**	**230**	**220**	NS	**180**	**120**	NS	NS	**185**
	PZ-11R	**9.0**	4.2	4.5	**8.7**	**6**	3.9	2.9	**5.6**	4.7	2.3	1.9	3.8	**5.3**	3.4	2.0	**5.4**	**5.9**	3.3	2.5	**5.4**	**7.2**	2.5
	PZ-13R	**5.5**	3.7	3.9	4.3	3.5	3.2 J	2.8	4.1	4.2	2.4	1.0 U	2.3	3.7	2.8	1.7	3.2	4.6	3.1	2.0	4.3	**5.1**	2.4
	A1-PZ-2	1.7	1.0 U	1.2	1.0 U	1.0 U	1.0 U	0.46 U	0.46 U	1.0 U	0.46 U	1.0 U	0.46 U	0.46 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**2100 D**	**2300**	**4100 [4800]**	**2600**	**1500**	**1100**	**2300**	**2300**	**1300**	**1200**	**1300**	**5500**	**2300**	**880**	**480**	**1900**	**420**	**520**	**830**	**600**	**530**	**716**
	A2-PZ-2	**--**	**--**	**740 D**	**360**	**330**	**580 D**	**390**	**380**	**260**	**160**	**100**	**170**	**85**	**270**	**260**	**240 T**	**140**	**360**	**260**	**430**	**230**	**354**
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	0.46 U	--	1.0 UJ	--	1.0 U	--	0.46 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.46 U	0.46 U	NS	NS	1.0 U	0.46 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.46 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	0.46 U	0.46 U	1.0 U	0.46 U	1.0 U	0.46 U	0.46 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.46 U	--	--	--	0.48 J	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.46 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.46 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.46 U [4.6 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	2.5	--	--	--	1.7	--	--	--	0.72 J [0.79 J]	--	--	--	1.0	--	--	--	0.61 J [0.58 J]	--	--	--	0.87 NJ	1.0 U
	PZ-7	0.58 J	**--**	1.0 U	--	1.0 U	--	0.46 U	--	1.0 U	--	0.59 J	--	0.46 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

TETRA TECH

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		cis-1,2 Dichloroethene																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	**40 [39]**	**35**	**34**	**40**	**44**	**20 [20]**	**19 [20]**	**11**	**19 J**	**17 [18]**	**6.2**	**15 [14]**	**23 [23 J]**	**11 [11]**	**8.7 [8.5]**	**12**	**9.1**	**15 [14]**	**18**	**24**	**23 [25]**	**13.6**
	MW-3	**68**	**40**	**21**	**23 [23]**	**46**	**26**	**16**	**15 [15]**	**28 [29]**	**15**	3.6 [3.9]	**17**	**27**	**15**	**12 F1**	**14 [14]**	**16**	**24**	**13 [14]**	**19**	**22**	**14**
	MW-18	**--**	**--**	**420 D**	**890**	**420**	**1500 D**	**1700 D**	**1400**	**1700**	**1100**	**1200**	**1000**	**1600**	**1500**	**1900**	**800**	**630**	**670**	**210**	**500**	**780**	**108**
	MW-20	**--**	**--**	**1400 J**	**890 D**	1.0 U	1.0 U	1.2	0.93	1.0 UJ	1.6 U	2.0 U	2.4	0.81 U	1.0 U	1.2	1.7	5.0 U	5.0 U	5.0 U	0.92 J [1.1]	5.0 U	1.0 U
	PZ-5	**53**	**41**	**41**	NS	**160**	**88**	**13**	**130**	**64**	**44**	NS	**39**	**46**	**47**	**41**	**43**	**57**	**30**	**24**	**41**	**35**	**25.3**
	PZ-6	**20**	**--**	**58**	**--**	**21**	--	**19**	--	**17**	--	**18**	--	**20**	**21**	**20**	**5.8**	**10**	**9.6**	**9.5**	--	**22**	**20.7**
	PZ-8	**77**	**91**	NS	NS	**56**	**52**	**36**	**26**	NS	NS	**34**	**28**	NS	**14**	**42**	**30**	NS	**34**	**20**	NS	NS	**30.8**
	PZ-11R	**5.0**	3.3	1.9	2.4	2.8	2.8	2.6	4.3	1.8	1.9	2.3	2.0	1.8	3.3	2.9	2.3	1.7	3.0	1.6	1.8	1.7	1.9
	PZ-13R	2.4	1.1	1.2	1.7	1.9		0.81 U	1.3	1.7	0.81 U	1.0 U	1.2	1.7	0.99 J	1.0 U	1.3	2.0	1.3	1.0 U	1.9	2.2	1.0 U
	A1-PZ-2	**99**	**22**	58	57	**10**	**11**	1.3	2	1.1	0.81 U	1.0 U	1.1	1.2	1.0 U	1.9	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**27000 D**	**42000 D**	**24000 [28000 D]**	**17000**	**23000**	**17000**	**19000**	**18000**	**24000**	**22000**	**11000**	**35000**	**34000**	**19000**	**7100 F1**	**16000**	**7400**	**17000**	**20000**	**13000**	**12000 J**	**19500**
	A2-PZ-2	**--**	**--**	**210 D**	**130**	**120**	**190 D**	**150**	**150**	**95**	**100**	**58**	**100**	**69**	**120**	**120**	**110**	**61**	**150**	**120**	**160**	**82**	**188**
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	0.81 U	--	1.0 UJ	--	1.0 U	--	0.81 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.81 U	0.81 U	NS	NS	1.0 U	0.81 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.81 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	**--**	**--**	1.0 U	1.0 U	1.0 U	1.0 U	0.81 U	0.81 U	1.0 U	0.81 U	1.0 U	0.81 U	0.81 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	0.85 J	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.81 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.81 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	**13**	**--**	--	--	**14**	--	--	--	**13**	--	--	--	**10**	--	--	--	**7.4**	--	--	--	**6.4**	**7.3**
	MW-4	3.3	**--**	--	--	4.6	--	--	--	4.4	--	--	--	4.4 [8.1 UJ]	--	--	--	3.9	--	--	--	5.0	1.3 [1.1]
	MW-10	**53**	**--**	--	--	**45**	--	--	--	**35 [34]**	--	--	--	**33**	--	--	--	**29 [29]**	--	--	--	**31**	**25.6**
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	0.81 U	--	1.0 U	--	1.0 U	--	0.81 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		trans 1,2-Dichloroethene																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.3]	1.0 U	1.0 U	1.4	1.0 U	1.0 U	0.90 U	0.90 U	1.0 U	0.90 U [0.90 U]	1.0 U	0.90 U [0.90 U]	0.90 U [0.90 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.1	1.0 U	1.1 [1]	0.91 J	1.0 U	0.90 U	0.90 U [0.90 U]	1.0 U [1.0 U]	0.90 U	1.0 U [1.0 U]	0.90 U	0.91	1.0 U	1.0 UF1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	2.6	5.0 U	4.4	4.5 U	18 U	20 U	9.0 U	20 U	18 U	18 U	4.7	4.9	40 U	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	**18 J**	**22**	**7.1**	1.0 U	4.3	3.9	3.6 J	3.1	4.6	**6.6**	3.1	3.5	3.4	3.8	5.0 U	5.0 U	5.0 U	2.4 [2.4]	5.0 U	1.4
	PZ-5	1.0 U	3.6 U	4.0 U	NS	4.0 U	1.2	0.90 U	1.1	2.0 U	1.8 U	NS	1.8 U	4.5 U	1.3	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.3	1.0 U	1.5
	PZ-6	1.0 U	--	1.0 U	**--**	1.0 U	--	0.90 U	--	1.0 U	--	1.0 U	--	0.90 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	4.5 U	NS	NS	5.0 U	1	4.5 U	4.5 U	NS	NS	5.0 U	4.5 U	NS	1.0 U	1.2	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.5
	PZ-11R	1.0 U	0.97	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	0.90 U	1.0 U	0.90 U	1.0 U	0.90 U	0.90 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	0.90 U	1.0 U	0.90 U	1.0 U	0.90 U	0.90 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	0.90 U	1.0 U	0.90 U	1.0 U	0.90 U	0.90 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**33**	250 U	250 U **[11]**	250 U	250 U	1.0 U	230 U	230 U	250 U	230 U	250 U	230 U	450 U	**19**	**8.0**	**14**	**14**	100 U	200 U	**16**	**9.0**	**69.0**
	A2-PZ-2	**--**	--	1.0 U	10 U	10 U	1.0 U	4.5 U	9.0 U	10 U	4.5 U	5.0 U	4.5 U	1.8 U	1.0 U	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	0.9 U	--	1.0 UJ	--	1.0 U	--	0.90 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.9 U	0.90 U	NS	NS	1.0 U	0.90 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.90 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	0.9 U	0.90 U	1.0 U	0.90 U	1.0 U	0.90 U	0.90 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.90 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.90 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	2.0	**--**	--	--	1.7	--	--	--	2	--	--	--	1.7	--	--	--	1.4	--	--	--	1.5	1.6
	MW-4	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.90 U [9.0 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	3.4	--	--	--	3.2	--	--	--	2.3 [2.4]	--	--	--	2.6	--	--	--	2.0 [2.3]	--	--	--	2.8	2.2
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	0.9 U	--	1.0 U	--	1.0 U	--	0.90 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

TETRA TECH

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Vinyl Chloride																					
NYSDEC TOGS Guidance Value:		2																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	**3.1 [3]**	1.5	1.7	**4.3**	**3.9**	1.0 U	1.0 U [1.0]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	0.91 [1.0 J]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 UJ	1.0 U [1.0 U]	1.6	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	**5**	**3.8**	**8.4**	**13 [13]**	**9.1**	**4.3**	**7.8**	2.0 [2.0]	**5.2 [5.4]**	**3.8**	1.0 U [1.0 U]	**5.2**	**2.6**	**3.7**	1.3	**3.4 [3.0]**	1.8	1.5	**3.3 [2.1]**	**3.4**	2.0	**3.0**
	MW-18	**--**	**--**	**5.5**	**7.6**	5.0 U	**7.6**	**7.9**	20 U	20 U	10 U	20 U	20 U	20 U	**9.0**	**10**	40 U	20 UJ	20 U	20 U	20 U	20 U	1.0 U
	MW-20	**--**	**--**	63	**680 D**	1.9	1.0 U	0.96 J	1.0 U	1.0 UJ	2.0 U	**2.8**	**3.3**	1.0 U	1.0 U	**2.5**	**3.6**	5.0 U	5.0 U	5.0 U	1.4 [1.1]	5.0 U	1.1
	PZ-5	1.0 U	4.0 U	4.0 U	NS	**27**	**68**	**2.8**	**2.4**	**5.9**	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.1	1.0 U
	PZ-6	1.0 U	--	**4.9**	**--**	**2.1**	--	0.95 J	--	1.0 U	--	1.0 U	--	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 U	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	1.1	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	**27**	**11**	24	15	**8.4**	**5.6**	1.0 U	**2.1**	1.0 U	0.97 J	1.3	2.0	1.0 U	1.0 U	**5.5**	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**720 D**	**1800**	**940 [1300 D]**	**830**	**1300**	**840**	**900**	**1000**	**1300**	**900**	**670**	**1300**	**1300**	**960**	**460^**	**850**	**460 J**	**690**	**1400**	**600**	**710**	**1200**
	A2-PZ-2	**--**	**--**	**14**	10 U	10 U	**7.8**	**6.7**	10 U	10 U	5.0 U	5.0 U	5.0 U	**2.3**	10 U	10 U	**4.4**	5.0 UJ	**6.4**	20 U	20 U	8.0 U	**8.6**
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	**--**	**--**	**9.3**	**6.5**	**13**	1.0 U	**2.1**	**5**	**5.2**	**3.5**	**2.6**	**3.9**	**2.6**	**2.4**	1.7	2.0	1.4	2.0 U	2.0 U	1.8	**3.4**	1.9
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	--	--
Objective 3	MW-2	**33**	**--**	--	--	**38**	--	--	--	**25**	--	--	--	**14**	--	--	--	**14**	--	--	--	**12**	**18.5**
	MW-4	1.4	**--**	--	--	**4.8**	--	--	--	**4.2**	--	--	--	**2.3 [10 UJ]**	--	--	--	**3.6**	--	--	--	**3.1**	1.0 U [1.0 U]
	MW-10	**23**	**--**	--	--	**38**	--	--	--	**20 [20]**	--	--	--	**19**	--	--	--	**17 [16 J]**	--	--	--	**23**	**15.6**
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		1,1,1-Trichloroethane																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 U [0.82 U]	0.82 U	1.0 U	0.82 U [0.82 U]	1.0 U	0.82 U [0.82 U]	0.82 U [0.82 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 UT	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	0.82 U	0.82 U [0.82 U]	1.0 U [1.0 U]	0.82 U	1.0 U [1.0 U]	0.82 U	0.82 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	1.0 U	5.0 U	1.0 U	4.1 U	16 U	20 U	8.2 U	20 U	16 U	16 U	1.0 U	1.0 U	40 U	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	16 U	5.0 U	1.0 U	1.0 U	0.82 U	0.82 U	1.0 UJ	1.6 U	2.0 U	1.6 U	0.82 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	3.3 U	4.0 U	NS	4.0 U	1.0 U	0.82 U	0.82 U	2.0 U	1.6 U	NS	1.6 U	4.1 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	0.82 U	--	1.0 U	--	1.0 U	--	0.82 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	4.1 U	NS	NS	5.0 U	1.0 U	4.1 U	4.1 U	NS	NS	5.0 U	4.1 U	NS	1.0 U	1.0 U	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	0.82 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 U	0.82 U	1.0 U	0.82 U	1.0 U	0.82 U	0.82 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 U	0.82 U	1.0 U	0.82 U	1.0 U	0.82 U	0.82 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.82 U	0.82 U	1.0 U	0.82 U	1.0 U	0.82 U	0.82 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	1.0 U	250 U	250 U [1.0 U	250 U	250 U	1.0 U	210 U	210 U	250 U	210 U	250 U	210 U	410 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	200 U	1.0 U	1.0 U	1.0 U
	A2-PZ-2	--	--	1.0 U	10 U	10 U	1.0 U	4.1 U	8.2 U	1.0 U	4.1 U	5.0 U	4.1 U	1.6 U	10 U	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 U	--	0.82 U	--	1.0 UJ	--	1.0 U	--	0.82 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.82 U	0.82 U	NS	NS	1.0 U	0.87	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.82 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	0.82 U	0.82 U	1.0 U	0.82 U	1.0 U	0.82 U	0.82 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.82 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.82 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.82 U	--	--	--	1.0 U	--	--	--	1.0 U	3.7
	MW-4	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.82 U [8.2 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	0.82 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	--	1.0 U	--	1.0 U	--	0.82 U	--	1.0 U	--	1.0 U	--	0.82 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		1,1-Dichloroethane																					
NYSDEC TOGS Guidance Value:		5																					
	Sampling Date:	Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	**5.8 [5.5]**	3.8	4.2	**5.9**	**5.7**	2.1 [2.1]	2.4 [2.4]	1.1	2.1	2.1 [2.0]	0.64 J	1.4 [1.4]	2.8 [3.2]	0.99 J [0.94 J]	0.78 J [0.84 J]	1.4	1.3	2.3 [2.3]	2.7	3.0	3.3 [3.5]	1.9
	MW-3	**6.8**	4.4	3.6	4.3 [4.1]	**5.4**	3	2.9	1.8 [2.0]	4.2 [4.4]	2.7	0.45 J [1.0 U]	3.8	4.0	2.6	1.3	2.8 [2.8]	2.8	2.6	1.7 [1.6]	2.8	3.1	2.9
	MW-18	--	--	**20 D**	**37**	**18**	**40**	**46**	**42**	**43**	**36**	**36**	**31**	**37**	**37**	**41**	**22 J**	**13 J**	**17 J**	20 U	**13 J**	**18 NJ**	3.2
	MW-20	--	--	7.6 U	**7.9**	0.41 J	1.0 U	0.38 U	0.7	1.0 UJ	0.76 U	2.0 U	1.2	0.65	0.70 J	1.0 U	1.0	5.0 U	5.0 U	5.0 U	0.81 J [0.85 J]	5.0 U	1.0 U
	PZ-5	1.0 U	1.5 U	4.0 U	NS	4.0 U	1.0 U	0.38 U	0.38 U	2.0 U	0.76 U	NS	0.76 U	1.9 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	**--**	1.0 U	--	0.38 U	--	1.0 U	--	1.0 U	--	0.38 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	4.8	**5.4**	NS	NS	4.2 J	4	3.4	3.4	NS	NS	3.3 J	2.8	NS	1.4	3.7	3.8 J	NS	5.0 U	1.9 J	NS	NS	2.9
	PZ-11R	1.0 U	0.38 U	1.0 U	1.0 U	1.0 U	1.0 U	0.38 U	0.38 U	1.0 U	0.38 U	1.0 U	0.38 U	0.38 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.38 U	0.38 U	1.0 U	0.38 U	1.0 U	0.38 U	0.38 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	2.1	0.48 J	1.1	1.3	0.49 J	1.0 U	0.38 U	0.38 U	1.0 U	0.38 U	1.0 U	0.38 U	0.38 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
	A2-PZ-1	**1900 D**	**2800**	**1900 [2300 D]**	**1100**	**1300**	**990**	**1200**	**1100**	**1200**	**1300**	**790**	**2200**	**1600**	**890**	**350**	**860**	**370**	**730**	**990**	**600**	**600**	**984**
	A2-PZ-2	**--**	**--**	**12**	10 U	10 U	**6**	**7.2**	**6.6**	3.9 J	3.1	2.3 J	3.8	1.9	**5.4 J**	4.6 J	**5.1**	5.0 U	**7.4**	20 U	**8.3 J**	3.4 NJ	**8.6**
Objective 2	MW-5	0.69 J	**--**	1.0 U	--	1.0 U	--	0.38 U	--	1.0 UJ	--	1.0 U	--	0.38 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	2.4	NS	NS	NS	NS	1.1	1.4	2	NS	NS	1.1	2.6	NS	0.89 J	0.96 J	1.3	NS	0.96 J	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.38 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	0.38 U	0.38 U	1.0 U	0.38 U	1.0 U	0.38 U	0.38 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.38 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.38 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	**5.9**	**--**	--	--	4.9	--	--	--	4.7	--	--	--	4.3	--	--	--	4.3	--	--	--	3.9	1.0 U
	MW-4	0.70 J	**--**	--	--	1.0	--	--	--	0.78 J	--	--	--	0.68 [3.8 U]	--	--	--	0.74 J	--	--	--	0.88 NJ	1.0 U [1.0 U]
	MW-10	2.6	--	--	--	3.5	--	--	--	2.9 [3.0]	--	--	--	2.3	--	--	--	2.8 [2.8]	--	--	--	3.0	2.0
	PZ-7	0.83 J	**--**	0.69 J	--	0.58 J	--	0.57	--	0.45 J	--	1.0 U	--	0.39	--	0.38 J	--	0.43 J	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		1,2-Dichloroethane																					
NYSDEC TOGS Guidance Value:		0.6																					
	Sampling Date:	Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	20 U	20 U	10 U	20 U	20 U	20 U	1.0 U	1.0 U	40 U	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	15 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	0.76 U	4.0 U	NS	4.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 U	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	1.0 U	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**5**	250 U	250 U [1.0 U]	250 U	250 U	1.0 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	**1.2**	0.39 J	**1.2**	1.0 U	100 U	200 U	**0.95 J**	**0.96 NJ**	1.0 U
	A2-PZ-2	**--**	--	1.0 U	10 U	10 U	1.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	2.0 U	10 U	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [10 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		1,1-Dichloroethene																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 UT	1.0 U	1.0 U [1.0 U]	0.29 J	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	0.57 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 [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U	0.32 J	1.0 U	1.0 UF1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	1.3	5.0 U	2.2	3.7 J	20 U	20 U	10 U	20 U	20 U	20 U	2.7	3.6	40 U	20 U	20 U	20 U	20 U	20 UJ	1.0 U
	MW-20	--	--	5.8 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 UJ	1.0 U
	PZ-5	1.0 U	2.0 U	4.0 U	NS	4.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 U	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	0.39 J	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**45**	250 U	250 U **[23]**	250 U	250 U	1.0 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	**24**	**10**	**18**	**10 J**	100 U	200 U	**15**	**13 J**	**33.1**
	A2-PZ-2	**--**	--	1.5	10 U	10 U	1.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	2.0 U	10 U	10 U	0.76 J	5.0 U	5.0 U	20 U	20 U	8.0 U	1.5
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [10 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 UJ	1.0 U
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		1,1,2,Trichloroethane																					
NYSDEC TOGS Guidance Value:		1																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 UF1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	20 U	20 U	10 U	20 U	20 U	20 U	1.0 U	1.0 U	40 U	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	4.6 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	2.0 U	4.0 U	NS	4.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 U	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	1.0 U	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**3**	250 U	250 U **[1.7]**	250 U	250 U	1.0 U	250 U	250 U	250 U	250 U	250 U	250 U	500 U	0.28 J	1.0 U	1.0 U	1.0 U	100 U	200 U	1.0 U	1.0 U	1.0 U
	A2-PZ-2	**--**	--	1.0 U	10 U	10 U	1.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	2.0 U	**15**	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	**--**	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [10 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	**--**	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		1,1,2-trichloro-1,2,2-trifluoroethane (Freon 113)																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 UJ	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 UJ [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.2	1.0 U	5.0 U	1.0 U	5.0 U	20 U	20 UJ	10 U	20 U	20 U	20 U	2.4	3.4	40 U	20 U	20 U	20 U	20 U	20 UJ	2.9
	MW-20	--	--	6.2 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 UJ	1.0 U
	PZ-5	1.0 U	2.0 U	4.0 U	NS	4.0 U	1.0 U	1.0 U	1.0 U	2.0 UJ	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U		1.0 UJ	--	1.0 U	--	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 U	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	1.0 U	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U
	A2-PZ-1	**1600 EJ**	**1900**	**1300 [1100 D]**	**940**	250 U	**680**	**400**	**850**	**550 J**	**660**	**400**	**1200**	**730 J**	**470**	**180**	**520**	**150**	**200**	**260**	**230 J**	**180 NJ**	**241**
	A2-PZ-2	**--**	**--**	1.0 U	10 U	10 U	1.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	2.0 UJ	10 U	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 UJ	1.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U [10 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ [1.0 U]	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 UJ	1.0 U
	PZ-7	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Dichloro-difluoromethane (Freon 12)																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U* [1.0 U*]	1.0 UT	1.0 UJ	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 UJ	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	1.0 U	5.0 UJ	0.96 J	5.0 U	20 U	20 U	10 U	20 U	20 U	20 U	1.0 U	1.0 U*	40 U	20 UJ	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	14 UJ	5.0 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	4.0 U	4.0 U	NS	4.0 UJ	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U*	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	1.0 U	2.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 UJ	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	1.0 U*	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 J	1.0 J	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U*	1.0 U	1.0 UJ	1.0 U	1.0 UT	1.0 U	1.0 U	1.0 U
	A2-PZ-1	**960 E**	**1200**	**830 [740 D]**	250 U	250 UJ	1.0 U	250 U	250 U	**560 J**	**440**	**240 J**	**300**	500 UJ	1.0 U	**160**	**460**	1.0 UJ	100 U	200 UT	1.0 U	**320 J**	1.0 U
	A2-PZ-2	**--**	**--**	1.0 U	10 U	10 UJ	1.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	2.0 UJ	10 U	10 U	1.0 U	5.0 U	5.0 U	20 UT	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U*	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U*	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 UJ	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U*	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	--	--
	PZ-26	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 UJ	--	--	--	--	--
Objective 3	MW-2	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U	--	--	--	1.0 U [10 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 UJ	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	--	--	--	1.0 U [1.0 UJ]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U*	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Ethylbenzene																					
NYSDEC TOGS Guidance Value:		5																					
	Sampling Date:	Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 U [0.74 U]	0.74 U	1.0 U	0.74 U [0.74 U]	1.0 U	0.74 U [0.74 U]	0.74 U [0.74 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	0.74 U	0.74 U [0.74 U]	1.0 U [1.0 U]	0.74 U	1.0 U [1.0 U]	0.74 U	0.74 U	1.0 U	1.0 UF1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	0.91 J	1.4	5.0 U	2.4	3.7 U	15 U	20 U	7.4 U	20 U	15 U	15 U	1.0 U	0.88 J	40 U	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	15 U	5.0 U	1.0 U	1.0 U	0.74 U	0.74 U	1.0 UJ	1.5 U	2.0 U	1.5 U	0.74 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	4.0 U	4.0 U	NS	3.8 J	1.7	4.5	4.3	2.0 U	1.5 U	NS	1.5 U	3.7 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	0.74 U	--	1.0 U	--	1.0 U	--	0.74 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	3.7 U	NS	NS	5.0 U	1.0 U	3.7 U	3.7 U	NS	NS	5.0 U	3.7 U	NS	1.0 U	1.0 U	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	0.74 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 U	0.74 U	1.0 U	0.74 U	1.0 U	0.74 U	0.74 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 U	0.74 U	1.0 U	0.74 U	1.0 U	0.74 U	0.74 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.74 U	0.74 U	1.0 U	0.74 U	1.0 U	0.74 U	0.74 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	1.0 U	250 U	250 U [1.0 U]	250 U	250 U	1.0 U	190 U	190 U	250 U	190 U	250 U	190 U	370 U	1.0 U	1.0 U	1.0 U	1.0 U	100 U	200 U	1.0 U	1.0 U	1.0 U
	A2-PZ-2	--	--	**9.0**	10 U	10 U	1.0 U	3.7 U	7.4 U	10 U	3.7 U	5.0 U	3.7 U	1.5 U	10 U	10 U	2.0	5.0 U	5.0 U	20 U	20 U	8.0 U	1.8
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 U	--	0.74 U	--	1.0 UJ	--	1.0 U	--	0.74 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.74 U	0.74 U	NS	NS	1.0 U	0.74 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.74 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	0.74 U	0.74 U	1.0 U	0.74 U	1.0 U	0.74 U	0.74 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.74 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.74 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.74 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.74 U [7.4 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	0.74 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	--	1.0 U	--	1.0 U	--	0.74 U	--	1.0 U	--	1.0 U	--	0.74 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Toluene																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.51 U [0.51 U]	0.51 U	1.0 U	0.51 U [0.51 U]	1.0 U	0.51 U [0.51 U]	0.51 U [0.51 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	0.51 U	0.51 U [0.51 U]	1.0 U [1.0 U]	0.51 U	1.0 U [1.0 U]	0.51 U	0.51 U	1.0 U	1.0 UF1	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.9	1.4	5.0 U	1.7	2.6 U	10 U	20 U	5.1 U	20 U	10 U	10 U	0.94 J	1.1	40 U	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	10 U	5.0 U	1.0 U	1.0 U	0.51 U	0.51 U	1.0 UJ	1.0 U	2.0 U	1.0 U	0.51 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	2.0 U	4.0 U	NS	4.0 U	1.0 U	0.51 U	0.51 U	2.0 U	1.0 U	NS	1.0 U	2.6 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	0.51 U	--	1.0 U	--	1.0 U	--	0.51 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	2.6 U	NS	NS	5.0 U	1.0 U	2.6 U	2.6 U	NS	NS	5.0 U	2.6 U	NS	1.0 U	1.0 U	5.0 U	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	0.51 U	1.0 U	1.0 U	1.0 U	1.0 U	0.51 U	0.51 U	1.0 U	0.51 U	1.0 U	0.51 U	0.51 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.51 U	0.51 U	1.0 U	0.51 U	1.0 U	0.51 U	0.51 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.51 U	0.51 U	1.0 U	0.51 U	1.0 U	0.51 U	0.51 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	5	250 U	250 U [4.6]	250 U	250 U	1.0 U	130 U	130 U	250 U	130 U	250 U	130 U	260 U	3.6	1.7	5.0	1.8	100 U	200 U	3.3	2.7	4.9
	A2-PZ-2	--	--	1.0 U	10 U	10 U	1.0 U	2.6 U	5.1 U	10 U	2.6 U	5.0 U	2.6 U	1.0 U	10 U	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 U	--	0.51 U	--	1.0 UJ	--	1.0 U	--	0.51 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	0.51 U	0.51 U	NS	NS	1.0 U	0.51 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.51 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	0.51 U	0.51 U	1.0 U	0.51 U	1.0 U	0.51 U	0.51 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.51 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.51 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.51 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	0.51 U [5.1 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	0.51 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	--	1.0 U	--	1.0 U	--	0.51 U	--	1.0 U	--	1.0 U	--	0.51 U	--	1.0 U	--	1.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Xylenes, total																					
NYSDEC TOGS Guidance Value:		5																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	2.0 U [2.0U]	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	2.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	2.0 U [2.0 U]	2.0 U [2.0 U]	2.0 U	2.0 U	2.0 U [2.0 U]	2.0 U	2.0 U	2.0 U [2.0 U]	1.0 U
	MW-3	2.0 U	2.0 U	2.0 U	2.0 U [2.0U]	2.0 U	2.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	2.0 U [2.0 U]	1.0 U	1.0 U	2.0 U	2.0 UF1	2.0 U [2.0 U]	2.0 U	2.0 U	2.0 U [2.0 U]	2.0 U	2.0 U	1.0 U
	MW-18	--	--	1.3 J	1.0 J	10 U	2.0 U	5.0 U	20 U	20 U	10 U	40 U	20 U	20 U	2.0 U	2.0 U	80 U	40 U	40 U	40 U	40 U	40 U	1.0 U
	MW-20	--	--	13 U	10 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	4.0 U	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	10 U	10 U	10 U	2.0 U [2.0 U]	10 U	1.0 U
	PZ-5	2.0 U	4.0 U	8.0 U	NS	**14**	**5.7**	**18**	**13**	2.0 U	2.0 U	NS	2.0 U	5.0 U	2.0 U	10 U	10 U	10 U	10 U	10 U	2.0 U	2.0 U	1.0 U
	PZ-6	2.0 U	--	1.0 U	**--**	2.0 U	--	0.74 J	--	1.0 U	--	2.0 U	--	1.0 U	2.0 U	4.0 U	2.0 U	2.0 U	2.0 U	2.0 U	--	2.0 U	1.0 U
	PZ-8	2.0 U	5.0 U	NS	NS	10 U	2.0 U	5.0 U	5.0 U	NS	NS	10 U	5.0 U	NS	2.0 U	2.0 U	10 U	NS	10 U	10 U	NS	NS	1.0 U
	PZ-11R	2.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
	PZ-13R	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
	A1-PZ-2	2.0 U	2.0 U	2.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U
	A2-PZ-1	2.0 U	500 U	500 U [2.0U]	500 U	500 U	2.0 U	250 U	250 U	250 U	250 U	500 U	250 U	250 U	2.0 U	2.0 U	2.0 U	2.0 U	200 U	400 U	2.0 U	2.0 U	1.0 U
	A2-PZ-2	**--**	**--**	2.0 U	20 U	20 U	2.0 U	5.0 U	10 U	10 U	5.0 U	10 U	5.0 U	2.0 U	20 U	20 U	2.0 U	10 U	10 U	40 U	40 U	16 U	1.0 U
Objective 2	MW-5	2.0 U	--	1.0 U	--	2.0 U	--	1.0 U	--	1.0 UJ	--	2.0 U	--	1.0 U	--	2.0 U	--	2.0 U	--	--	--	--	--
	MW-13S	2.0 U	NS	NS	NS	NS	2.0 U	1.0 U	1.0 U	NS	NS	2.0 U	1.0 U	NS	2.0 U	2.0 U	2.0 U	NS	2.0 U	--	--	--	--
	MW-14BR	2.0 U	--	--	--	2.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	2.0 U	--	--	--	--	--
	MW-21	--	--	2.0 U	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.0 U	4.0 U	2.0 U	2.0 U	1.0 U
	PZ-18	2.0 U	--	--	--	2.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	2.0 U	--	--	--	--	--
	PZ-26	2.0 U	--	--	--	2.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	2.0 U	--	--	--	--	--
Objective 3	MW-2	2.0 U	--	--	--	2.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	2.0 U	--	--	--	2.0 U	1.0 U
	MW-4	2.0 U	--	--	--	2.0 U	--	--	--	1.0 U	--	--	--	1.0 U [10 U]	--	--	--	2.0 U	--	--	--	2.0 U	1.0 U [1.0 U]
	MW-10	2.0 U	--	--	--	2.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	--	--	--	2.0 U [2.0 U]	--	--	--	2.0 U	1.0 U
	PZ-7	2.0 U	--	1.0 U	--	2.0 U	--	1.0 U	--	1.0 U	--	2.0 U	--	1.0 U	--	2.0 U	--	2.0 U	--	--	--	--	--

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Acetone																					
NYSDEC TOGS Guidance Value:		50																					
Sampling Date:		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	10 U [10U]	10 U	10 U	8.8 J	10 U	10 U	10 U [10 U]	10 U	10 U	10 U [10 U]	10 U	10 U [10 U]	10 U [10 U]	10 U [10 U]	10 U [10 U]	10 U	10 U	10 U [10 U]	10 U	10 U	10 U [10 U]	5.0 U
	MW-3	10 U	10 U	10 U	1.0 U [1.0 U]	10 U	10 U	10 U	10 U [10 U]	10 U [10 U]	10 U	10 U [10 U]	10 U	10 U	10 U	10 U	10 U [10 U]	10 U	10 U	10 U [10 U]	3.8 J	10 U	5.0 U
	MW-18	--	--	10 U	9.1 J	50 U	10 U	50 U	200 U	200 U	100 U	200 U	200 U	200 U	10 U	10 U	400 U	200 U	200 U	200 U	200 U	200 UJ	5.0 U
	MW-20	--	--	200	**400**	**78**	10 U	4.5 J	8.7 J	10 UJ	20 U	20 U	20 U	10 U	10 U	10 U	4.7 J	50 U	50 U	50 U	5.2 J [3.1 J]	50 UJ	5.0 U
	PZ-5	3.1 J	16	40 U	NS	40 U	10 U	6.1 J	3.1 J	20 U	6.6 J	NS	20 U	50 U	10 U	50 U	50 U	50 U	50 U	50 U	10 U	10 U	41
	PZ-6	10 U	--	3.8 J	--	10 U	--	10 U	--	10 U	--	10 U	--	10 U	10 U	20 U	10 U	10 U	5.5 J	3.4 J	--	10 U	15.5
	PZ-8	10 U	50 U	NS	NS	50 U	10 U	50 U	50 U	NS	NS	50 U	50 U	NS	3.0	3.8 J	50 U	NS	50 U	50 U	NS	NS	**13.6**
	PZ-11R	10 U	10 U	10 U	9.4 J	10 U	10 U	3.1 J	10 U	17	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	5.0 U
	PZ-13R	10 U	10 U	10 U	9.3 J	10 U	10 U	3.2 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 UJ	5.0 U
	A1-PZ-2	6.6 J	10 U	10 UB	16 UB	10 U	10 U	10 U	9.2 J	10 U	10 U	10 U	4.9 J	44	3.8	3.7 J	4.5 J	3.0 J	10 U	4.4 J	10 U	10 UJ	5.0 U
	A2-PZ-1	9.5 J	2500 U	2500 U [14]	2500 U	2500 U	10 U	2500 U	2500 U	2500 U	2500 U	2500 U	2500 U	5000 U	10 U	10 U	6.9 J	10 U	1000 U	2000 U	3.9 J	10 UJ	5.0 U
	A2-PZ-2	--	--	10 U	100 U	100 U	10 U	50 U	100 U	100 U	50 U	50 U	50 U	20 U	100 U	100 U	10 U	50 U	50 U	200 U	200 U	80 UJ	5.0 U
Objective 2	MW-5	10 U	--	10 U	--	10 U	--	6.8 J	--	4.5 J	--	10 U	--	10 U	--	10 U	--	10 U	--	--	--	--	
	MW-13S	10 U	NS	NS	NS	NS	10 U	10 U	10 U	NS	NS	10 U	10 U	NS	10 U	10 U	10 U	NS	10 U	--	--	--	
	MW-14BR	10 U	--	--	--	16	--	--	--	19	--	--	--	18	--	--	--	15	--	--	--	--	
	MW-21	--	--	10 U	8.8 J	10 U	--	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	24	10 U	10 U	20 U	20 U	10 U	10 UJ	5.0 U
	PZ-18	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	--	
	PZ-26	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	--	
Objective 3	MW-2	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U	5.0 U
	MW-4	10 U	--	--	--	10 U	--	--	--	10 U	--	--	--	10 U [100 U]	--	--	--	10 U	--	--	--	10 U	5.0 U [5.0 U]
	MW-10	10 U	--	--	--	10 U	--	--	--	10 U [10 U]	--	--	--	10 U	--	--	--	10 U [10 U]	--	--	--	10 UJ	5.0 U
	PZ-7	10 U	--	4.2 J	--	10 U	--	10 U	--	10 U	--	5.5 J	--	10 U	--	7.3 J	--	10 U	--	--	--	--	

See last page for notes.

Table 4-2
Groundwater Monitoring Data - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Compound:		Methylene Chloride																					
NYSDEC TOGS Guidance Value:		5																					
	Sampling Date:	Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	10 U [10 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	10 U [10 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U
	MW-3	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U [1.0 U]	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U [1.0 U]	1.0 U	1.0 U	1.0 U
	MW-18	--	--	1.0 U	1.0 U	5.0 U	1.0 U	5.0 U	20 U	20 U	10 U	20 U	20 U	20 U	1.0 U	1.0 U	**20 J**	20 U	20 U	20 U	20 U	20 U	1.0 U
	MW-20	--	--	8.8 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	2.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	1.0 U [1.0 U]	5.0 U	1.0 U
	PZ-5	1.0 U	4.0 U	4.0 U	NS	4.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	NS	2.0 U	5.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
	PZ-6	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	1.0 U	2.0 U	0.56 J	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U
	PZ-8	1.0 U	5.0 U	NS	NS	5.0 U	1.0 U	5.0 U	5.0 U	NS	NS	5.0 U	5.0 U	NS	1.0 U	1.0 U	3.1 J	NS	5.0 U	5.0 U	NS	NS	1.0 U
	PZ-11R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	PZ-13R	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A1-PZ-2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
	A2-PZ-1	1.0 U	250 U	250 U [14]	250 U	250 U	110 JB	250 U	250 U	250 U	250 U	250 U	250 U	500 U	1.0 U	0.85 J	1.1	1.0 U	100 U	200 U	0.50 J	1.0 U	1.0 U
	A2-PZ-2	--	--	1.0 U	10 U	10 U	1.0 U	5.0 U	10 U	10 U	5.0 U	5.0 U	5.0 U	2.0 U	10 U	10 U	1.0 U	5.0 U	5.0 U	20 U	20 U	8.0 U	1.0 U
Objective 2	MW-5	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 UJ	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--
	MW-13S	1.0 U	NS	NS	NS	NS	1.0 U	1.0 U	1.0 U	NS	NS	1.0 U	1.0 U	NS	1.0 U	1.0 U	1.0 U	NS	1.0 U	--	--	--	--
	MW-14BR	0.57 J	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	MW-21	--	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	2.0 U	2.0 U	1.0 U	1.0 U	1.0 U
	PZ-18	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
	PZ-26	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	--	--
Objective 3	MW-2	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U
	MW-4	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [10 U]	--	--	--	1.0 U	--	--	--	1.0 U	1.0 U [1.0 U]
	MW-10	1.0 U	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	--	--	--	1.0 U [1.0 U]	--	--	--	1.0 U	1.0 U
	PZ-7	1.0 U	--	0.55 J	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	1.0 U	--	--	--	--	--

Notes:
1. B = The compound has been found in the sample as well as its associated blank, its presence in the sample may be suspected.
2. D = Diluted sample result within calibration range
3. E = Analyte exceeded calibration range.
4. F1 or T or * = MS and/or MSD Recovery or LCS or LCSD is outside acceptance limits.
5. ^ = ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
6. J = Indicates an estimated value.
7. NYSDEC TOGS = New York State Department of Environmental Conservation Technical and Operational Guidance Series
8. U = The compound was analyzed for but not detected. The associated value is the compound Reporting Limit.
9. "--" indicates not measured
10. "NS" indicates insufficient groundwater was available for sampling
11. "Green font" indicates sampled as part of the pilot test; the pilot test sampling was performed post-injection on 4/24/12 and 7/12/12
12. **Bold** indicates concentration above NYSDEC TOGS Value
13. All units in micrograms per liter (µg/l)
14. [ ] = Field duplicate results
15. Potential exists that an air bubble in the PZ-6 sampling vial (collected July 2015) resulted in underestimated VOC concentrations (see Q3 2015 data summary).
16. NJ = The analysis indicates the presence of a compound that has been "tentatively identified"; the associated numerical value represents its approximate concentration.

TETRA TECH

Table 4-3
Groundwater Sampling Field Parameters - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	pH (s.u.)																					
Sampling Date		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	6.92	7.52	7.20	7.36	7.03	7.19	6.92	7.08	7.10	7.30	7.37	7.24	7.18	7.35	7.51	7.06	6.96	7.78	7.39	7.55	7.46	5.67
	MW-3	6.93	7.57	7.27	7.33	7.15	7.38	6.98	6.95	7.15	7.35	7.14	6.74	7.25	7.34	7.19	7.10	6.92	7.47	7.52	7.48	7.37	5.93
	MW-18	--	--	7.51	7.41	7.5	7.17	7.53	7.32	7.59	7.57	7.30	7.91	7.62	7.63	7.53	7.41	7.49	7.73	7.54	7.56	7.76	6.98
	MW-20	--	--	--	6.24	6.85	6.78	6.82	6.75	7.3	6.87	6.75	7.1	7.10	6.95	7.03	6.98	6.95	7.11	7.20	7.12	7.04	6.91
	PZ-5	7.79	8.04	7.79	--	7.59	7.85	8.44	7.5	7.59	7.72	NA	7.64	7.89	7.77	8.03	NA	NA	NA	NA	NA	NA	6.9
	PZ-6	7.11	--	7.62	--	7.82	--	8.1	--	7.15	--	7.81	--	7.95	7.90	7.82	NA	NA	NA	NA	--	NA	6.7
	PZ-8	6.76	7.43	--	--	NA	7.16	NA	7.09	NA	NA	7.30	7.28	NA	NA	7.18	NA	NA	NA	NA	NA	NA	5.51
	PZ-11R	7.24	7.56	7.07	6.93	7.07	6.51	7.12	7.54	7.18	7.11	6.78	7.49	7.14	7.03	7.21	6.92	7.18	7.36	7.50	6.77	7.05	6.33
	PZ-13R	6.70	7.60	6.85	6.67	6.85	6.79	7.19	6.79	8.18	7.00	6.93	7.89	7.14	7.45	7.08	6.84	6.95	7.46	7.24	7.04	7.14	6.11
	A1-PZ-2	6.90	7.68	7.42	2.25*	7.25	7.49	7.74	8.13	7.85	7.88	7.42	7.33	7.95	7.99	7.24	7.42	7.68	8.47	8.04	7.77	8.08	8.11
	A2-PZ-1	6.90	7.42	7.12	7.25	6.95	7.07	7.34	7.10	7.09	7.22	6.99	6.73	7.11	7.21	7.16	7.02	6.94	7.47	7.60	7.45	7.17	6.53
	A2-PZ-2	--	--	--	7.18	6.94	7.24	7.38	7.15	7.14	7.14	7.12	6.53	7.13	7.32	7.19	7.11	7.14	7.47	7.63	7.59	7.49	5.3
Objective 2	MW-5	6.81	--	6.91	--	7.17	--	7.29	--	7.42	--	7.36	--	7.52	--	7.44	--	7.36	--	--	--	--	--
	MW-13S	6.97	--	--	--	--	6.58	7.31	7.05	NA	NA	7.30	7.26	NA	7.49	7.35	7.52	NA	7.42	--	--	--	--
	MW-14BR	9.67	--	--	--	7.64	--	--	--	7.25	--	--	--	7.42	--	--	--	7.65	--	--	--	--	--
	MW-21	--	--	7.35	7.13	7.23	7.55	7.81	7.38	7.66	7.50	7.48	7.62	7.63	7.72	7.73	7.82	7.50	7.76	8.06	7.65	7.54	7.51
	PZ-18	6.78	--	--	--	6.9	--	--	--	6.99	--	--	--	7.23	--	--	--	7.00	--	--	--	--	--
	PZ-26	7.72	--	--	--	7.66	--	--	--	8.11	--	--	--	8.21	--	--	--	7.79	--	--	--	--	--
Objective 3	MW-2	7.29	--	--	--	7.3	--	--	--	7.61	--	--	--	7.70	--	--	--	7.41	--	--	--	7.49	7.23
	MW-4	6.83	--	--	--	7.11	--	--	--	7.26	--	--	--	7.37	--	--	--	7.02	--	--	--	7.36	6.38
	MW-10	7.30	--	--	--	7.37	--	--	--	7.44	--	--	--	7.46	--	--	--	7.30	--	--	--	7.50	7.84
	PZ-7	7.18	--	7.21	--	7.13	--	7.27	--	7.07	--	7.00	--	7.69	--	7.47	--	NA	--	--	--	--	--

See last page for notes.

Table 4-3
Groundwater Sampling Field Parameters - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	Specific Conductivity (mS/cm)																					
Sampling Date		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	1.764	1.123	1.816	1.625	1.173	0.658	1.217	0.868	0.983	0.722	0.740	0.780	1.220	0.780	0.750	0.870	0.910	0.81	1.47	1.62	1.23	1.05
	MW-3	1.966	1.435	2.514	1.919	1.299	0.829	3.563	1.182	1.455	1.031	0.530	0.007	1.790	1.730	1.600	1.940	1.320	0.94	3.38	2.06	1.13	1.98
	MW-18	--	--	0.836	0.696	0.759	0.689	0.966	0.929	0.736	0.570	0.810	0.780	0.770	0.655	0.720	0.444	0.490	0.497	0.389	1.08	0.79	0.468
	MW-20	--	--	--	8.13	5.737	5.153	6.672	6.010	5.082	4.258	9.130	9.060	7.740	7.360	9.130	8.420	3.240	7.69	9.05	8.98	8.13	9.16
	PZ-5	1.372	1.193	1.527	--	1.533	1.364	0.815	1.745	1.832	1.634	NA	1.800	1.740	1.590	1.020	NA	NA	NA	NA	NA	NA	1.528
	PZ-6	1.666	--	1.445	--	1.774	--	1.573	--	1.727	--	1.720	--	1.800	1.630	0.990	NA	NA	NA	NA	--	NA	1.785
	PZ-8	1.316	1.021	--	--	NA	0.942	NA	1.380	NA	NA	0.900	0.522	NA	NA	0.550	NA	NA	NA	NA	NA	NA	0.881
	PZ-11R	3.222	1.398	4.986	3.639	2.867	2.846	6.129	4.125	3.180	3.200	8.940	4.930	3.620	5.110	8.880	5.630	4.050	4.82	7.94	7.15	4.71	4.457
	PZ-13R	7.593	2.762	5.503	7.164	6.601	4.704	6.226	9.009	6.874	4.840	12.700	9.350	7.320	6.720	14.460	9.540	8.640	8.30	16.01	10.09	9.57	9.06
	A1-PZ-2	2.397	1.096	1.262	1.828	1.214	0.859	0.659	0.648	0.512	0.477	1.100	0.476	0.511	0.583	2.510	1.040	1.020	0.672	0.542	0.310	0.492	0.681
	A2-PZ-1	1.271	0.709	1.247	1.22	1.097	0.769	1.186	1.097	0.931	0.638	1.180	1.450	1.380	1.020	1.060	1.120	1.110	1.04	0.97	1.07	0.94	1.18
	A2-PZ-2	--	--	--	1.738	1.134	0.826	1.015	1.081	1.023	0.699	0.770	1.140	1.200	0.990	1.190	1.230	1.110	1.13	1.21	1.54	1.14	1.05
Objective 2	MW-5	9.422	--	8.55	--	5.004	--	5.690	--	6.862	--	7.060	--	5.890	--	3.510	--	5.060	--	--	--	--	--
	MW-13S	1.756	--	--	--	--	0.885	1.417	0.878	NA	NA	1.130	1.180	NA	0.920	0.744	0.403	NA	0.85	--	--	--	--
	MW-14BR	8.862	--	--	--	11.57	--	--	--	8.825	--	--	--	10.790	--	--	--	8.940	--	--	--	--	--
	MW-21	--	--	9.773	8.36	12.15	5.203	4.104	4.588	5.891	4.514	8.650	6.450	5.760	4.570	5.310	4.760	5.340	3.01	2.81	2.15	5.63	3.859
	PZ-18	6.487	--	--	--	3.062	--	--	--	0.102	--	--	--	3.41	--	--	--	3.770	--	--	--	--	--
	PZ-26	0.636	--	--	--	0.67	--	--	--	0.599	--	--	--	0.740	--	--	--	0.740	--	--	--	--	--
Objective 3	MW-2	1.831	--	--	--	2.003	--	--	--	1.715	--	--	--	1.870	--	--	--	2.360	--	--	--	2.34	3.391
	MW-4	1.729	--	--	--	2.164	--	--	--	1.544	--	--	--	2.510	--	--	--	2.580	--	--	--	2.90	1.705
	MW-10	1.751	--	--	--	2.722	--	--	--	2.634	--	--	--	2.980	--	--	--	2.920	--	--	--	2.92	6.91
	PZ-7	1.389	--	1.063	--	1.22	--	1.091	--	1.019	--	1.030	--	0.930	--	0.980	--	NA	--	--	--	--	--

See last page for notes.

Table 4-3
Groundwater Sampling Field Parameters - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	DO (mg/L)																					
Sampling Date		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	0.24	2.90	1.69	0.52	0.80	3.25	4.30	3.59	1.06	3.91	8.52	2.49	0.27	5.78	6.90	2.02	1.74	8.07	7.58	4.43	6.06	5.17
	MW-3	0.71	1.01	1.76	0.46	0.68	1.06	2.71	0.86	0.33	0.39	6.13	1.14	0.14	0.45	3.35	0.53	0.18	3.20	3.57	1.75	5.71	2.04
	MW-18	--	--	0.82	1.03	0.2	0.16	4.4	0.64	0.33	1.04	0.75	0.21	0.16	2.80	0.33	2.30[A]	0.75	0.00	0.70	0.53	0.53	5.62
	MW-20	--	--	--	0.55	0.62	4.5	1.28	1.95	0.21	2.1	0.78	0.27	3.62	1.06	0.61	1.99[A]	0.30	0.42	0.70	0.25	0.93	1.37
	PZ-5	0.85	2.40	2.59	--	0.68	0.6	2.45	1.14	2.15	2.38	NA	4.8	3.57**	3.24	1.60	NA	NA	1.89	NA	NA	NA	3.35
	PZ-6	1.70	--	1.55	--	0.89	--	NA	--	2.39	--	0.52	--	2.28**	4.57**	2.51	NA	NA	2.75	NA	--	NA	1.88
	PZ-8	0.89	1.58	--	--	NA	1.48	NA	4.01	NA	NA	2.61	6.19	NA	NA	3.58	NA	NA	5.25	NA	NA	NA	3.5
	PZ-11R	0.60	4.34	7.45	5.19	2.91	3.31	8.82	2.30	3.94	4.31	7.48	6.27	1.92**	3.40**	8.92	0.84**	1.78	4.43***	2.64***	3.88***	3.48***	7.06
	PZ-13R	0.04	2.48	3.44	2.09	0.80	2.83	3.52	2.89	2.34	4.58	2.53	3.85	4.40**	5.72**	9.02	1.07**	2.81	4.33***	3.16***	1.37***	3.65***	5.26
	A1-PZ-2	1.31	8.24	0.51	0.16	0.10	1.02	0.88	5.37	0.10	2.62	0.88	0.80	0.035**	3.60**	0.10	0.38	0.02	1.23	1.47	2.07	0.39	0.97
	A2-PZ-1	0.43	1.07	0.86	0.65	0.80	5.4	1.09	0.09	0.49	0.08	0.69	0.02	1.97	0.70	0.10	0.09	0.13	0.47	0.30	0.43	0.86	1.31
	A2-PZ-2	--	--	--	1.10	1.40	0.87	2.6	1.07	2.17	1.52	8.14	2.33	2.87**	6.45**	2.28	1.34	1.32	3.47	4.16	1.49	2.45	1.97
Objective 2	MW-5	0.03	--	1.04	--	0.22	--	3.67	--	1.54	--	1.73	--	1.18	--	1.27	--	1.45	--	--	--	--	--
	MW-13S	1.52	--	--	--	--	2.95	1.97	0.77	NA	NA	5.82	1.21	NA	3.97	2.87	3.47**	NA	7.20***	--	--	--	--
	MW-14BR	1.90	--	--	--	4.17	--	--	--	1.59	--	--	--	1.93	--	--	--	0.64	--	--	--	--	--
	MW-21	--	--	0.54	0.33	0.89	0.15	0.57	0.53	0.13	2.7	2.75	0.5	0.37	0.85	0.31	1.23[A]	0.20	0.21	0.62	0.54	0.22	1.19
	PZ-18	0.12	--	--	--	4.34	--	--	--	2.44	--	--	--	1.94**	--	--	--	0.56	--	--	--	--	--
	PZ-26	0.08	--	--	--	0.2	--	--	--	2.39	--	--	--	0.17	--	--	--	0.20	--	--	--	--	--
Objective 3	MW-2	0.60	--	--	--	0.2	--	--	--	0.18	--	--	--	0.76	--	--	--	0.67	--	--	--	0.25	0.91
	MW-4	0.57	--	--	--	0.4	--	--	--	2.19	--	--	--	3.74	--	--	--	1.08	--	--	--	1.54	8.94
	MW-10	0.09	--	--	--	0.2	--		--	0.15	--	--	--	0.08	--	--	--	0.00	--	--	--	0.37	1.65
	PZ-7	1.81	--	1.6	--	0.75	--	1.46	--	2.17	--	1.91	--	2.71**	--	2.05	--	NA	--	--	--	--	--

See last page for notes.

Table 4-3
Groundwater Sampling Field Parameters - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

	Well ID	ORP (mV)																					
Sampling Date		Sep-11	Jan-12	Apr-12	Jul-12	Oct-12	Jan-13	Apr-13	Jul-13	Oct-13	Feb-14	Apr-14	Jul-14	Oct-14	Jan-15	Apr-15	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Jan-17
Objective 1	MW-1	121.2	-42.7	46.9	63.1	-203.6	82.0	97.30	69.0	50.7	32.3	202.1	151.7	150.9	111.7	115.0	125.6	171.8	65.2	70.7	212.5	3.0	-33.0
	MW-3	89.6	-42.9	59.3	62.4	-216.6	119.6	81.20	70.3	62.7	29.2	208.6	127.4	177.1	120.9	84.9	147.5	129.1	105.0	104.0	220.9	80.0	-70.0
	MW-18	--	--	-77.4	92.8	-73.8	-53.8	-35.0	-84.3	-35.2	-94.5	40.2	-74.1	-76.9	-46.6	-30.6	-44.9	-82.6	-79.3	-2.0	90.7	-82	-21
	MW-20	--	--	--	-100	-160.6	-67.4	-63.5	-114.3	-94.4	-98.4	-51.1	-92	60.3	-69.3	-88.0	-103.0	-106.0	-61.8	-78.5	-80.2	-57.0	-144.0
	PZ-5	-139.2	-88.3	-84.3	--	-132	121.16	92.40	-75.9	-48.6	-90.0	NA	181.20	53.4	86.0	63.8	NA	NA	127.2	NA	NA	NA	-30
	PZ-6	12.4	--	-74	--	-58.6	--	16.1	--	-40	--	30.3	--	30.2	51.6	71.1	NA	NA	106.5	NA	--	NA	-7
	PZ-8	73.7	-23.4	--	--	NA	115.4	NA	102.0	NA	NA	-19.3	241.7	NA	NA	227.3	NA	NA	136.5	NA	NA	NA	-44
	PZ-11R	33.0	-70.7	-2.1	104.2	-2.0	146.6	44.50	88.5	62.2	61.4	2.40	125.00	204.1	118.6	85.4	55.5	146.0	126.3***	111.2***	161.3***	92***	-18
	PZ-13R	-28.2	-28.1	201.3	-35.0	-18.5	3.3	5.30	83.5	-52.9	22.5	-23.40	-110.10	34.4	103.3	39.1	67.8	35.7	133.3***	138.9***	118.3***	78***	-20
	A1-PZ-2	-96.0	-39.2	-63.1	-78.3	-190.7	-28.9	186.90	-41.7	-178.5	-104.1	-115.70	-126.70	-149.6	-75.0	-121.6	-121.8	-198.7	-107.7	-72.8	40.9	-160	-118
	A2-PZ-1	-48.4	-87.9	-91.4	50.4	-208.2	-39.7	-36.90	-110.3	-111.1	-112.1	-90.60	-99.80	-68.8	-74.7	-49.0	-109.6	-104.6	-43.8	-86.2	203.5	-86.0	2.0
	A2-PZ-2	--	--	--	-78.3	-16.8	25.3	96.0	-16.0	-53.6	-1.1	60.9	-41.9	-10.0	21.3	-15.5	-55.4	44.6	1.4	26.6	84.5	-23.7	-10
Objective 2	MW-5	-55.1	--	-83.6	--	-97.2	--	20.4	--	-21.8	--	-10.7	--	-63.1	--	-80.1	--	-110.7	--	--	--	--	--
	MW-13S	83.2	--	--	--	--	160.7	65.2	153.7	NA	NA	215.8	109.8	NA	175.6	98.5	107.9	NA	133.7***	--	--	--	--
	MW-14BR	-27.4	--	--	--	-254.5	--	--	--	-141.3	--	--	--	-105.4	--	--	--	-204.5	--	--	--	--	--
	MW-21	--	--	-98.8	90.4	-112.7	-101.9	-85.6	-110.1	-68.5	-113.6	-77.2	-116.5	-86.7	-86.6	-112.3	-19.6	-131.1	-143.3	-102.6	58.7	-102	-124
	PZ-18	-17.9	--	--	--	-48.4	--	--	--	-61.1	--	--	--	37.4	--	--	--	-81.6	--	--	--	--	--
	PZ-26	-55.6	--	--	--	-27.8	--	--	--	-40.9	--	--	--	-59.9	--	--	--	-89.0	--	--	--	--	--
Objective 3	MW-2	-122.4	--	--	--	-108	--	--	--	-52.9	--	--	--	-66.9	--	--	--	-98.9	--	--	--	-147	-44
	MW-4	68.8	--	--	--	-53	--	--	--	-12.7	--	--	--	41.4	--	--	--	-1.1	--	--	--	-147	-49
	MW-10	-145.3	--	--	--	-254.2	--	--	--	-118.3	--	--	--	-110.4	--	--	--	-134.8	--	--	--	-167	-80
	PZ-7	-20.0	--	-97.8	--	-88	--	-31.0	--	-60.9	--	-41.0	--	67.5	--	98.8	--	NA	--	--	--	--	--

See last page for notes.

Table 4-3
Groundwater Sampling Field Parameters - September 2011 through January 2017
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Notes:
1. DO = dissolved oxygen
2. mg/L = milligrams per liter
3. mS/cm = milliSiemens per centimeter
4. mV = millivolts
5. ORP = oxidation reduction potential
6. s.u. = standard units
7. * Instrument error
8. NA = not analyzed due to well being dry or insufficient sample volume.
9. -- = Not included in the specified sampling round.
10. Note for ORP analysis: only three wells are purged by the low flow evacuation method and parameters monitored using a flow-through cell: MW-1, MW-3, and MW-10. For the others, groundwater parameters are generally collected by bailer and are evaluated at the surface, which is not a reliable or reproducible method for evaluating ORP results.
11. ** Indicates downhole DO was not collected due to insufficient volume.
12. Field parameters for the following wells were collected prior to purging during the Q4 2014 event due to insufficient volume: PZ-5, PZ-6, PZ-7, PZ-9, and PZ-18.
13. Field parameters for the following wells were collected during purging during the Q4 2014 event due to the well going dry prior to purging three well volumes: PZ-13R, MW-14BR, A2-PZ-2, and A1-PZ-2.
14. Field parameters for the following wells were collected prior to purging due to insufficient volume during the Q1 2015 event: PZ-5, PZ-6, PZ-11R, and PZ-13R.
15. Field parameters for the following wells were collected prior to purging due to insufficient volume during the Q2 2015 event: PZ-5, PZ-6, PZ-7, and PZ-8.
16. Field parameters for the following wells were collected prior to purging due to insufficient volume during the Q3 2015 event: PZ-11R, PZ-13R, and MW-13S.
17. Field parameters for the following wells were collected during purging during the Q4 2015 event due to the well going dry prior to purging three well volumes: PZ-11R, PZ-18, and MW-14BR.
18. [A] Due to downhole DO instrument error, the DO value provided was measured using the YSI during bailer purging.
19. Beginning Q1 (January) 2016, all wells were purged and sampled using a bailer. Downhole DO and ORP were measured at all locations (assuming sufficient water column and unless otherwise noted) except at A1-PZ-2, which is too narrow to accommodate the downhole probes available.
20. *** Indicates downhole DO/ORP was not collected due to insufficient volume.
21. Field parameters for the following wells were collected prior to or during purging due to insufficient volume during the Q1 2016 event: PZ-5, PZ-6, PZ-8, PZ-11R, PZ-13R, and MW-13S.
22. Field parameters for the following wells were collected prior to or during purging due to insufficient volume during the Q2-Q4 2016 events: PZ-11R and PZ-13R.

Table 4-4
Summary of Mann-Kendall Trend Analysis of Groundwater Analytical Data
Quarterly Data Summary
Former Lockheed Martin French Road Facility
Utica, New York

Monitoring Well Objective	Location ID[A]	Analyte	Cleanup Goal (µg/L)	Data Range							Mann-Kendall Analysis[B]		Sudden Increase Evaluation			
				Start Date	End Date	Min[B] (µg/L)	Max[B] (µg/L)	Historic Maximum[C] (µg/L)	Most recent result[D] (µg/L)	Comparison of the most recent data with Historic Maximum[D]	p Value	Data Trend[D]	Mean[B]	Std Dev[B]	Mean[B] +3xSTDV[B]	January 2017 Results
Objective 1	MW-1	cis-1,2-Dichloroethene	5	06/20/96	01/17/17	8.7	25	390	13.6	Less than	0.0160	Increasing Trend	16	6.2	34	No Sudden Increase
	MW-1	Tetrachloroethene	5	06/20/96	01/17/17	29	79	11000	50.2	Less than	0.2740	No Trend	49	20	108	No Sudden Increase
	MW-1	Trichloroethene	5	06/20/96	01/17/17	6.8	15	830	13.4	Less than	0.4060	No Trend	12	2.7	20	No Sudden Increase
	MW-3	cis-1,2-Dichloroethene	5	08/22/96	01/17/17	12	24	510	14	Less than	0.1685	No Trend	17	4.3	30	No Sudden Increase
	MW-3	Tetrachloroethene	5	08/22/96	01/17/17	2.7	25	73	2.7	Less than	0.0116	Decreasing Trend	14	8.4	40	No Sudden Increase
	MW-3	Trichloroethene	5	05/19/98	01/17/17	4.2	15	430	4.2	Less than	0.0890	No Trend	10.0	3.8	21	No Sudden Increase
	MW-3	Vinyl Chloride	2	08/22/96	01/17/17	1.3	3.4	94	3.0	Less than	0.2365	No Trend	2.5	0.9	5.2	No Sudden Increase
	MW-18	1,1-Dichloroethane	5	11/30/11	01/18/17	3.2	41	46	3.2	Less than	0.0540	No Trend	18	11	51	No Sudden Increase
	MW-18	cis-1,2-Dichloroethene	5	11/30/11	01/18/17	108	1900	1900	108	Less than	0.0310	Decreasing Trend	700	547	2340	No Sudden Increase
	MW-18	Tetrachloroethene	5	11/30/11	01/18/17	18	480	480	181	Less than	0.1990	No Trend	161	156	628	No Sudden Increase
	MW-18	Trichloroethene	5	11/30/11	01/18/17	50.6	510	510	50.6	Less than	0.1685	No Trend	214	175	737	No Sudden Increase
	MW-18	Vinyl Chloride	2	11/30/11	01/18/17	0.9	10	10	1.0 U	ND	0.2740	No Trend	17	9.8	47	No Sudden Increase
	MW-20	Vinyl Chloride	2	04/11/12	01/17/17	1.10	4.5	680	1.1	Less than	0.4520	No Trend	3.3	1.5	7.7	No Sudden Increase
	PZ-5	cis-1,2-Dichloroethene	5	06/20/96	01/18/17	24	57	500	25.3	Less than	0.1135	No Trend	37	11	70	No Sudden Increase
	PZ-5	Tetrachloroethene	5	06/20/96	01/18/17	11	300	350	166	Less than	0.0425	Decreasing Trend	165	85	420	No Sudden Increase
	PZ-5	Trichloroethene	5	06/20/96	01/18/17	19	86	330	39	Less than	0.0890	No Trend	54	22	121	No Sudden Increase
	PZ-6	cis-1,2-Dichloroethene	5	02/09/95	01/18/17	5.8	22	97	20.7	Less than	0.4770	No Trend	14	6.7	34	No Sudden Increase
	PZ-6	Tetrachloroethene	5	02/09/95	01/18/17	1.8	85	350	1.8	Less than	0.0540	No Trend	28	31	120	No Sudden Increase
	PZ-6	Trichloroethene	5	02/09/95	01/18/17	5.8	36	140	8.1	Less than	0.1685	No Trend	15	10	46	No Sudden Increase
	PZ-8	cis-1,2-Dichloroethene	5	08/06/08	01/18/17	20	42	91	30.8	Less than	0.4770	No Trend	31	7.9	55	No Sudden Increase
	PZ-8	Tetrachloroethene	5	08/06/08	01/18/17	133	210	470	133	Less than	0.0715	No Trend	171	30	260	No Sudden Increase
	PZ-8	Trichloroethene	5	08/06/08	01/18/17	120	230	410	185	Less than	0.1135	No Trend	187	43	317	No Sudden Increase
	PZ-11R	Trichloroethene	5	09/29/11	01/17/17	2.0	7.2	9.0	2.5	Less than	0.3600	No Trend	4.3	1.9	10.1	No Sudden Increase
	A1-PZ-2	Vinyl Chloride	2	06/28/10	01/17/17	0.90	5.5	27	1.0 U	ND	0.2365	No Trend	1.6	1.7	6.8	No Sudden Increase
	A2-PZ-1	1,1-Dichloroethane	5	06/25/10	01/18/17	350	990	2800	984	Less than	0.1685	No Trend	686	251	1438	No Sudden Increase
	A2-PZ-1	1,2-Dichloroethane	0.6	06/25/10	01/18/17	0.39	1.2	5.0	1.0 U	ND	0.1685	No Trend	34	67	234	No Sudden Increase
	A2-PZ-1	1,1-Dichloroethene	5	06/25/10	01/18/17	10	24	45	33.1	Less than	0.1685	No Trend	46	60	227	No Sudden Increase
	A2-PZ-1	1,1,2-trichloro-1,2,2-trifluoroethane	5	06/25/10	01/18/17	150	520	1900	241	Less than	0.4060	No Trend	245	117	596	No Sudden Increase
	A2-PZ-1	cis-1,2-Dichloroethene	5	06/25/10	01/18/17	7100	20000	42000	19500	Less than	0.1380	No Trend	14000	5006	29018	No Sudden Increase
	A2-PZ-1	Dichlorodifluoromethane	5	06/25/10	01/18/17	0.90	460	1200	1.0 U	ND	0.3170	No Trend	152	167	654	No Sudden Increase
	A2-PZ-1	trans 1,2-Dichloroethene	5	06/25/10	01/18/17	8.0	19	33	69.0	Greater than	0.1685	No Trend	50	61	233	No Sudden Increase
	A2-PZ-1	Trichloroethene	5	06/25/10	01/18/17	420	1900	5500	716	Less than	0.2740	No Trend	750	483	2200	No Sudden Increase
	A2-PZ-1	Vinyl Chloride	2	06/25/10	01/18/17	460	1400	1800	1200	Less than	0.1135	No Trend	796	341	1819	No Sudden Increase
	A2-PZ-2	1,1-Dichloroethane	5	06/25/10	01/18/17	3.4	8.3	12	8.6	Less than	0.1990	No Trend	7.5	4.7	21	No Sudden Increase
	A2-PZ-2	cis-1,2-Dichloroethene	5	06/25/10	01/18/17	61	188	290	188	Less than	0.1685	No Trend	124	41	248	No Sudden Increase
	A2-PZ-2	Tetrachloroethene	5	06/25/10	01/18/17	340	1100	2300	936	Less than	0.2365	No Trend	722	262	1507	No Sudden Increase
	A2-PZ-2	Trichloroethene	5	06/25/10	01/18/17	140	430	740	354	Less than	0.3170	No Trend	284	92	559	No Sudden Increase
	A2-PZ-2	Vinyl Chloride	2	06/25/10	01/18/17	4.4	6.4	14	8.6	Less than	0.1685	No Trend	9.5	5.5	26	No Sudden Increase
Objective 2	MW-21	Vinyl Chloride	2	04/11/12	01/17/17	1.4	3.4	13	1.9	Less than	0.1135	No Trend	2.0	0.60	3.8	No Sudden Increase
Objective 3	MW-2	1,1-Dichloroethane	5	08/22/96	01/17/17	0.9	5.9	87	1.0 U	ND	0.0006	Decreasing Trend	4.3	1.5	8.8	No Sudden Increase
	MW-2	cis-1,2-Dichloroethene	5	08/22/96	01/17/17	6.4	14	390	7.3	Less than	0.0235	Decreasing Trend	10	3.0	19	No Sudden Increase
	MW-2	Vinyl Chloride	2	08/22/96	01/17/17	12	38	78	18.5	Less than	0.0425	Decreasing Trend	23	10	52	No Sudden Increase
	MW-4	cis-1,2-Dichloroethene	5	08/22/96	01/18/17	1.3	7.1	7.4	1.3	Less than	0.1685	No Trend	4.3	1.6	9.1	No Sudden Increase
	MW-4	Vinyl Chloride	2	08/22/96	01/18/17	0.9	4.8	6.4	1.0 U	ND	0.1990	No Trend	2.9	1.3	6.9	No Sudden Increase
	MW-10	1,1-Dichloroethane	5	06/20/96	01/17/17	2.0	3.5	280	2.0	Less than	0.5480	No Trend	2.7	0.5	4.2	No Sudden Increase
	MW-10	cis-1,2-Dichloroethene	5	06/20/96	01/17/17	25	53	1700	25.6	Less than	0.0890	No Trend	35	9.8	64	No Sudden Increase
	MW-10	Vinyl Chloride	2	06/20/96	01/17/17	15.6	38	320	15.6	Less than	0.0715	No Trend	22	7.0	43	No Sudden Increase

Notes:
[A] Locations were excluded if: more than half of the last eight rounds were non-detect or if there were no exceedances in the last eight rounds.
[B] Indicates a calculation based on the eight most recent rounds of data.
[C] Historical maximum provided is based on all available data (excluding the most recent round).
[D] For non-detect results, 90% of the reportling limit (RL) is used for calculations. However, the "greater than" distinction for the Historic Maximum comparison is only applied if the most recent result is above the reporting limit (i.e. a "non-detect" with higher reporting limit will not trigger a "greater than" result as the value is not representative of a detected contaminant concentration). Similarly, a statistically-significant increasing or decreasing trend is only shown if detections (not modified reporting limits) contribute to the trend's statistical significance (i.e. an "increasing trend" is not representative of groundwater conditions if the trend is caused by non-detect results with elevated reporting limits).

Abbreviations:

J	Indicates an estimated value.
ND	Indicates a non-detect result with an elevated reporting limit for the most recent sampling event that would cause mis-identification of new Historical Maxima and/or statistically-significant trends. See Note [D] above.
NJ	The analysis indicates the presence of a compound that has been "tentatively identified"; the associated numerical value represents its approximate concentration.
U	The compound was analyzed for but not detected. The associated value is the compound Reporting Limit.

DATA USABILITY SUMMARY REPORT

DATA USABILITY SUMMARY REPORT
PROJECT: LOCKHEED MARTIN CORPORATION (LMC) UTICA NEW YORK
DATE SAMPLES COLLECTED: JANUARY 17-18, 2017

LAB REPORT No. 709443

1.0 INTRODUCTION

Eighteen aqueous samples including a field duplicate pair and one trip blank were collected by Tetra Tech, Inc., at the Lockheed Martin Utica site on January 17-18, 2017. The samples were sent to Pace Analytical Services, LLC, in Melville, New York. All analyses were conducted in accordance with USEPA SW846 8260C analytical and reporting protocols.

The data package deliverables provided by the laboratory included a Category B deliverable as outlined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols.

Data validation was performed on the aforementioned samples in accordance with EPA Region II data validation guidelines. Data validation review requirements were applied with specifications of the methods and as outlined in the USEPA Region II Standard Operating Procedures (SOPs) Low/Medium Volatile Data Validation, HW-33A Revision 0 (July 2015).

The Data Usability Summary Report (DUSR) was prepared after the process of data validation was completed and summarizes the overall data quality and usability in accordance with the NYSDEC Technical Guidance for Site Investigation and Remediation (NYSDEC 2010).

The DUSR review is based on the following parameters:

* ● Data completeness
* ● Hold times/Sample Preservation
* ● GC/MS System Tuning and Performance
● Initial/continuing calibrations
* ● Laboratory Method and Trip Blank Results
* ● Surrogate Spike Recoveries
* ● Internal Standard Results
* ● Laboratory Control Sample Results
* ● Matrix Spike Results
* ● Field Duplicate Precision
* ● Laboratory Duplicate Precision
* ● Compound Identification/Quantitation
* ● Detection Limits

The symbol (*) indicates that all quality control criteria were met for this parameter.

This report was prepared to provide a critical review of the laboratory analysis and reported chemical results. Overall, the data quality is acceptable. The results of the Quality Assurance Review are presented in Section 3.0. Summary tables are provided. Attachments 1, 2, and 3 are provided so that the data user can review the qualified analytical results, results reported by the laboratory, and the supporting documentation associated with data findings and data quality.

2.0 SAMPLES INCLUDED IN REVIEW

Lab Report No. 709443

Sample ID	Lab ID	Date Collected	Test Requested
A1-PZ-2	709443002	1/17/2017	VOCs
A2-PZ-1	709443015	1/18/2017	VOCs
A2-PZ-2	709443018	1/18/2017	VOCs
MW-1	709443003	1/17/2017	VOCs
MW-10	709443013	1/17/2017	VOCs
MW-18	709443008	1/18/2017	VOCs
MW-2	709443004	1/17/2017	VOCs
MW-20	709443007	1/17/2017	VOCs
MW-21	709443006	1/17/2017	VOCs
MW-3	709443009	1/17/2017	VOCs
MW-4	709443019	1/18/2017	VOCs
MW-4-DUP	709443020	1/18/2017	VOCs
PZ-11R	709443005	1/17/2017	VOCs
PZ-13R	709443012	1/17/2017	VOCs
PZ-5	709443017	1/18/2017	VOCs
PZ-6	709443010	1/18/2017	VOCs
PZ-8	709443016	1/18/2017	VOCs
TRIP BLANK	709443021	1/18/2017	VOCs

Legend:
VOCs = Volatile Organic Compounds in accordance with SW846 8260C.

3.0 RESULTS

3.1 DATA COMPLETENESS

With regard to the data package deliverables, the contents of the data package were complete and contained all necessary summary forms and raw instrument data.

3.2 QUALITY CONTROL PARAMETERS

Hold Times/Sample Preservation: Technical hold times and preservation were assessed by comparing the sample dates and preservation code on the sample COC with that of the analysis dates.

- All project samples were properly preserved and analyzed within the required hold time for all analyses.

GC/MS Performance Check (Tuning) Summary: Gas chromatograph/mass spectrometer (GC/MS) instrument tuning and performance checks are performed to ensure the instrument's ability to provide appropriate mass-resolution, identification and sensitivity.

- The BFB tuning compound mass-ion abundance criteria for the LL VOC analyses were reported within control limits.

Initial and Continuing Calibration Results: Control limits for initial and continuing instrument calibrations are established to ensure that the instrument is capable of producing accurate quantitative data. The following issues were noted:

- The continuing calibration performed on 1/20/2017 @ 06:34 had a Percent Drift (%Drift) for acetone and a Percent Differences (%D) for ethanol which exceeded the 20% quality control limit. Samples A1-PZ-2, MW-1, MW-18, MW-2, MW-20, MW-21, PZ-11R, PZ-5, PZ-6, and PZ-8 were affected. The detected and non-detected results reported for these compounds were qualified as estimated, (J) and (UJ), respectively.

- The continuing calibration performed on 1/22/2017 @ 10:24 had a %Drift for acetone and %D for bromoform and ethanol which exceeded the 20% quality control limit. Samples A2-PZ-1, A2-PZ-2, MW-10, MW-3, MW-4, MW-4-DUP, PZ-13R, and TRIP BLANK were affected. The detected and non-detected results reported for these compounds were qualified as estimated, (J) and (UJ), respectively.

- All other initial calibration Percent Relative Standard Deviations (%RSDs) and initial and continuing calibration response factors were within the quality control limits.

Laboratory Method and Trip Blank Contamination:

- No target compound contaminants were detected in the laboratory method or trip blanks associated with the reviewed parameters in this data set.

System Monitoring Compound (Surrogate) Recoveries:

- All surrogate recoveries fell within control limits for the project samples received for LL VOC reviewed.

Internal Standards Area Performance:

- The internal standard area counts and retention times fell within control limits for the project samples received and reviewed.

Laboratory Control Spike (LCS) Results:

- The LCS target compound Percent Recoveries (%Rs) were within the quality control limits.

Matrix Spike (MS) Results:

- The MS analyses performed on samples MW-1 and PZ-6 had acceptable %Rs for all target compounds.

Field Duplicate Precision: Field duplicates are collected to provide information on sampling precision and homogeneity.

- MW-4-DUP was collected as a field duplicate sample of MW-4. The results associated with these two samples fell within quality control limits, thereby satisfying precision.

Laboratory Duplicate Precision: Laboratory duplicates are analyzed to provide information on sampling precision and homogeneity.

- Samples MW-2 and MW-3 were analyzed for laboratory duplicate precision. The results associated with these duplicate analyses had acceptable Relative Percent Differences (RPDs), thereby satisfying laboratory precision.

Target Compound Identification and Quantitation: The laboratory calculations are verified and compound identifications are reviewed and assessed by the data reviewer.

- The GC/MS raw data (quantitation reports and chromatograms) were provided for review. No laboratory calculation errors were noted for the sample selected for verification during data validation.

Detection Limits: Non-detected results were reported to the Reporting Limit (RL). Samples A2-PZ-1 and A2-PZ-2 were further analyzed at 100X and 10X dilutions, respectively, due to elevated concentrations of target volatile organic compounds.

Additional comments: Samples PZ-5, PZ-6, and PZ-8 were collected on both 1/16/17 and 1/18/17. Both dates of sample collection were inadvertently analyzed by the laboratory. The chain of custody (COC) record requested that only the samples collected on 1/18/17 be analyzed for the aforementioned samples. The data reviewer selected the samples collected on 1/18/17 for validation.

4.0 CONCLUSIONS

Overall, based on the outcome of data validation and as summarized in the DUSR, the data quality is acceptable with the qualifiers noted in this report.

Tetra Tech, Inc.
Michelle L. Allen
Chemist/Data Validator

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

February 28, 2017

Attachments:

Attachment 1 – Qualified Analytical Results
Attachment 2 – Results as Reported by the Laboratory
Attachment 3 – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Attachment 1

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's $r < 0.995$
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient $r < 0.995$
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 08218	NSAMPLE	A1-PZ-2			A2-PZ-1			A2-PZ-2			MW-1		
SDG: 709443	LAB_ID	709443002			709443015			709443018			709443003		
FRACTION: OV	SAMP_DATE	1/17/2017			1/18/2017			1/18/2017			1/17/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		984			8.6			1.9		
1,1-DICHLOROETHENE		1	U		33.1			1.5			1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4,5-TETRAMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,4-DIETHYLBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		1	U		1	U		1	U		1	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		1	U		1	U		1	U		1	U	
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		1	U		1	U		1	U		1	U	
ACETONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
BENZENE		1	U		1	U		1	U		1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMOFORM		1	U		1	UJ	C	1	UJ	C	1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 08218	NSAMPLE	MW-10			MW-18			MW-2			MW-20		
SDG: 709443	LAB_ID	709443013			709443008			709443004			709443007		
FRACTION: OV	SAMP_DATE	1/17/2017			1/18/2017			1/17/2017			1/17/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		2			3.2			3.7			1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4,5-TETRAMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,4-DIETHYLBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		1	U		1	U		1	U		1	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		1	U		1	U		1	U		1	U	
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		1	U		1	U		1	U		1	U	
ACETONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
BENZENE		1	U		1	U		1	U		1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMOFORM		1	UJ	C	1	U		1	U		1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 08218	NSAMPLE	MW-21			MW-3			MW-4			MW-4-DUP		
SDG: 709443	LAB_ID	709443006			709443009			709443019			709443020		
FRACTION: OV	SAMP_DATE	1/17/2017			1/17/2017			1/18/2017			1/18/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										MW-4		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		2.9			1	U		1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4,5-TETRAMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,4-DIETHYLBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		1	U		1	U		1	U		1	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		1	U		1	U		1	U		1	U	
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		1	U		1	U		1	U		1	U	
ACETONE		5	UJ	C	5	UJ	C	5	UJ	C	5	UJ	C
BENZENE		1	U		1	U		1	U		1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMOFORM		1	U		1	UJ	C	1	UJ	C	1	UJ	C
BROMOMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 08218	NSAMPLE	PZ-11R			PZ-13R			PZ-5			PZ-6		
SDG: 709443	LAB_ID	709443005			709443012			709443017			709443014		
FRACTION: OV	SAMP_DATE	1/17/2017			1/17/2017			1/18/2017			1/18/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,1-DICHLOROETHENE		1	U		1	U		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,2,4,5-TETRAMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U		1	U		1	U	
1,4-DIETHYLBENZENE		1	U		1	U		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U		1	U		1	U	
2-BUTANONE		1	U		1	U		1	U		1	U	
2-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
2-HEXANONE		1	U		1	U		1	U		1	U	
4-CHLOROTOLUENE		1	U		1	U		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U		1	U		1	U	
4-METHYL-2-PENTANONE		1	U		1	U		1	U		1	U	
ACETONE		5	UJ	C	5	UJ	C	41	J	C	15.5	J	C
BENZENE		1	U		1	U		1	U		1	U	
BROMOBENZENE		1	U		1	U		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U		1	U		1	U	
BROMOFORM		1	U		1	UJ	C	1	U		1	U	
BROMOMETHANE		1	U		1	U		1	U		1	U	

PROJ_NO: 08218	NSAMPLE	PZ-8			TRIP BLANK		
SDG: 709443	LAB_ID	709443016			709443021		
FRACTION: OV	SAMP_DATE	1/18/2017			1/18/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1,2-TETRACHLOROETHANE		1	U		1	U	
1,1,1-TRICHLOROETHANE		1	U		1	U	
1,1,2,2-TETRACHLOROETHANE		1	U		1	U	
1,1,2-TRICHLOROETHANE		1	U		1	U	
1,1-DICHLOROETHANE		2.9			1	U	
1,1-DICHLOROETHENE		1	U		1	U	
1,1-DICHLOROPROPENE		1	U		1	U	
1,2,3-TRICHLOROBENZENE		1	U		1	U	
1,2,3-TRICHLOROPROPANE		1	U		1	U	
1,2,4,5-TETRAMETHYLBENZENE		1	U		1	U	
1,2,4-TRICHLOROBENZENE		1	U		1	U	
1,2,4-TRIMETHYLBENZENE		1	U		1	U	
1,2-DIBROMOETHANE		1	U		1	U	
1,2-DICHLOROBENZENE		1	U		1	U	
1,2-DICHLOROETHANE		1	U		1	U	
1,2-DICHLOROPROPANE		1	U		1	U	
1,3,5-TRIMETHYLBENZENE		1	U		1	U	
1,3-DICHLOROBENZENE		1	U		1	U	
1,3-DICHLOROPROPANE		1	U		1	U	
1,4-DICHLOROBENZENE		1	U		1	U	
1,4-DIETHYLBENZENE		1	U		1	U	
2,2-DICHLOROPROPANE		1	U		1	U	
2-BUTANONE		1	U		1	U	
2-CHLOROTOLUENE		1	U		1	U	
2-HEXANONE		1	U		1	U	
4-CHLOROTOLUENE		1	U		1	U	
4-ISOPROPYLTOLUENE		1	U		1	U	
4-METHYL-2-PENTANONE		1	U		1	U	
ACETONE		13.6	J	C	5	UJ	C
BENZENE		1	U		1	U	
BROMOBENZENE		1	U		1	U	
BROMOCHLOROMETHANE		1	U		1	U	
BROMODICHLOROMETHANE		1	U		1	U	
BROMOFORM		1	U		1	UJ	C
BROMOMETHANE		1	U		1	U	

PROJ_NO: 08218	NSAMPLE	A1-PZ-2			A2-PZ-1			A2-PZ-2			MW-1		
SDG: 709443	LAB_ID	709443002			709443015			709443018			709443003		
FRACTION: OV	SAMP_DATE	1/17/2017			1/18/2017			1/18/2017			1/17/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1	U		1	U		1	U		1	U	
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	U		1	U		1	U		1	U	
CIS-1,2-DICHLOROETHENE		1	U		19500			188			13.6		
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHANOL		250	UJ	C	250	UJ	C	250	UJ	C	250	UJ	C
ETHYLBENZENE		1	U		1	U		1.8			1	U	
HEXACHLOROBUTADIENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
M+P-XYLENES		2	U		2	U		2	U		2	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
NAPHTHALENE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
O-XYLENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		3.8			936			50.2		
TOLUENE		1	U		4.9			1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		69			1	U		1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		1	U		1	U		1	U		1	U	
TRICHLOROETHENE		1	U		716			354			13.4		
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL CHLORIDE		1	U		1200			8.6			1	U	

PROJ_NO: 08218	NSAMPLE	MW-10			MW-18			MW-2			MW-20		
SDG: 709443	LAB_ID	709443013			709443008			709443004			709443007		
FRACTION: OV	SAMP_DATE	1/17/2017			1/18/2017			1/17/2017			1/17/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1	U		1	U		1	U		1	U	
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	U		1	U		1	U		1	U	
CIS-1,2-DICHLOROETHENE		25.6			108			7.3			1	U	
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHANOL		250	UJ	C	250	UJ	C	250	UJ	C	250	UJ	C
ETHYLBENZENE		1	U		1	U		1	U		1	U	
HEXACHLOROBUTADIENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
M+P-XYLENES		2	U		2	U		2	U		2	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
NAPHTHALENE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
O-XYLENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		181			1	U		1	U	
TOLUENE		1	U		1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		2.2			1	U		1.6			1.4		
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		1	U		1	U		1	U		1	U	
TRICHLOROETHENE		1	U		50.6			1	U		1	U	
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL CHLORIDE		15.6			1	U		18.5			1.1		

PROJ_NO: 08218	NSAMPLE	MW-21			MW-3			MW-4			MW-4-DUP		
SDG: 709443	LAB_ID	709443006			709443009			709443019			709443020		
FRACTION: OV	SAMP_DATE	1/17/2017			1/17/2017			1/18/2017			1/18/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF										MW-4		
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1	U		1	U		1	U		1	U	
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	U		1	U		1	U		1	U	
CIS-1,2-DICHLOROETHENE		1	U		14			1.3			1.1		
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHANOL		250	UJ	C	250	UJ	C	250	UJ	C	250	UJ	C
ETHYLBENZENE		1	U		1	U		1	U		1	U	
HEXACHLOROBUTADIENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
M+P-XYLENES		2	U		2	U		2	U		2	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
NAPHTHALENE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
O-XYLENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		1	U		2.7			1	U		1	U	
TOLUENE		1	U		1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		1	U		1	U		1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		1	U		1	U		1	U		1	U	
TRICHLOROETHENE		1	U		4.2			1	U		1	U	
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL CHLORIDE		1.9			3			1	U		1	U	

PROJ_NO: 08218	NSAMPLE	PZ-11R			PZ-13R			PZ-5			PZ-6		
SDG: 709443	LAB_ID	709443005			709443012			709443017			709443014		
FRACTION: OV	SAMP_DATE	1/17/2017			1/17/2017			1/18/2017			1/18/2017		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1	U		1	U		1	U		3.2		
CARBON TETRACHLORIDE		1	U		1	U		1	U		1	U	
CHLOROBENZENE		1	U		1	U		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U		1	U		1	U	
CHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
CHLOROETHANE		1	U		1	U		1	U		1	U	
CHLOROFORM		1	U		1	U		1	U		1	U	
CHLOROMETHANE		1	U		1	U		1	U		1	U	
CIS-1,2-DICHLOROETHENE		1.9			1	U		25.3			20.7		
CIS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
DIBROMOMETHANE		1	U		1	U		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U		1	U		1	U	
ETHANOL		250	UJ	C	250	UJ	C	250	UJ	C	250	UJ	C
ETHYLBENZENE		1	U		1	U		1	U		1	U	
HEXACHLOROBUTADIENE		1	U		1	U		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U		1	U		1	U	
M+P-XYLENES		2	U		2	U		2	U		2	U	
METHYL TERT-BUTYL ETHER		1	U		1	U		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U		1	U		1	U	
NAPHTHALENE		1	U		1	U		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U		1	U		1	U	
O-XYLENE		1	U		1	U		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U		1	U		1	U	
STYRENE		1	U		1	U		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U		1	U		1	U	
TETRACHLOROETHENE		2.2			1	U		166			1.8		
TOLUENE		1	U		1	U		1	U		1	U	
TOTAL XYLENES		1	U		1	U		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1	U		1	U		1.5			1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		1	U		1	U		1	U		1	U	
TRICHLOROETHENE		2.5			2.4			39			8.1		
TRICHLOROFLUOROMETHANE		1	U		1	U		1	U		1	U	
VINYL CHLORIDE		1	U		1	U		1	U		1	U	

PROJ_NO: 08218	NSAMPLE	PZ-8			TRIP BLANK		
SDG: 709443	LAB_ID	709443016			709443021		
FRACTION: OV	SAMP_DATE	1/18/2017			1/18/2017		
MEDIA: WATER	QC_TYPE	NM			NM		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
CARBON DISULFIDE		1	U		1	U	
CARBON TETRACHLORIDE		1	U		1	U	
CHLOROBENZENE		1	U		1	U	
CHLORODIBROMOMETHANE		1	U		1	U	
CHLORODIFLUOROMETHANE		1	U		1	U	
CHLOROETHANE		1	U		1	U	
CHLOROFORM		1	U		1	U	
CHLOROMETHANE		1	U		1	U	
CIS-1,2-DICHLOROETHENE		30.8			1	U	
CIS-1,3-DICHLOROPROPENE		1	U		1	U	
DIBROMOMETHANE		1	U		1	U	
DICHLORODIFLUOROMETHANE		1	U		1	U	
ETHANOL		250	UJ	C	250	UJ	C
ETHYLBENZENE		1	U		1	U	
HEXACHLOROBUTADIENE		1	U		1	U	
ISOPROPYLBENZENE		1	U		1	U	
M+P-XYLENES		2	U		2	U	
METHYL TERT-BUTYL ETHER		1	U		1	U	
METHYLENE CHLORIDE		1	U		1	U	
NAPHTHALENE		1	U		1	U	
N-BUTYLBENZENE		1	U		1	U	
N-PROPYLBENZENE		1	U		1	U	
O-XYLENE		1	U		1	U	
SEC-BUTYLBENZENE		1	U		1	U	
STYRENE		1	U		1	U	
TERT-BUTYLBENZENE		1	U		1	U	
TETRACHLOROETHENE		133			1	U	
TOLUENE		1	U		1	U	
TOTAL XYLENES		1	U		1	U	
TRANS-1,2-DICHLOROETHENE		1.5			1	U	
TRANS-1,3-DICHLOROPROPENE		1	U		1	U	
TRANS-1,4-DICHLORO-2-BUTENE		1	U		1	U	
TRICHLOROETHENE		185			1	U	
TRICHLOROFLUOROMETHANE		1	U		1	U	
VINYL CHLORIDE		1	U		1	U	

Attachment 2

Results as Reported by the Laboratory

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

A1-PZ-2

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:23 Lab Sample ID: 709443002

Date Analyzed: 01/20/2017 12:23 Lab File ID: 012017.B\J31857.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

A1-PZ-2

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:23 Lab Sample ID: 709443002

Date Analyzed: 01/20/2017 12:23 Lab File ID: 012017.B\J31857.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-1

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:41 Lab Sample ID: 709443003

Date Analyzed: 01/20/2017 12:41 Lab File ID: 012017.B\J31858.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	1.9	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	13.6	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-1

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:41 Lab Sample ID: 709443003

Date Analyzed: 01/20/2017 12:41 Lab File ID: 012017.B\J31858.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	50.2	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	13.4	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-2

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:59 Lab Sample ID: 709443004

Date Analyzed: 01/20/2017 12:59 Lab File ID: 012017.B\J31859.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	3.7	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	7.3	
156-60-5	trans-1,2-Dichloroethene	1.6	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-2

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:59 Lab Sample ID: 709443004

Date Analyzed: 01/20/2017 12:59 Lab File ID: 012017.B\J31859.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	18.5	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

PZ-11R

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 13:17 Lab Sample ID: 709443005

Date Analyzed: 01/20/2017 13:17 Lab File ID: 012017.B\J31860.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	1.9	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

PZ-11R

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 13:17 Lab Sample ID: 709443005

Date Analyzed: 01/20/2017 13:17 Lab File ID: 012017.B\J31860.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	2.2	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	2.5	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-21

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 13:35 Lab Sample ID: 709443006

Date Analyzed: 01/20/2017 13:35 Lab File ID: 012017.B\J31861.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-21

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 13:35 Lab Sample ID: 709443006

Date Analyzed: 01/20/2017 13:35 Lab File ID: 012017.B\J31861.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	1.9	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-20

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 13:53 Lab Sample ID: 709443007

Date Analyzed: 01/20/2017 13:53 Lab File ID: 012017.B\J31862.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	1.4	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-20

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 13:53 Lab Sample ID: 709443007

Date Analyzed: 01/20/2017 13:53 Lab File ID: 012017.B\J31862.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	1.1	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-18

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 14:29 Lab Sample ID: 709443008

Date Analyzed: 01/20/2017 14:29 Lab File ID: 012017.B\J31864.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	3.2	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	108	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-18

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 14:29 Lab Sample ID: 709443008

Date Analyzed: 01/20/2017 14:29 Lab File ID: 012017.B\J31864.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	181	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	50.6	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-18

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 14:29 Lab Sample ID: 709443008

Date Analyzed: 01/20/2017 14:29 Lab File ID: 012017.B\J31864.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	181	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	50.6	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-3

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 14:27 Lab Sample ID: 709443009

Date Analyzed: 01/22/2017 14:27 Lab File ID: 012217.B\J31880.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	2.9	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	14.0	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-3

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 14:27 Lab Sample ID: 709443009

Date Analyzed: 01/22/2017 14:27 Lab File ID: 012217.B\J31880.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	2.7	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	4.2	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	3.0	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PZ-13R

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 15:03 Lab Sample ID: 709443012

Date Analyzed: 01/22/2017 15:03 Lab File ID: 012217.B\J31882.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

PZ-13R

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 15:03 Lab Sample ID: 709443012

Date Analyzed: 01/22/2017 15:03 Lab File ID: 012217.B\J31882.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	2.4	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-10

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 15:21 Lab Sample ID: 709443013

Date Analyzed: 01/22/2017 15:21 Lab File ID: 012217.B\J31883.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	2.0	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	25.6	
156-60-5	trans-1,2-Dichloroethene	2.2	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-10

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 15:21 Lab Sample ID: 709443013

Date Analyzed: 01/22/2017 15:21 Lab File ID: 012217.B\J31883.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	15.6	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

PZ-6

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 11:12 Lab Sample ID: 709443014

Date Analyzed: 01/20/2017 11:12 Lab File ID: 012017.B\J31853.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	15.5	
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	3.2	
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	20.7	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

PZ-6

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 11:12 Lab Sample ID: 709443014

Date Analyzed: 01/20/2017 11:12 Lab File ID: 012017.B\J31853.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	1.8	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	8.1	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: LMC UTICA
Pace Project No.: 709443

Sample: PZ-6 **Lab ID: 709443014** Collected: 01/18/17 08:15 Received: 01/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**15.5**	ug/L	5.0	1		01/20/17 11:12	67-64-1	CC
Benzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	108-86-1	L3
Bromochloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	74-83-9	
2-Butanone (MEK)	**<1.0**	ug/L	1.0	1		01/20/17 11:12	78-93-3	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	98-06-6	
Carbon disulfide	**3.2**	ug/L	1.0	1		01/20/17 11:12	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		01/20/17 11:12	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		01/20/17 11:12	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	106-43-4	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		01/20/17 11:12	106-93-4	
Dibromomethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-35-4	
cis-1,2-Dichloroethene	**20.7**	ug/L	1.0	1		01/20/17 11:12	156-59-2	
trans-1,2-Dichloroethene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	10061-02-6	
1,4-Diethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		01/20/17 11:12	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	87-68-3	
2-Hexanone	**<1.0**	ug/L	1.0	1		01/20/17 11:12	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		01/20/17 11:12	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	99-87-6	
Methylene Chloride	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: LMC UTICA
Pace Project No.: 709443

Sample: PZ-6 **Lab ID: 709443014** Collected: 01/18/17 08:15 Received: 01/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<1.0**	ug/L	1.0	1		01/20/17 11:12	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/20/17 11:12	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	1		01/20/17 11:12	127-18-4	
1,2,4,5-tetramethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	95-93-2	N3
Toluene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	87-61-6	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	79-00-5	
Trichloroethene	**8.1**	ug/L	1.0	1		01/20/17 11:12	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:12	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		01/20/17 11:12	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1		01/20/17 11:12	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		01/20/17 11:12	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		01/20/17 11:12	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%.	68-153	1		01/20/17 11:12	17060-07-0	
4-Bromofluorobenzene (S)	93	%.	79-124	1		01/20/17 11:12	460-00-4	
Toluene-d8 (S)	98	%.	69-124	1		01/20/17 11:12	2037-26-5	

REPORT OF LABORATORY ANALYSIS

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

A2-PZ-1

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 15:39 Lab Sample ID: 709443015

Date Analyzed: 01/22/2017 15:39 Lab File ID: 012217.B\J31884.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	33.1	
156-60-5	trans-1,2-Dichloroethene	69.0	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U

SAMPLE NO.

A2-PZ-1

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 15:39 Lab Sample ID: 709443015

Date Analyzed: 01/22/2017 15:39 Lab File ID: 012217.B\J31884.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	3.8	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	4.9	
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

A2-PZ-1

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 17:09 Lab Sample ID: 709443015

Date Analyzed: 01/22/2017 17:09 Lab File ID: 012217.B\J31889.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 100 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
75-34-3	1,1-Dichloroethane	984	
156-59-2	cis-1,2-Dichloroethene	19500	
79-01-6	Trichloroethene	716	
75-01-4	Vinyl chloride	1200	

SAMPLE NO.

PZ-8

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 11:30 Lab Sample ID: 709443016

Date Analyzed: 01/20/2017 11:30 Lab File ID: 012017.B\J31854.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	13.6	
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	2.9	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	30.8	
156-60-5	trans-1,2-Dichloroethene	1.5	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

PZ-8

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 11:30 Lab Sample ID: 709443016

Date Analyzed: 01/20/2017 11:30 Lab File ID: 012017.B\J31854.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	133	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	185	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
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ANALYTICAL RESULTS

Project: LMC UTICA
Pace Project No.: 709443

Sample: PZ-8 **Lab ID: 709443016** Collected: 01/18/17 07:45 Received: 01/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**13.6**	ug/L	5.0	1		01/20/17 11:30	67-64-1	CC
Benzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	108-86-1	L3
Bromochloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	74-83-9	
2-Butanone (MEK)	**<1.0**	ug/L	1.0	1		01/20/17 11:30	78-93-3	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	98-06-6	
Carbon disulfide	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		01/20/17 11:30	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		01/20/17 11:30	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	106-43-4	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		01/20/17 11:30	106-93-4	
Dibromomethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-71-8	
1,1-Dichloroethane	**2.9**	ug/L	1.0	1		01/20/17 11:30	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-35-4	
cis-1,2-Dichloroethene	**30.8**	ug/L	1.0	1		01/20/17 11:30	156-59-2	
trans-1,2-Dichloroethene	**1.5**	ug/L	1.0	1		01/20/17 11:30	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	10061-02-6	
1,4-Diethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		01/20/17 11:30	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	87-68-3	
2-Hexanone	**<1.0**	ug/L	1.0	1		01/20/17 11:30	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		01/20/17 11:30	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	99-87-6	
Methylene Chloride	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: LMC UTICA
Pace Project No.: 709443

Sample: PZ-8 **Lab ID: 709443016** Collected: 01/18/17 07:45 Received: 01/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<1.0**	ug/L	1.0	1		01/20/17 11:30	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/20/17 11:30	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	79-34-5	
Tetrachloroethene	**133**	ug/L	1.0	1		01/20/17 11:30	127-18-4	
1,2,4,5-tetramethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	95-93-2	N3
Toluene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	87-61-6	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	79-00-5	
Trichloroethene	**185**	ug/L	1.0	1		01/20/17 11:30	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:30	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		01/20/17 11:30	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1		01/20/17 11:30	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		01/20/17 11:30	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		01/20/17 11:30	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	102	%.	68-153	1		01/20/17 11:30	17060-07-0	
4-Bromofluorobenzene (S)	95	%.	79-124	1		01/20/17 11:30	460-00-4	
Toluene-d8 (S)	98	%.	69-124	1		01/20/17 11:30	2037-26-5	

REPORT OF LABORATORY ANALYSIS

SAMPLE NO.

PZ-5

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 11:48 Lab Sample ID: 709443017

Date Analyzed: 01/20/2017 11:48 Lab File ID: 012017.B\J31855.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	41.0	
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	25.3	
156-60-5	trans-1,2-Dichloroethene	1.5	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

PZ-5

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 11:48 Lab Sample ID: 709443017

Date Analyzed: 01/20/2017 11:48 Lab File ID: 012017.B\J31855.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	166	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	39.0	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: LMC UTICA
Pace Project No.: 709443

Sample: PZ-5 **Lab ID: 709443017** Collected: 01/18/17 08:45 Received: 01/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
Acetone	**41.0**	ug/L	5.0	1		01/20/17 11:48	67-64-1	CC
Benzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	71-43-2	
Bromobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	108-86-1	L3
Bromochloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	74-97-5	
Bromodichloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-27-4	
Bromoform	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-25-2	
Bromomethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	74-83-9	
2-Butanone (MEK)	**<1.0**	ug/L	1.0	1		01/20/17 11:48	78-93-3	
n-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	104-51-8	
sec-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	135-98-8	
tert-Butylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	98-06-6	
Carbon disulfide	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-15-0	
Carbon tetrachloride	**<1.0**	ug/L	1.0	1		01/20/17 11:48	56-23-5	
Chlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	108-90-7	
Chlorodifluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-45-6	N3
Chloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-00-3	
Chloroform	**<1.0**	ug/L	1.0	1		01/20/17 11:48	67-66-3	
Chloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	74-87-3	
2-Chlorotoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	95-49-8	
4-Chlorotoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	106-43-4	
Dibromochloromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	124-48-1	
1,2-Dibromoethane (EDB)	**<1.0**	ug/L	1.0	1		01/20/17 11:48	106-93-4	
Dibromomethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	74-95-3	
1,2-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	95-50-1	
1,3-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	541-73-1	
1,4-Dichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	106-46-7	
trans-1,4-Dichloro-2-butene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	110-57-6	
Dichlorodifluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-71-8	
1,1-Dichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-34-3	
1,2-Dichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	107-06-2	
1,1-Dichloroethene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-35-4	
cis-1,2-Dichloroethene	**25.3**	ug/L	1.0	1		01/20/17 11:48	156-59-2	
trans-1,2-Dichloroethene	**1.5**	ug/L	1.0	1		01/20/17 11:48	156-60-5	
1,2-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	78-87-5	
1,3-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	142-28-9	
2,2-Dichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	594-20-7	
1,1-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	563-58-6	
cis-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	10061-01-5	
trans-1,3-Dichloropropene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	10061-02-6	
1,4-Diethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	105-05-5	N3
Ethanol	**<250**	ug/L	250	1		01/20/17 11:48	64-17-5	
Ethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	100-41-4	
Hexachloro-1,3-butadiene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	87-68-3	
2-Hexanone	**<1.0**	ug/L	1.0	1		01/20/17 11:48	591-78-6	
Isopropylbenzene (Cumene)	**<1.0**	ug/L	1.0	1		01/20/17 11:48	98-82-8	
p-Isopropyltoluene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	99-87-6	
Methylene Chloride	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-09-2	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

ANALYTICAL RESULTS

Project: LMC UTICA
Pace Project No.: 709443

Sample: PZ-5 **Lab ID: 709443017** Collected: 01/18/17 08:45 Received: 01/19/17 09:15 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260C Volatile Organics	Analytical Method: EPA 8260C/5030C							
4-Methyl-2-pentanone (MIBK)	**<1.0**	ug/L	1.0	1		01/20/17 11:48	108-10-1	
Methyl-tert-butyl ether	**<1.0**	ug/L	1.0	1		01/20/17 11:48	1634-04-4	
Naphthalene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	91-20-3	
n-Propylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	103-65-1	
Styrene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	100-42-5	
1,1,1,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	630-20-6	
1,1,2,2-Tetrachloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	79-34-5	
Tetrachloroethene	**166**	ug/L	1.0	1		01/20/17 11:48	127-18-4	
1,2,4,5-tetramethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	95-93-2	N3
Toluene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	108-88-3	
1,2,3-Trichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	87-61-6	
1,2,4-Trichlorobenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	120-82-1	
1,1,1-Trichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	71-55-6	
1,1,2-Trichloroethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	79-00-5	
Trichloroethene	**39.0**	ug/L	1.0	1		01/20/17 11:48	79-01-6	
Trichlorofluoromethane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-69-4	
1,2,3-Trichloropropane	**<1.0**	ug/L	1.0	1		01/20/17 11:48	96-18-4	
1,2,4-Trimethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	95-63-6	
1,3,5-Trimethylbenzene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	108-67-8	
Vinyl chloride	**<1.0**	ug/L	1.0	1		01/20/17 11:48	75-01-4	
Xylene (Total)	**<1.0**	ug/L	1.0	1		01/20/17 11:48	1330-20-7	
m&p-Xylene	**<2.0**	ug/L	2.0	1		01/20/17 11:48	179601-23-1	
o-Xylene	**<1.0**	ug/L	1.0	1		01/20/17 11:48	95-47-6	
Surrogates								
1,2-Dichloroethane-d4 (S)	103	%.	68-153	1		01/20/17 11:48	17060-07-0	
4-Bromofluorobenzene (S)	97	%.	79-124	1		01/20/17 11:48	460-00-4	
Toluene-d8 (S)	98	%.	69-124	1		01/20/17 11:48	2037-26-5	

REPORT OF LABORATORY ANALYSIS

SAMPLE NO.

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

A2-PZ-2

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 16:33 Lab Sample ID: 709443018

Date Analyzed: 01/22/2017 16:33 Lab File ID: 012217.B\J31887.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	8.6	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	1.5	
156-59-2	cis-1,2-Dichloroethene	188	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

A2-PZ-2

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 16:33 Lab Sample ID: 709443018

Date Analyzed: 01/22/2017 16:33 Lab File ID: 012217.B\J31887.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	1.8	
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	8.6	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

A2-PZ-2

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 16:51 Lab Sample ID: 709443018

Date Analyzed: 01/22/2017 16:51 Lab File ID: 012217.B\J31888.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 10 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
127-18-4	Tetrachloroethene	936	
79-01-6	Trichloroethene	354	

SAMPLE NO.

MW-4

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 18:40 Lab Sample ID: 709443019

Date Analyzed: 01/22/2017 18:40 Lab File ID: 012217.B\J31894.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	1.3	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-4

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 18:40 Lab Sample ID: 709443019

Date Analyzed: 01/22/2017 18:40 Lab File ID: 012217.B\J31894.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

MW-4-DUP

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 18:58 Lab Sample ID: 709443020

Date Analyzed: 01/22/2017 18:58 Lab File ID: 012217.B\J31895.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	1.1	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

MW-4-DUP

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 18:58 Lab Sample ID: 709443020

Date Analyzed: 01/22/2017 18:58 Lab File ID: 012217.B\J31895.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

TRIP BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 12:40 Lab Sample ID: 709443021

Date Analyzed: 01/22/2017 12:40 Lab File ID: 012217.B\J31874.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

TRIP BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 12:40 Lab Sample ID: 709443021

Date Analyzed: 01/22/2017 12:40 Lab File ID: 012217.B\J31874.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

Attachment 3

Support Documentation

LMC UTICA
SDG 709443

SAMPLE IDENTIFICATION	A2-PZ-1
COMPOUND	CIS-1,2-DICHLOROETHENE
COMPOUND AREA	808092
INTERNAL STANDARD AMOUNT (ng)	250
VOLUME WATER PURGED (ml)	5
DILUTION FACTOR	100
INTERNAL STANDARD AREA	235493
CONTINUING CALIBRATION RRF	0.88151
ml to µl	1000
ng to µg	1000

19464 µg/L

(808092 x 250ng x 100x 1000ml X 1µg /235493 x 0.88151 x 5ml x 1L x 1000ng)

Data File: \\v70wintarget\chem\70msv6.i\012217.b\J31889.D
Report Date: 24-Jan-2017 13:48

Pace Analytical Services, Inc.

SW846-8260C/EPA 624

Data file : \\v70wintarget\chem\70msv6.i\012217.b\J31889.D
Lab Smp Id: 709443015 Client Smp ID: A2-PZ-1
Inj Date : 22-JAN-2017 17:09 MS Autotune Date: 05-JUL-2016 05:5
Operator : BBL Inst ID: 70msv6.i
Smp Info : 709443015x100,
Misc Info : 1520,
Comment :
Method : \\v70wintarget\chem\70msv6.i\012217.b\121616_8260W.m
Meth Date : 24-Jan-2017 13:17 mnguyen Quant Type: ISTD
Cal Date : 16-DEC-2016 16:06 Cal File: J30742.D
Als bottle: 20
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 8260.sub
Target Version: RC10A
Processing Host: 70MSV2WS10B6

Concentration Formula: Amt * DF * Uf * 1/Vo * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	Sample Volume purged (mL)
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)	REVIEW C
1 Chlorodifluoromethane	51	Compound Not Detected.						(D)
2 Dichlorotetrafluoroethane	135	Compound Not Detected.						
3 Dichlorodifluoromethane	85	Compound Not Detected.						(D)
4 Chloromethane	50	Compound Not Detected.						
5 Vinyl chloride	62	1.464	1.464	(0.422)	56823	11.9872	1200	
6 1,3-Butadiene	54	Compound Not Detected.						
7 Acetaldehyde	44	Compound Not Detected.						
8 Bromomethane	94	Compound Not Detected.						
9 Chloroethane	64	Compound Not Detected.						
10 Dichlorofluoromethane	67	Compound Not Detected.						(D)
11 Trichlorofluoromethane	101	Compound Not Detected.						
12 Ethanol	45	Compound Not Detected.						
13 Diethyl ether (Ethyl ether)	59	Compound Not Detected.						
16 1,1,2-Trichlorotrifluoroethane	101	2.153	2.159	(0.621)	5838	2.40656	241	
14 Acrolein	56	Compound Not Detected.						
15 1,1-Dichloroethene	96	Compound Not Detected.						
17 Acetone	43	Compound Not Detected.						
18 Iodomethane	142	Compound Not Detected.						
19 2-Propanol	45	Compound Not Detected.						
20 Carbon disulfide	76	Compound Not Detected.						
21 Allyl chloride	76	Compound Not Detected.						
22 Acetonitrile	41	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\012217.b\J31889.D
Report Date: 24-Jan-2017 13:48

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)	REVIEW C
	23 Methyl acetate	43	Compound Not Detected.						
	24 Methylene Chloride	84	Compound Not Detected.						
	25 tert-Butyl Alcohol	59	Compound Not Detected.						
	28 Methyl-tert-butyl ether	73	Compound Not Detected.						
	27 trans-1,2-Dichloroethene	96	Compound Not Detected.						
	26 Acrylonitrile	53	Compound Not Detected.						
	30 n-Hexane	57	Compound Not Detected.						
	29 Diisopropyl ether	45	Compound Not Detected.						
	32 Vinyl acetate	43	Compound Not Detected.						
	31 1,1-Dichloroethane	63	2.867	2.873	(0.826)	77244	9.83959	984	
	33 Chloroprene	53	Compound Not Detected.						
	34 Ethyl-tert-butyl ether	59	Compound Not Detected.						
	36 2,2-Dichloropropane	77	Compound Not Detected.						
	35 cis-1,2-Dichloroethene	96	3.196	3.202	(0.921)	808092	194.637	19500	
	39 Ethyl acetate	61	Compound Not Detected.						(D)
	37 2-Butanone (MEK)	43	Compound Not Detected.						
	41 Bromochloromethane	128	Compound Not Detected.						
	42 Tetrahydrofuran	42	Compound Not Detected.						
	43 Chloroform	83	Compound Not Detected.						
	38 Propionitrile	54	Compound Not Detected.						
	46 Cyclohexane	56	Compound Not Detected.						
	45 1,1,1-Trichloroethane	97	Compound Not Detected.						
*	44 Pentafluorobenzene (IS)	168	3.470	3.470	(1.000)	235493	50.0000	(Q)	
	48 Carbon tetrachloride	117	Compound Not Detected.						(D)
	47 1,1-Dichloropropene	75	Compound Not Detected.						(D)
	55 2,2,4-Trimethylpentane	57	Compound Not Detected.						
	51 Benzene	78	Compound Not Detected.						
	40 Methacrylonitrile	67	Compound Not Detected.						
$	50 1,2-Dichloroethane-d4 (S)	65	3.677	3.677	(0.941)	160145	50.9407	50.9	
	56 tert-Amylmethyl ether	73	Compound Not Detected.						
	52 1,2-Dichloroethane	62	Compound Not Detected.						
	57 n-Heptane	43	Compound Not Detected.						
*	58 1,4-Difluorobenzene (IS)	114	3.909	3.909	(1.000)	421852	50.0000		
	59 Trichloroethene	95	4.055	4.055	(1.037)	27329	7.16000	716	
	60 Methylcyclohexane	83	Compound Not Detected.						
	49 Isobutanol	43	Compound Not Detected.						
	53 tert-Amyl Alcohol	59	Compound Not Detected.						
	54 tert-Amyl ethyl ether	59	Compound Not Detected.						
	61 1,2-Dichloropropane	63	Compound Not Detected.						
	63 Methyl methacrylate	69	Compound Not Detected.						
	64 1,4-Dioxane (p-Dioxane)	88	Compound Not Detected.						
	62 Dibromomethane	93	Compound Not Detected.						
	65 Bromodichloromethane	83	Compound Not Detected.						
	66 2-Nitropropane	43	Compound Not Detected.						
	67 2-Chloroethylvinyl ether	63	Compound Not Detected.						
	68 cis-1,3-Dichloropropene	75	Compound Not Detected.						
	69 4-Methyl-2-pentanone (MIBK)	43	Compound Not Detected.						
$	70 Toluene-d8 (S)	98	4.805	4.805	(0.827)	532820	49.2685	49.3	
	71 Toluene	91	Compound Not Detected.						
	72 Methyl isothiocyanate	73	Compound Not Detected.						(D)
	74 trans-1,3-Dichloropropene	75	Compound Not Detected.						
	75 Ethyl methacrylate	69	Compound Not Detected.						
	76 1,1,2-Trichloroethane	83	Compound Not Detected.						
	77 Tetrachloroethene	166	5.208	5.201	(0.896)	3632	1.17155	117	
	78 1,3-Dichloropropane	76	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\012217.b\J31889.D
Report Date: 24-Jan-2017 13:48

							CONCENTRATIONS		
		QUANT SIG					ON-COLUMN	FINAL	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/L)	(ug/L)	REVIEW C
	79 2-Hexanone	43	Compound Not Detected.						
	73 n-Octane	43	Compound Not Detected.						
	81 n-Butyl acetate	43	Compound Not Detected.						
	80 Dibromochloromethane	129	Compound Not Detected.						
	82 1,2-Dibromoethane (EDB)	107	Compound Not Detected.						
*	83 Chlorobenzene-d5 (IS)	82	5.811	5.811	(1.000)	246201	50.0000		
	84 Chlorobenzene	112	Compound Not Detected.						
	86 Ethylbenzene	106	Compound Not Detected.						
	85 1,1,1,2-Tetrachloroethane	131	Compound Not Detected.						
	88 n-Nonane	43	Compound Not Detected.						(D)
	87 m&p-Xylene	106	Compound Not Detected.						
	89 o-Xylene	106	Compound Not Detected.						
	90 Styrene	104	Compound Not Detected.						
	91 Bromoform	173	Compound Not Detected.						
	92 Isopropylbenzene (Cumene)	105	Compound Not Detected.						
$	93 4-Bromofluorobenzene (S)	95	6.671	6.671	(1.148)	190999	48.2048	48.2	
	94 Bromobenzene	156	Compound Not Detected.						
	95 1,1,2,2-Tetrachloroethane	83	Compound Not Detected.						
	98 n-Propylbenzene	91	Compound Not Detected.						
	96 1,2,3-Trichloropropane	110	Compound Not Detected.						
	97 trans-1,4-Dichloro-2-butene	53	Compound Not Detected.						
	103 n-Decane	43	Compound Not Detected.						
	99 2-Chlorotoluene	91	Compound Not Detected.						
	100 4-Ethyltoluene	105	Compound Not Detected.						
	101 1,3,5-Trimethylbenzene	105	Compound Not Detected.						
	102 4-Chlorotoluene	91	Compound Not Detected.						
	104 tert-Butylbenzene	119	Compound Not Detected.						
	105 Pentachloroethane	167	Compound Not Detected.						
	106 1,2,4-Trimethylbenzene	105	Compound Not Detected.						
	107 sec-Butylbenzene	105	Compound Not Detected.						
	109 d-Limonene	136	Compound Not Detected.						
	110 p-Isopropyltoluene	119	Compound Not Detected.						
	108 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	111 1,4-Dichlorobenzene-d4 (IS)	152	7.549	7.549	(1.000)	153914	50.0000		
	112 1,4-Dichlorobenzene	146	Compound Not Detected.						
	113 1,2,3-Trimethylbenzene	105	Compound Not Detected.						
	114 Benzyl chloride	91	Compound Not Detected.						
	115 trans-Decalin	138	Compound Not Detected.						
	116 1,4-Diethylbenzene	119	Compound Not Detected.						
	117 n-Butylbenzene	91	Compound Not Detected.						
	119 n-Undecane	43	Compound Not Detected.						
	118 1,2-Dichlorobenzene	146	Compound Not Detected.						
	120 cis-Decalin	138	Compound Not Detected.						
	121 1,2,4,5-tetramethylbenzene	119	Compound Not Detected.						
	122 1,2-Dibromo-3-chloropropane	75	Compound Not Detected.						
	123 n-Dodecane	43	Compound Not Detected.						
	124 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
	125 Hexachloro-1,3-butadiene	225	Compound Not Detected.						
	126 Naphthalene	128	Compound Not Detected.						
	127 1,2,3-Trichlorobenzene	180	Compound Not Detected.						

Data File: \\v70wintarget\chem\70msv6.i\012217.b\J31889.D
Report Date: 24-Jan-2017 13:48

QC Flag Legend

Q - Qualifier signal failed the ratio test.
D - User disabled compound identification.

Review Codes Legend

:

FIELD DUPLICATE PRECISION
LMC - UTICA
SDG 709443

SAMPLE	PARAMETER	RESULT (µg/L)	DUPLICATE SAMPLE	PARAMETER	RESULT (µg/L)	RPD (%)	DIFFERENCE	RL (µg/L)
MW-4	CIS-1,2-DICHLOROETHENE	1.3	**MW-4-DUP**	CIS-1,2-DICHLOROETHENE	1.1	16.67	0.2	1

QC: RPD < 30%
or DIFFERENCE < RL

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

WO#:709443

709443

Section A Required Client Information:

Company:	Tetra Tech
Address:	1260 Scottsville Rd Rochester NY 14624
Email To:	pat.mcguire2@tetratech.com
Phone:	315-420-5629 Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	pat.mcguire2@tetratech.com
Copy To:	Hanni.haynes@tetratech.com
Purchase Order No.:	
Project Name:	LMC Utica
Project Number:	194-8898

Section C Invoice Information:

Attention:	
Company Name:	Tetra Tech
Address:	175 N Corporate Dr Suite 100 Brookfield, WI
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY: NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / OTHER

Site Location STATE: NY

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	USEPA SW8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	PZ-5	W	G	1-16-17	17:30								X						X		
2	AI-PZ-2	W	G	1-17-17	10:45								X						X		
3	MW-1	W	G	1-17-17	1500								X						X		
4	MW-2	W	G	1-17-17	1300								X						X		
5	PZ-11R	W	G	1-17-17	1615								X						X		
6	MW-21	W	G	1-17-17	1145								X						X		
7	MW-20	W	G	1-17-17	1030								X						X		
8	MW-18	W	G	1-18-17	930								X						X		
9	MW-3	W	G	1-17-17	1515								X						X		
10	PZ-6	W	G	1-16-17	1700								X						X		
X 11	PZ-8	W	G	1-16-17	1645								X						X		
12	PZ-13R	W	G	1-17-17	1630								X						X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
PZ-5, PZ-6 and PZ-8 were all sampled on 01-16 and 01-18. Please only analyze samples taken on 01-18 UNLESS a second vial is needed for analysis. If a second vial is not needed for analysis please discard PZ-5 PZ-6 and PZ-8 samples taken on 01-16	Ali Flake	01-18-17	15:23	[signature] PACE	1/18/17	15:23	
	[signature] PACE	1/18/17	17:00	[signature]	1/19/17	915	3.3

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ali Flake

SIGNATURE of SAMPLER: Ali Flake

DATE Signed (MM/DD/YY): 01-18-17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

1819192

Section A Required Client Information:

Company: Tetra Tech
Address: 1200 Scottsville Rd
Rochester NY [redacted] 14624
Email To: pat.mcguire2@tetratech.com
Phone: 315-420 Fax: -5629
Requested Due Date/TAT:

Section B Required Project Information:

Report To: pat.mcguire2@tetratech.com
Copy To: [redacted] Hanni.haynes@tetratech.com
Purchase Order No.:
Project Name: LML Utica
Project Number: 194-8848

Section C Invoice Information:

Attention:
Company Name: Tetra Tech
Address: 175 N Corporate Dr Suite 100 Brookfield, WI
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test ↓ Y/N	USEPA SW8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-10	W	G	1-17-17	1215								X					X	X		
2	PZ-6	W	G	1-18-17	815								X					X	X		
3	A2-PZ-1	W	G	1-18-17	1130								X					X	X		
4	PZ-8	W	G	1-18-17	745								X					X	X		
5	PZ-5	W	G	1-18-17	845								X					X	X		
6	A2-PZ-2	W	G	1-18-17	1200								X					X	X		
7	MW-4	W	G	1-18-17	1215								X					X	X		
8	MW-4-DUP	W	G	1-18-17	1230								X					X	X		
9	Trip Blank	W		—	—								X					X	X		
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ali Flake	01-18-17	15:23	PACE	1/18/17	15:23	
	PACE	1/18/17	17:00	PACE	1/19/17	915	3-3

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ali Flake
SIGNATURE of SAMPLER: Ali Flake
DATE Signed (MM/DD/YY): 01-18-17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

64 of 1169

Sample Condition Upon Recei

WO#:709443

PM: JDS Due Date: 02/02/17
CLIENT: TETRA

Pace Analytical

Client Name: _____

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Optional: Proj. Due Date: Proj. Name:

Tracking #: 7782 0477 0183

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: TH077 TH078 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.3 °C

Date and Initials of person examining contents: 1/19/17 JR

Temp should be above freezing to 6°C

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☑N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix SL WT OIL			
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A
Exceptions: VOA, micro, TOC, O&G			
Samples checked for dechlorination:	☐Yes	☐No	☑N/A
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A
Trip Blank Present:	☑Yes	☐No	☐N/A
Trip Blank Custody Seals Present	☑Yes	☐No	☐N/A
Pace Trip Blank Lot # (if purchased): _____			

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
Initial when completed:	Lot # of added preservative:
	Date and Time preservative added:
14.	
15.	
16.	

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution: "PZ-6" (@ 8:15 ↓ only rec'd 1 filled VOA, "PZ-8" only rec'd 1 filled VOA (@ 16:15 "PZ-8" @ 7:45, only rec'd 1 filled VOA, "PZ-5" @ 8:45 only rec'd 1 filled VOA,

* PM (Project Manager) review is documented electronically in LIMS.

F-LI-C-002-rev.00

Pace Analytical® www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed

WO#:709443

709443

Section A Required Client Information:

Company:	Tetra Tech
Address:	1260 Scottsville Rd Rochester NY 14624
Email To:	pat.mcguire2@tetratech.com
Phone:	315-420- Fax: 5629
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	pat.mcguire2@tetratech.com
Copy To:	Hanni.haynes@tetratech.com
Purchase Order No.:	
Project Name:	LMC Utica
Project Number:	194-8898

Section C Invoice Information:

Attention:	
Company Name:	Tetra Tech
Address:	175 N Corporate Dr Suite 100
Pace Quote Reference:	Brookfield, WI
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER ______

Site Location STATE: NY

Requested Analysis Filtered (Y/N)

Section D Required Client Information

Matrix Codes MATRIX / CODE: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	NCEPA SW8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	PZ-5	W	G	1-16-17	17:30								X						X		
2	AI-PZ-2	W	G	1-17-17	10:45								X						X		
3	MW-1	W	G	1-17-17	1500								X						X		
4	MW-2	W	G	1-17-17	1300								X						X		
5	PZ-11R	W	G	1-17-17	1615								X						X		
6	MW-21	W	G	1-17-17	1145								X						X		
7	MW-20	W	G	1-17-17	1030								X						X		
8	MW-18	W	G	1-18-17	930								X						X		
9	MW-3	W	G	1-17-17	1515								X						X		
10	PZ-6	W	G	1-16-17	1700								X						X		
X 11	PZ-8	W	G	1-16-17	1645								X						X		
12	PZ-13R	W	G	1-17-17	1630								X						X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
PZ-5, PZ-6 and PZ-8 were all sampled on 01-16 and 01-18. Please only analyze samples taken on 01-18 UNLESS a second vial is needed for analysis. If a second vial is not needed for analysis please discard PZ-5, PZ-6 and PZ-8 samples taken on 01-16	Ali Flake	01-18-17	15:23	[signature] PACE	1/18/17	15:23	
	[signature] PACE	1/18/17	17:00	[signature]	1/19/17	915	3.3

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Ali Flake

SIGNATURE of SAMPLER: Ali Flake DATE Signed (MM/DD/YY): 01-18-17

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

1819192

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Tetra Tech	Report To: Pat.mcguire2@tetratech.com	Attention:
Address: 1200 Scottsville Rd	Copy To: [redacted] Hanni.haynes@tetratech.com	Company Name: Tetra Tech
Rochester NY [redacted] 14624		Address: 175 N Corporate Dr Suite 100 Brookfield, WI
Email To: Pat.mcguire2@tetratech.com	Purchase Order No.:	Pace Quote Reference:
Phone: 315-420-[redacted] 5629	Project Name: LML Utica	Pace Project Manager:
Requested Due Date/TAT:	Project Number: 194-8848	Pace Profile #:

REGULATORY AGENCY

NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: USEPA SW8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-10	W	G	1-17-17	1215								X					X		
2	PZ-6	W	G	1-18-17	815								X					X		
3	A2-PZ-1	W	G	1-18-17	1130								X					X		
4	PZ-8	W	G	1-18-17	745								X					X		
5	PZ-5	W	G	1-18-17	845								X					X		
6	A2-PZ-2	W	G	1-18-17	1200								X					X		
7	MW-4	W	G	1-18-17	1215								X					X		
8	MW-4-DUP	W	G	1-18-17	1230								X					X		
9	Trip Blank	W		—	—								X					X		
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Ali Flake	01-18-17	15:23	PACE	1/18/17	15:23	
	PACE	1/18/17	17:00		1/19/17	915	3-3

ORIGINAL

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Ali Flake		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
SIGNATURE of SAMPLER:	Ali Flake	DATE Signed (MM/DD/YY): 01-18-17				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

67 of 1169

Sample Condition Upon Recei

WO#:709443

PM: JDS Due Date: 02/02/17
CLIENT: TETRA

Pace Analytical

Client Name: _____

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Optional
Proj. Due Date:
Proj. Name:

Tracking #: 7782 0477 0183

Custody Seal on Cooler/Box Present: ☐ yes ☐ no Seals intact: ☑ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other _____

Thermometer Used: TH077 TH078 Type of Ice: (Wet) Blue None ☐ Samples on ice, cooling process has begun

Cooler Temperature: 3.3 °C

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 1/19/17 JR

Comments:

Chain of Custody Present:	☑Yes	☐No	☐N/A
Chain of Custody Filled Out:	☑Yes	☐No	☐N/A
Chain of Custody Relinquished:	☑Yes	☐No	☐N/A
Sampler Name & Signature on COC:	☑Yes	☐No	☐N/A
Samples Arrived within Hold Time:	☑Yes	☐No	☐N/A
Short Hold Time Analysis (<72hr):	☑Yes	☐No	☐N/A
Rush Turn Around Time Requested:	☐Yes	☑No	☐N/A
Sufficient Volume:	☑Yes	☐No	☐N/A
Correct Containers Used:	☑Yes	☐No	☐N/A
-Pace Containers Used:	☑Yes	☐No	☐N/A
Containers Intact:	☑Yes	☐No	☐N/A
Filtered volume received for Dissolved tests	☐Yes	☐No	☐N/A
Sample Labels match COC:	☑Yes	☐No	☐N/A
-Includes date/time/ID/Analysis Matrix SL WT OIL			
All containers needing preservation have been checked.	☐Yes	☐No	☐N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☐N/A
Exceptions: VOA, micro, TOC, O&G			
Samples checked for dechlorination:	☐Yes	☐No	☐N/A
Headspace in VOA Vials (>6mm):	☐Yes	☑No	☐N/A
Trip Blank Present:	☑Yes	☐No	☐N/A
Trip Blank Custody Seals Present	☑Yes	☐No	☐N/A
Pace Trip Blank Lot # (if purchased): _____			

1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
Initial when completed:	Lot # of added preservative:
	Date and Time preservative added:
14.	
15.	
16.	

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution: "PZ-6" (@ 8:15 ↓ only rec'd 1 filled VOA, "PZ-8" only rec'd 1 filled VOA (@ 16:15 "PZ-8" (@ 7:45, only rec'd 1 filled VOA, "PZ-5" (@ 8:45 only rec'd 1 filled VOA,

* PM (Project Manager) review is documented electronically in LIMS.

F-LI-C-002-rev.00

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

PROJECT NARRATIVE

Project: LMC UTICA
Pace Project No.: 709443

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Tetra Tech
Date: February 03, 2017

General Information:
21 samples were analyzed for EPA 8260C/5030C. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 11086

CC: The continuing calibration for this compound is outside of method control limits. The result is estimated.

- LCS (Lab ID: 56862)
  - Acetone
  - Ethanol
- MS (Lab ID: 57613)
  - Acetone
  - Ethanol
- PZ-5 (Lab ID: 709443017)
  - Acetone
- PZ-6 (Lab ID: 709443014)
  - Acetone
- PZ-8 (Lab ID: 709443016)
  - Acetone

QC Batch: 11257

CC: The continuing calibration for this compound is outside of method control limits. The result is estimated.

- LCS (Lab ID: 57605)
  - Acetone
  - Bromoform
  - Ethanol
- MS (Lab ID: 57616)
  - Acetone
  - Bromoform
  - Ethanol

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Pace Analytical Services, LLC
575 Broad Hollow Road
Melville, NY 11747
(631)694-3040

PROJECT NARRATIVE

Project: LMC UTICA
Pace Project No.: 709443

Method: **EPA 8260C/5030C**
Description: 8260C Volatile Organics
Client: Tetra Tech
Date: February 03, 2017

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 11086

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 56862)
  - Bromobenzene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

MSV - FORM II VOA-1
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Instrument ID: 70MSV6

LAB SAMPLE ID	SAMPLE NAME	12D4	BFB	TOL8
56861	56861BLANK	102	97	101
56862	56862LCS	99	95	99
57613	57613MS	100	95	98
57614	57614DUP	103	97	99
709443001	PZ-5	103	95	98
709443002	A1-PZ-2	103	95	98
709443003	MW-1	103	97	97
709443004	MW-2	105	94	101
709443005	PZ-11R	103	96	99
709443006	MW-21	103	99	100
709443007	MW-20	103	98	100
709443008	MW-18	102	96	102
709443011	PZ-8	103	94	98
709443014	PZ-6	102	93	98
709443016	PZ-8	102	95	98
709443017	PZ-5	103	97	98

	QC LIMITS
(12D4) = 1,2-Dichloroethane-d4 (S)	(68-153)
(BFB) = 4-Bromofluorobenzene (S)	(79-124)
(TOL8) = Toluene-d8 (S)	(69-124)

* Values outside of QC Limits

MSV - FORM II VOA-2
WATER VOLATILE SURROGATE RECOVERY

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Instrument ID: 70MSV6

LAB SAMPLE ID	SAMPLE NAME	12D4	BFB	TOL8
57604	57604BLANK	102	97	99
57605	57605LCS	101	97	92
57615	57615DUP	103	100	102
57616	57616MS	102	102	98
709443009	MW-3	103	99	99
709443010	PZ-6	104	97	99
709443012	PZ-13R	102	93	98
709443013	MW-10	103	95	99
709443015	A2-PZ-1	100	102	102
709443018	A2-PZ-2	99	98	100
709443019	MW-4	103	95	101
709443020	MW-4-DUP	104	99	103
709443021	TRIP BLANK	103	96	98

	QC LIMITS
(12D4) = 1,2-Dichloroethane-d4 (S)	(68-153)
(BFB) = 4-Bromofluorobenzene (S)	(79-124)
(TOL8) = Toluene-d8 (S)	(69-124)

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Sample ID : 8440842CCV Date Analyzed: 01/20/2017

Instrument ID: 70MSV6 GC Column: Col 1 Time Analyzed: 06:34

Lab File ID: 012017.B\J31839.D

		AREA CBZ	RT	AREA DCB	RT	AREA DFB	RT	AREA PFB	RT
12 HOUR STD		297631	5.811	189144	7.549	505036	3.909	283031	3.47
UPPER LIMIT		595262	6.311	378288	8.049	1010072	4.409	566062	3.97
LOWER LIMIT		148815.5	5.311	94572	7.049	252518	3.409	141515.5	2.97
LAB SAMPLE ID	SAMPLE NO.								
56861	56861BLANK	263732	5.812	156799	7.549	459674	3.91	254270	3.471
56862	56862LCS	291422	5.812	183714	7.543	493423	3.903	272742	3.471
57613	57613MS	267042	5.812	166848	7.543	446751	3.903	249580	3.471
57614	57614DUP	261820	5.812	156617	7.549	458322	3.909	252160	3.471
709443001	PZ-5	274937	5.812	158783	7.549	463644	3.903	252343	3.471
709443002	A1-PZ-2	277327	5.812	160934	7.549	470579	3.903	257580	3.471
709443003	MW-1	268640	5.812	157878	7.549	453395	3.903	247307	3.471
709443004	MW-2	262450	5.812	151640	7.549	452378	3.909	249325	3.471
709443005	PZ-11R	276793	5.811	166053	7.549	472439	3.903	256773	3.47
709443006	MW-21	262851	5.811	156601	7.549	453301	3.903	247413	3.47
709443007	MW-20	260743	5.811	154341	7.549	455295	3.909	251367	3.47
709443008	MW-18	256201	5.812	149009	7.549	449787	3.903	247213	3.471
709443011	PZ-8	285884	5.812	167486	7.549	483040	3.909	267141	3.47
709443014	PZ-6	273699	5.811	159087	7.549	460158	3.903	254183	3.47
709443016	PZ-8	276197	5.812	161488	7.549	469588	3.903	256953	3.471
709443017	PZ-5	275086	5.811	162073	7.549	465393	3.909	254402	3.47

CBZ = Chlorobenzene-D5 (IS)
DCB = 1,4-Dichlorobenzene-d4 (IS)
DFB = 1,4-Difluorobenzene (IS)
PFB = Pentafluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

MSV - FORM VIII VOA-1
MSV INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Sample ID : 8441580CCV Date Analyzed: 01/22/2017

Instrument ID: 70MSV6 GC Column: Col 1 Time Analyzed: 10:24

Lab File ID: 012217.B\J31868.D

		AREA CBZ	RT	AREA DCB	RT	AREA DFB	RT	AREA PFB	RT
12 HOUR STD		277317	5.812	189604	7.549	487870	3.909	268711	3.471
UPPER LIMIT		554634	6.312	379208	8.049	975740	4.409	537422	3.971
LOWER LIMIT		138658.5	5.312	94802	7.049	243935	3.409	134355.5	2.971
LAB SAMPLE ID	SAMPLE NO.								
57604	57604BLANK	274817	5.812	161944	7.549	474356	3.909	257194	3.47
57605	57605LCS	292131	5.812	185181	7.549	483544	3.909	268990	3.471
57615	57615DUP	254505	5.811	156307	7.549	443906	3.909	238955	3.47
57616	57616MS	259334	5.811	172455	7.549	445762	3.909	241118	3.47
709443009	MW-3	265954	5.811	161118	7.549	455051	3.909	242631	3.47
709443010	PZ-6	266684	5.812	160948	7.549	452348	3.909	245127	3.471
709443012	PZ-13R	268878	5.811	150519	7.549	453352	3.909	241776	3.47
709443013	MW-10	268342	5.812	157284	7.549	450663	3.909	245739	3.471
709443015	A2-PZ-1	263129	5.811	164488	7.549	475810	3.909	257192	3.47
709443015 DL 100	A2-PZ-1	246201	5.812	153914	7.549	421852	3.909	235493	3.471
709443018	A2-PZ-2	256114	5.812	157705	7.549	442273	3.909	244378	3.471
709443018 DL 10	A2-PZ-2	245103	5.811	150232	7.549	420502	3.909	233019	3.47
709443019	MW-4	262406	5.811	155318	7.549	451775	3.909	240874	3.47
709443020	MW-4-DUP	256862	5.812	156227	7.549	446684	3.909	244916	3.471
709443021	TRIP BLANK	271945	5.811	160733	7.549	455821	3.909	251459	3.47

CBZ = Chlorobenzene-D5 (IS)
DCB = 1,4-Dichlorobenzene-d4 (IS)
DFB = 1,4-Difluorobenzene (IS)
PFB = Pentafluorobenzene (IS)

AREA UPPER LIMIT = 200% of Internal Standard Area
AREA LOWER LIMIT = 50% of Internal Standard Area
RT UPPER LIMIT = +0.50 minutes of Internal Standard RT
RT LOWER LIMIT = -0.50 minutes of Internal Standard RT

* Values outside of QC Limits

SAMPLE NO.

56861BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Instrument ID: 70MSV6 Matrix: Water Lab Sample ID: 56861

Lab File ID: 012017.B\J31841.D Date Analyzed: 01/20/2017 Time: 07:23

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
56862LCS	56862	012017.B\J31842.D	01/20/2017 07:44
PZ-8	709443011	012017.B\J31852.D	01/20/2017 10:54
PZ-6	709443014	012017.B\J31853.D	01/20/2017 11:12
PZ-8	709443016	012017.B\J31854.D	01/20/2017 11:30
PZ-5	709443017	012017.B\J31855.D	01/20/2017 11:48
PZ-5	709443001	012017.B\J31856.D	01/20/2017 12:05
A1-PZ-2	709443002	012017.B\J31857.D	01/20/2017 12:23
MW-1	709443003	012017.B\J31858.D	01/20/2017 12:41
MW-2	709443004	012017.B\J31859.D	01/20/2017 12:59
PZ-11R	709443005	012017.B\J31860.D	01/20/2017 13:17
MW-21	709443006	012017.B\J31861.D	01/20/2017 13:35
MW-20	709443007	012017.B\J31862.D	01/20/2017 13:53
57614DUP	57614	012017.B\J31863.D	01/20/2017 14:11
MW-18	709443008	012017.B\J31864.D	01/20/2017 14:29
57613MS	57613	012017.B\J31866.D	01/20/2017 15:05

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 07:23 Lab Sample ID: 56861

Date Analyzed: 01/20/2017 07:23 Lab File ID: 012017.B\J31841.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 07:23 Lab Sample ID: 56861

Date Analyzed: 01/20/2017 07:23 Lab File ID: 012017.B\J31841.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New York
Lab Sample ID: 56862LCS
Date Extracted: 01/20/2017
Date Analyzed (1): 01/20/2017
Instrument: 70MSV6
LCS Lot No: 9340
Lab File ID: 012017.B\J31842.D
SDG No.: 709443

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	50.0	51.8	104	23-188
Benzene	50.0	48.8	98	73-119
Bromobenzene	50.0	51.5	103	72-102
Bromochloromethane	50.0	49.5	99	81-116
Bromodichloromethane	50.0	49.9	100	78-117
Bromoform	50.0	52.7	105	65-122
Bromomethane	50.0	47.3	95	52-147
2-Butanone (MEK)	50.0	50.9	102	44-162
n-Butylbenzene	50.0	49.3	99	73-107
sec-Butylbenzene	50.0	48.0	96	72-103
tert-Butylbenzene	50.0	48.0	96	68-100
Carbon disulfide	50.0	48.6	97	41-144
Carbon tetrachloride	50.0	50.1	100	59-120
Chlorobenzene	50.0	47.9	96	75-113
Chlorodifluoromethane	50.0	50.8	102	43-140
Chloroethane	50.0	50.5	101	49-151
Chloroform	50.0	49.4	99	72-122
Chloromethane	50.0	51.6	103	46-144
2-Chlorotoluene	50.0	48.2	96	74-101
4-Chlorotoluene	50.0	49.6	99	74-101
Dibromochloromethane	50.0	51.9	104	70-120
1,2-Dibromoethane (EDB)	50.0	52.6	105	83-115
Dibromomethane	50.0	49.9	100	75-125
1,2-Dichlorobenzene	50.0	52.0	104	74-113
1,3-Dichlorobenzene	50.0	50.3	101	71-112
1,4-Dichlorobenzene	50.0	50.0	100	71-113
trans-1,4-Dichloro-2-butene	50.0	42.4	85	71-121
Dichlorodifluoromethane	50.0	40.0	80	22-154
1,1-Dichloroethane	50.0	49.4	99	83-151
1,2-Dichloroethane	50.0	50.3	101	74-129
1,1-Dichloroethene	50.0	51.7	103	45-146
cis-1,2-Dichloroethene	50.0	48.0	96	72-121
trans-1,2-Dichloroethene	50.0	48.1	96	56-142
1,2-Dichloropropane	50.0	48.9	98	75-117
1,3-Dichloropropane	50.0	49.4	99	74-112
2,2-Dichloropropane	50.0	50.1	100	63-133
1,1-Dichloropropene	50.0	48.6	97	59-127
cis-1,3-Dichloropropene	50.0	52.0	104	78-116
trans-1,3-Dichloropropene	50.0	54.2	108	79-116
1,4-Diethylbenzene	50.0	49.1	98	56-130
Ethanol	1250	822	66	10-151
Ethylbenzene	50.0	47.0	94	70-113
Hexachloro-1,3-butadiene	50.0	53.1	106	59-121
2-Hexanone	50.0	47.3	95	32-183
Isopropylbenzene (Cumene)	50.0	47.6	95	67-115
p-Isopropyltoluene	50.0	48.5	97	73-101
Methylene Chloride	50.0	47.5	95	61-142

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New York
Lab Sample ID: 56862LCS
Date Extracted: 01/20/2017
Date Analyzed (1): 01/20/2017
Instrument: 70MSV6
LCS Lot No: 9340
Lab File ID: 012017.B\J31842.D
SDG No.: 709443

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
4-Methyl-2-pentanone (MIBK)	50.0	53.9	108	69-132
Methyl-tert-butyl ether	50.0	49.5	99	72-131
Naphthalene	50.0	50.3	101	70-118
n-Propylbenzene	50.0	47.8	96	68-116
Styrene	50.0	49.8	100	72-118
1,1,1,2-Tetrachloroethane	50.0	50.5	101	74-113
1,1,2,2-Tetrachloroethane	50.0	49.5	99	74-121
Tetrachloroethene	50.0	48.3	97	60-128
1,2,4,5-tetramethylbenzene	50.0	51.2	102	66-103
Toluene	50.0	47.3	95	72-119
1,2,3-Trichlorobenzene	50.0	50.6	101	67-103
1,2,4-Trichlorobenzene	50.0	51.3	103	66-116
1,1,1-Trichloroethane	50.0	48.5	97	65-118
1,1,2-Trichloroethane	50.0	49.0	98	80-117
Trichloroethene	50.0	47.9	96	69-117
Trichlorofluoromethane	50.0	52.1	104	27-173
1,2,3-Trichloropropane	50.0	52.9	106	71-123
1,2,4-Trimethylbenzene	50.0	49.0	98	68-116
1,3,5-Trimethylbenzene	50.0	48.0	96	67-116
Vinyl chloride	50.0	50.6	101	43-143
Xylene (Total)	150	145	97	71-109
m&p-Xylene	100	97.5	97	72-115
o-Xylene	50.0	48.0	96	73-117

Spike Recovery: 1 out of 70 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York | Matrix Spike - Sample No: 57613MS

Date Extracted: 01/20/2017 | Date Analyzed (1): 01/20/2017

Instrument: 70MSV6 | Lab File ID: 012017.B\J31866.D

Parent Sample ID: MW-1 | SDG No.: 709443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	<1.0	49.4	99	74-113
1,1,1-Trichloroethane	50.0	<1.0	48.4	97	65-118
1,1,2,2-Tetrachloroethane	50.0	<1.0	47.7	95	74-121
1,1,2-Trichloroethane	50.0	<1.0	48.9	98	80-117
1,1-Dichloroethane	50.0	1.9	50.6	97	83-151
1,1-Dichloroethene	50.0	<1.0	50.5	101	45-146
1,1-Dichloropropene	50.0	<1.0	48.2	96	59-127
1,2,3-Trichlorobenzene	50.0	<1.0	50.1	100	67-103
1,2,3-Trichloropropane	50.0	<1.0	52.5	105	71-123
1,2,4,5-tetramethylbenzene	50.0	<1.0	50.8	102	66-103
1,2,4-Trichlorobenzene	50.0	<1.0	51.2	102	66-116
1,2,4-Trimethylbenzene	50.0	<1.0	49.3	99	68-116
1,2-Dibromoethane (EDB)	50.0	<1.0	51.2	102	83-115
1,2-Dichlorobenzene	50.0	<1.0	50.6	101	74-113
1,2-Dichloroethane	50.0	<1.0	49.8	100	74-129
1,2-Dichloropropane	50.0	<1.0	49.0	98	75-117
1,3,5-Trimethylbenzene	50.0	<1.0	47.8	96	67-116
1,3-Dichlorobenzene	50.0	<1.0	51.2	102	71-112
1,3-Dichloropropane	50.0	<1.0	48.8	98	74-112
1,4-Dichlorobenzene	50.0	<1.0	49.8	100	71-113
1,4-Diethylbenzene	50.0	<1.0	49.4	99	56-130
2,2-Dichloropropane	50.0	<1.0	49.6	99	63-133
2-Butanone (MEK)	50.0	<1.0	51.4	103	44-162
2-Chlorotoluene	50.0	<1.0	47.9	96	74-101
2-Hexanone	50.0	<1.0	46.0	92	32-183
4-Chlorotoluene	50.0	<1.0	49.0	98	74-101
4-Methyl-2-pentanone (MIBK)	50.0	<1.0	52.6	105	69-132
Acetone	50.0	<5.0	47.3	95	23-188
Benzene	50.0	<1.0	49.5	99	73-119
Bromobenzene	50.0	<1.0	51.2	102	72-102
Bromochloromethane	50.0	<1.0	49.3	99	81-116
Bromodichloromethane	50.0	<1.0	50.0	100	78-117
Bromoform	50.0	<1.0	50.3	101	65-122
Bromomethane	50.0	<1.0	45.6	91	52-147
Carbon disulfide	50.0	<1.0	47.3	95	41-144
Carbon tetrachloride	50.0	<1.0	47.4	95	59-120
Chlorobenzene	50.0	<1.0	47.5	95	75-113
Chlorodifluoromethane	50.0	<1.0	49.6	99	43-140
Chloroethane	50.0	<1.0	50.3	101	49-151
Chloroform	50.0	<1.0	49.8	100	72-122
Chloromethane	50.0	<1.0	49.9	100	46-144
Dibromochloromethane	50.0	<1.0	50.2	100	70-120
Dibromomethane	50.0	<1.0	50.4	101	75-125
Dichlorodifluoromethane	50.0	<1.0	37.8	76	22-154
Ethanol	1250	<250	1030	82	10-151
Ethylbenzene	50.0	<1.0	45.8	92	70-113
Hexachloro-1,3-butadiene	50.0	<1.0	51.8	104	59-121

MSV - FORM III VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Matrix Spike - Sample No: 57613MS
Date Extracted: 01/20/2017
Date Analyzed (1): 01/20/2017
Instrument: 70MSV6
Lab File ID: 012017.B\J31866.D
Parent Sample ID: MW-1
SDG No.: 709443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
Isopropylbenzene (Cumene)	50.0	<1.0	46.7	93	67-115
Methyl-tert-butyl ether	50.0	<1.0	47.7	95	72-131
Methylene Chloride	50.0	<1.0	47.1	94	61-142
Naphthalene	50.0	<1.0	49.8	100	70-118
Styrene	50.0	<1.0	49.0	98	72-118
Tetrachloroethene	50.0	50.2	92.7	85	60-128
Toluene	50.0	<1.0	47.4	95	72-119
Trichloroethene	50.0	13.4	60.1	93	69-117
Trichlorofluoromethane	50.0	<1.0	51.3	103	27-173
Vinyl chloride	50.0	<1.0	49.7	99	43-143
Xylene (Total)	150	<1.0	143	96	71-109
cis-1,2-Dichloroethene	50.0	13.6	60.1	93	72-121
cis-1,3-Dichloropropene	50.0	<1.0	51.7	103	78-116
m&p-Xylene	100	<2.0	95.9	96	72-115
n-Butylbenzene	50.0	<1.0	48.9	98	73-107
n-Propylbenzene	50.0	<1.0	46.7	93	68-116
o-Xylene	50.0	<1.0	47.4	95	73-117
p-Isopropyltoluene	50.0	<1.0	48.6	97	73-101
sec-Butylbenzene	50.0	<1.0	46.2	92	72-103
tert-Butylbenzene	50.0	<1.0	46.9	94	68-100
trans-1,2-Dichloroethene	50.0	<1.0	47.5	95	56-142
trans-1,3-Dichloropropene	50.0	<1.0	54.5	109	79-116
trans-1,4-Dichloro-2-butene	50.0	<1.0	40.1	80	71-121

Spike Recovery: 0 out of 70 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE SAMPLE/DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Duplicate Sample No: 709443004DUP
Date Extracted: 01/20/2017
Date Analyzed: 01/20/2017
Instrument 70MSV6
Lab File ID: 012017.B\J31863.D
Lab Sample ID: MW-2
SDG No.: 709443

COMPOUND	SAMPLE CONCENTRATION (ug/L)	DUPLICATE CONCENTRATION (ug/L)	RPD	RPD LIMITS
1,1,1,2-Tetrachloroethane	<1.0	<1.0		0-20
1,1,1-Trichloroethane	<1.0	<1.0		0-20
1,1,2,2-Tetrachloroethane	<1.0	<1.0		0-20
1,1,2-Trichloroethane	<1.0	<1.0		0-20
1,1-Dichloroethane	3.7	3.7	0	0-20
1,1-Dichloroethene	<1.0	<1.0		0-20
1,1-Dichloropropene	<1.0	<1.0		0-20
1,2,3-Trichlorobenzene	<1.0	<1.0		0-20
1,2,3-Trichloropropane	<1.0	<1.0		0-20
1,2,4,5-tetramethylbenzene	<1.0	<1.0		0-20
1,2,4-Trichlorobenzene	<1.0	<1.0		0-20
1,2,4-Trimethylbenzene	<1.0	<1.0		0-20
1,2-Dibromoethane (EDB)	<1.0	<1.0		0-20
1,2-Dichlorobenzene	<1.0	<1.0		0-20
1,2-Dichloroethane	<1.0	<1.0		0-20
1,2-Dichloropropane	<1.0	<1.0		0-20
1,3,5-Trimethylbenzene	<1.0	<1.0		0-20
1,3-Dichlorobenzene	<1.0	<1.0		0-20
1,3-Dichloropropane	<1.0	<1.0		0-20
1,4-Dichlorobenzene	<1.0	<1.0		0-20
1,4-Diethylbenzene	<1.0	<1.0		0-20
2,2-Dichloropropane	<1.0	<1.0		0-20
2-Butanone (MEK)	<1.0	<1.0		0-20
2-Chlorotoluene	<1.0	<1.0		0-20
2-Hexanone	<1.0	<1.0		0-20
4-Chlorotoluene	<1.0	<1.0		0-20
4-Methyl-2-pentanone (MIBK)	<1.0	<1.0		0-20
Acetone	<5.0	<5.0		0-20
Benzene	<1.0	<1.0		0-20
Bromobenzene	<1.0	<1.0		0-20
Bromochloromethane	<1.0	<1.0		0-20
Bromodichloromethane	<1.0	<1.0		0-20
Bromoform	<1.0	<1.0		0-20
Bromomethane	<1.0	<1.0		0-20
Carbon disulfide	<1.0	<1.0		0-20
Carbon tetrachloride	<1.0	<1.0		0-20
Chlorobenzene	<1.0	<1.0		0-20
Chlorodifluoromethane	<1.0	<1.0		0-20
Chloroethane	<1.0	<1.0		0-20
Chloroform	<1.0	<1.0		0-20
Chloromethane	<1.0	<1.0		0-20
Dibromochloromethane	<1.0	<1.0		0-20
Dibromomethane	<1.0	<1.0		0-20
Dichlorodifluoromethane	<1.0	<1.0		0-20
Ethanol	<250	<250		0-20

RPD: 0 out of 1 outside limits.

02/03/2017 10:32

MSV - FORM III VOA-2

WATER VOLATILE SAMPLE/DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Duplicate Sample No: 709443004DUP
Date Extracted: 01/20/2017
Date Analyzed: 01/20/2017
Instrument 70MSV6
Lab File ID: 012017.B\J31863.D
Lab Sample ID: MW-2
SDG No.: 709443

COMPOUND	SAMPLE CONCENTRATION (ug/L)	DUPLICATE CONCENTRATION (ug/L)	RPD	RPD LIMITS
Ethylbenzene	<1.0	<1.0		0-20
Hexachloro-1,3-butadiene	<1.0	<1.0		0-20
Isopropylbenzene (Cumene)	<1.0	<1.0		0-20
Methyl-tert-butyl ether	<1.0	<1.0		0-20
Methylene Chloride	<1.0	<1.0		0-20
Naphthalene	<1.0	<1.0		0-20
Styrene	<1.0	<1.0		0-20
Tetrachloroethene	<1.0	<1.0		0-20
Toluene	<1.0	<1.0		0-20
Trichloroethene	<1.0	<1.0		0-20
Trichlorofluoromethane	<1.0	<1.0		0-20
Vinyl chloride	18.5	18.1	2	0-20
Xylene (Total)	<1.0	<1.0		0-20
cis-1,2-Dichloroethene	7.3	7.2	1	0-20
cis-1,3-Dichloropropene	<1.0	<1.0		0-20
m&p-Xylene	<2.0	<2.0		0-20
n-Butylbenzene	<1.0	<1.0		0-20
n-Propylbenzene	<1.0	<1.0		0-20
o-Xylene	<1.0	<1.0		0-20
p-Isopropyltoluene	<1.0	<1.0		0-20
sec-Butylbenzene	<1.0	<1.0		0-20
tert-Butylbenzene	<1.0	<1.0		0-20
trans-1,2-Dichloroethene	1.6	1.5	1	0-20
trans-1,3-Dichloropropene	<1.0	<1.0		0-20
trans-1,4-Dichloro-2-butene	<1.0	<1.0		0-20

RPD: 0 out of 4 outside limits.

SAMPLE NO.

57604BLANK

MSV - FORM IV VOA-1
VOLATILE METHOD BLANK SUMMARY

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Instrument ID: 70MSV6 Matrix: Water Lab Sample ID: 57604

Lab File ID: 012217.B\J31870.D Date Analyzed: 01/22/2017 Time: 11:21

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	ANALYZED
57605LCS	57605	012217.B\J31871.D	01/22/2017 11:46
TRIP BLANK	709443021	012217.B\J31874.D	01/22/2017 12:40
MW-3	709443009	012217.B\J31880.D	01/22/2017 14:27
PZ-6	709443010	012217.B\J31881.D	01/22/2017 14:45
PZ-13R	709443012	012217.B\J31882.D	01/22/2017 15:03
MW-10	709443013	012217.B\J31883.D	01/22/2017 15:21
A2-PZ-1	709443015	012217.B\J31884.D	01/22/2017 15:39
A2-PZ-2	709443018	012217.B\J31887.D	01/22/2017 16:33
A2-PZ-2	709443018	012217.B\J31888.D	01/22/2017 16:51
A2-PZ-1	709443015	012217.B\J31889.D	01/22/2017 17:09
MW-4	709443019	012217.B\J31894.D	01/22/2017 18:40
MW-4-DUP	709443020	012217.B\J31895.D	01/22/2017 18:58
57615DUP	57615	012217.B\J31896.D	01/22/2017 19:16
57616MS	57616	012217.B\J31897.D	01/22/2017 19:34

SAMPLE NO.

BLANK

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 11:21 Lab Sample ID: 57604

Date Analyzed: 01/22/2017 11:21 Lab File ID: 012217.B\J31870.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	<1.0	U
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

BLANK

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 11:21 Lab Sample ID: 57604

Date Analyzed: 01/22/2017 11:21 Lab File ID: 012217.B\J31870.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	<1.0	U
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	<1.0	U
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

MSV - FORM III VOA-1

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New York
Lab Sample ID: 57605LCS
Date Extracted: 01/22/2017
Date Analyzed (1): 01/22/2017
Instrument: 70MSV6
LCS Lot No: 9340
Lab File ID: 012217.B\J31871.D
SDG No.: 709443

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
Acetone	50.0	53.9	108	23-188
Benzene	50.0	45.9	92	73-119
Bromobenzene	50.0	50.2	100	72-102
Bromochloromethane	50.0	50.0	100	81-116
Bromodichloromethane	50.0	48.4	97	78-117
Bromoform	50.0	55.2	110	65-122
Bromomethane	50.0	42.7	85	52-147
2-Butanone (MEK)	50.0	54.8	110	44-162
n-Butylbenzene	50.0	45.0	90	73-107
sec-Butylbenzene	50.0	43.0	86	72-103
tert-Butylbenzene	50.0	43.5	87	68-100
Carbon disulfide	50.0	42.4	85	41-144
Carbon tetrachloride	50.0	44.9	90	59-120
Chlorobenzene	50.0	45.8	92	75-113
Chlorodifluoromethane	50.0	44.2	88	43-140
Chloroethane	50.0	45.6	91	49-151
Chloroform	50.0	47.1	94	72-122
Chloromethane	50.0	45.1	90	46-144
2-Chlorotoluene	50.0	46.3	93	74-101
4-Chlorotoluene	50.0	47.6	95	74-101
Dibromochloromethane	50.0	51.8	104	70-120
1,2-Dibromoethane (EDB)	50.0	53.0	106	83-115
Dibromomethane	50.0	49.2	98	75-125
1,2-Dichlorobenzene	50.0	50.2	100	74-113
1,3-Dichlorobenzene	50.0	49.1	98	71-112
1,4-Dichlorobenzene	50.0	48.6	97	71-113
trans-1,4-Dichloro-2-butene	50.0	44.5	89	71-121
Dichlorodifluoromethane	50.0	33.3	67	22-154
1,1-Dichloroethane	50.0	46.2	92	83-151
1,2-Dichloroethane	50.0	50.0	100	74-129
1,1-Dichloroethene	50.0	45.1	90	45-146
cis-1,2-Dichloroethene	50.0	45.8	92	72-121
trans-1,2-Dichloroethene	50.0	43.5	87	56-142
1,2-Dichloropropane	50.0	46.6	93	75-117
1,3-Dichloropropane	50.0	47.7	95	74-112
2,2-Dichloropropane	50.0	45.3	91	63-133
1,1-Dichloropropene	50.0	43.3	87	59-127
cis-1,3-Dichloropropene	50.0	48.9	98	78-116
trans-1,3-Dichloropropene	50.0	52.2	104	79-116
1,4-Diethylbenzene	50.0	45.5	91	56-130
Ethanol	1250	1540	123	10-151
Ethylbenzene	50.0	42.3	85	70-113
Hexachloro-1,3-butadiene	50.0	47.3	95	59-121
2-Hexanone	50.0	48.3	97	32-183
Isopropylbenzene (Cumene)	50.0	43.2	86	67-115
p-Isopropyltoluene	50.0	44.8	90	73-101
Methylene Chloride	50.0	46.6	93	61-142

MSV - FORM III VOA-2

WATER LABORATORY CONTROL SAMPLE RECOVERY

Lab Name: Pace Analytical - New York
Lab Sample ID: 57605LCS
Date Extracted: 01/22/2017
Date Analyzed (1): 01/22/2017
Instrument: 70MSV6
LCS Lot No: 9340
Lab File ID: 012217.B\J31871.D
SDG No.: 709443

COMPOUND	AMOUNT ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS %REC	QC LIMITS REC.
4-Methyl-2-pentanone (MIBK)	50.0	53.4	107	69-132
Methyl-tert-butyl ether	50.0	50.5	101	72-131
Naphthalene	50.0	50.2	100	70-118
n-Propylbenzene	50.0	43.5	87	68-116
Styrene	50.0	47.6	95	72-118
1,1,1,2-Tetrachloroethane	50.0	49.1	98	74-113
1,1,2,2-Tetrachloroethane	50.0	52.5	105	74-121
Tetrachloroethene	50.0	40.9	82	60-128
1,2,4,5-tetramethylbenzene	50.0	49.6	99	66-103
Toluene	50.0	41.7	83	72-119
1,2,3-Trichlorobenzene	50.0	49.3	99	67-103
1,2,4-Trichlorobenzene	50.0	49.5	99	66-116
1,1,1-Trichloroethane	50.0	44.1	88	65-118
1,1,2-Trichloroethane	50.0	47.7	95	80-117
Trichloroethene	50.0	43.3	87	69-117
Trichlorofluoromethane	50.0	45.8	92	27-173
1,2,3-Trichloropropane	50.0	56.6	113	71-123
1,2,4-Trimethylbenzene	50.0	47.4	95	68-116
1,3,5-Trimethylbenzene	50.0	45.2	90	67-116
Vinyl chloride	50.0	43.4	87	43-143
Xylene (Total)	150	134	89	71-109
m&p-Xylene	100	88.8	89	72-115
o-Xylene	50.0	44.9	90	73-117

Spike Recovery: 0 out of 70 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Matrix Spike - Sample No: 57616MS
Date Extracted: 01/22/2017
Date Analyzed (1): 01/22/2017
Instrument: 70MSV6
Lab File ID: 012217.B\J31897.D
Parent Sample ID: PZ-6
SDG No.: 709443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
1,1,1,2-Tetrachloroethane	50.0	<1.0	50.6	101	74-113
1,1,1-Trichloroethane	50.0	<1.0	48.8	98	65-118
1,1,2,2-Tetrachloroethane	50.0	<1.0	49.2	98	74-121
1,1,2-Trichloroethane	50.0	<1.0	48.7	97	80-117
1,1-Dichloroethane	50.0	<1.0	51.0	102	83-151
1,1-Dichloroethene	50.0	<1.0	52.8	106	45-146
1,1-Dichloropropene	50.0	<1.0	48.6	97	59-127
1,2,3-Trichlorobenzene	50.0	<1.0	45.5	91	67-103
1,2,3-Trichloropropane	50.0	<1.0	53.0	106	71-123
1,2,4,5-tetramethylbenzene	50.0	<1.0	47.6	95	66-103
1,2,4-Trichlorobenzene	50.0	<1.0	46.5	93	66-116
1,2,4-Trimethylbenzene	50.0	<1.0	47.8	96	68-116
1,2-Dibromoethane (EDB)	50.0	<1.0	51.4	103	83-115
1,2-Dichlorobenzene	50.0	<1.0	49.2	98	74-113
1,2-Dichloroethane	50.0	<1.0	52.2	104	74-129
1,2-Dichloropropane	50.0	<1.0	50.0	100	75-117
1,3,5-Trimethylbenzene	50.0	<1.0	46.0	92	67-116
1,3-Dichlorobenzene	50.0	<1.0	48.3	97	71-112
1,3-Dichloropropane	50.0	<1.0	49.2	98	74-112
1,4-Dichlorobenzene	50.0	<1.0	48.2	96	71-113
1,4-Diethylbenzene	50.0	<1.0	45.4	91	56-130
2,2-Dichloropropane	50.0	<1.0	48.0	96	63-133
2-Butanone (MEK)	50.0	<1.0	54.3	109	44-162
2-Chlorotoluene	50.0	<1.0	47.2	94	74-101
2-Hexanone	50.0	<1.0	46.5	93	32-183
4-Chlorotoluene	50.0	<1.0	48.1	96	74-101
4-Methyl-2-pentanone (MIBK)	50.0	<1.0	52.0	104	69-132
Acetone	50.0	<5.0	52.7	105	23-188
Benzene	50.0	<1.0	50.0	100	73-119
Bromobenzene	50.0	<1.0	49.9	100	72-102
Bromochloromethane	50.0	<1.0	51.5	103	81-116
Bromodichloromethane	50.0	<1.0	48.9	98	78-117
Bromoform	50.0	<1.0	52.7	105	65-122
Bromomethane	50.0	<1.0	47.1	94	52-147
Carbon disulfide	50.0	1.4	49.7	97	41-144
Carbon tetrachloride	50.0	<1.0	47.7	95	59-120
Chlorobenzene	50.0	<1.0	48.1	96	75-113
Chlorodifluoromethane	50.0	<1.0	51.9	104	43-140
Chloroethane	50.0	<1.0	52.4	105	49-151
Chloroform	50.0	<1.0	51.4	103	72-122
Chloromethane	50.0	<1.0	50.9	102	46-144
Dibromochloromethane	50.0	<1.0	52.4	105	70-120
Dibromomethane	50.0	<1.0	51.0	102	75-125
Dichlorodifluoromethane	50.0	<1.0	38.6	77	22-154
Ethanol	1250	<250	1410	113	10-151
Ethylbenzene	50.0	<1.0	46.0	92	70-113
Hexachloro-1,3-butadiene	50.0	<1.0	40.8	82	59-121

MSV - FORM III VOA-2

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Matrix Spike - Sample No: 57616MS
Date Extracted: 01/22/2017
Date Analyzed (1): 01/22/2017
Instrument: 70MSV6
Lab File ID: 012217.B\J31897.D
Parent Sample ID: PZ-6
SDG No.: 709443

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS %REC	QC LIMITS REC.
Isopropylbenzene (Cumene)	50.0	<1.0	45.2	90	67-115
Methyl-tert-butyl ether	50.0	<1.0	51.2	102	72-131
Methylene Chloride	50.0	<1.0	49.6	99	61-142
Naphthalene	50.0	<1.0	46.2	92	70-118
Styrene	50.0	<1.0	48.8	98	72-118
Tetrachloroethene	50.0	1.9	49.2	95	60-128
Toluene	50.0	<1.0	46.0	92	72-119
Trichloroethene	50.0	12.9	63.1	100	69-117
Trichlorofluoromethane	50.0	<1.0	54.7	109	27-173
Vinyl chloride	50.0	1.1	52.5	103	43-143
Xylene (Total)	150	<1.0	146	97	71-109
cis-1,2-Dichloroethene	50.0	34.3	88.9	109	72-121
cis-1,3-Dichloropropene	50.0	<1.0	50.3	101	78-116
m&p-Xylene	100	<2.0	97.3	97	72-115
n-Butylbenzene	50.0	<1.0	44.6	89	73-107
n-Propylbenzene	50.0	<1.0	44.9	90	68-116
o-Xylene	50.0	<1.0	48.7	97	73-117
p-Isopropyltoluene	50.0	<1.0	45.7	91	73-101
sec-Butylbenzene	50.0	<1.0	44.1	88	72-103
tert-Butylbenzene	50.0	<1.0	45.2	90	68-100
trans-1,2-Dichloroethene	50.0	<1.0	49.3	99	56-142
trans-1,3-Dichloropropene	50.0	<1.0	51.5	103	79-116
trans-1,4-Dichloro-2-butene	50.0	<1.0	39.7	79	71-121

Spike Recovery: 0 out of 70 outside limits.

MSV - FORM III VOA-1

WATER VOLATILE SAMPLE/DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Duplicate Sample No: 709443009DUP
Date Extracted: 01/22/2017
Date Analyzed: 01/22/2017
Instrument 70MSV6
Lab File ID: 012217.B\J31896.D
Lab Sample ID: MW-3
SDG No.: 709443

COMPOUND	SAMPLE CONCENTRATION (ug/L)	DUPLICATE CONCENTRATION (ug/L)	RPD	RPD LIMITS
1,1,1,2-Tetrachloroethane	<1.0	<1.0		0-20
1,1,1-Trichloroethane	<1.0	<1.0		0-20
1,1,2,2-Tetrachloroethane	<1.0	<1.0		0-20
1,1,2-Trichloroethane	<1.0	<1.0		0-20
1,1-Dichloroethane	2.9	3.0	1	0-20
1,1-Dichloroethene	<1.0	<1.0		0-20
1,1-Dichloropropene	<1.0	<1.0		0-20
1,2,3-Trichlorobenzene	<1.0	<1.0		0-20
1,2,3-Trichloropropane	<1.0	<1.0		0-20
1,2,4,5-tetramethylbenzene	<1.0	<1.0		0-20
1,2,4-Trichlorobenzene	<1.0	<1.0		0-20
1,2,4-Trimethylbenzene	<1.0	<1.0		0-20
1,2-Dibromoethane (EDB)	<1.0	<1.0		0-20
1,2-Dichlorobenzene	<1.0	<1.0		0-20
1,2-Dichloroethane	<1.0	<1.0		0-20
1,2-Dichloropropane	<1.0	<1.0		0-20
1,3,5-Trimethylbenzene	<1.0	<1.0		0-20
1,3-Dichlorobenzene	<1.0	<1.0		0-20
1,3-Dichloropropane	<1.0	<1.0		0-20
1,4-Dichlorobenzene	<1.0	<1.0		0-20
1,4-Diethylbenzene	<1.0	<1.0		0-20
2,2-Dichloropropane	<1.0	<1.0		0-20
2-Butanone (MEK)	<1.0	<1.0		0-20
2-Chlorotoluene	<1.0	<1.0		0-20
2-Hexanone	<1.0	<1.0		0-20
4-Chlorotoluene	<1.0	<1.0		0-20
4-Methyl-2-pentanone (MIBK)	<1.0	<1.0		0-20
Acetone	<5.0	<5.0		0-20
Benzene	<1.0	<1.0		0-20
Bromobenzene	<1.0	<1.0		0-20
Bromochloromethane	<1.0	<1.0		0-20
Bromodichloromethane	<1.0	<1.0		0-20
Bromoform	<1.0	<1.0		0-20
Bromomethane	<1.0	<1.0		0-20
Carbon disulfide	<1.0	<1.0		0-20
Carbon tetrachloride	<1.0	<1.0		0-20
Chlorobenzene	<1.0	<1.0		0-20
Chlorodifluoromethane	<1.0	<1.0		0-20
Chloroethane	<1.0	<1.0		0-20
Chloroform	<1.0	<1.0		0-20
Chloromethane	<1.0	<1.0		0-20
Dibromochloromethane	<1.0	<1.0		0-20
Dibromomethane	<1.0	<1.0		0-20
Dichlorodifluoromethane	<1.0	<1.0		0-20
Ethanol	<250	<250		0-20

RPD: 0 out of 1 outside limits.

MSV - FORM III VOA-2

WATER VOLATILE SAMPLE/DUPLICATE RECOVERY

Lab Name: Pace Analytical - New York
Duplicate Sample No: 709443009DUP
Date Extracted: 01/22/2017
Date Analyzed: 01/22/2017
Instrument 70MSV6
Lab File ID: 012217.B\J31896.D
Lab Sample ID: MW-3
SDG No.: 709443

COMPOUND	SAMPLE CONCENTRATION (ug/L)	DUPLICATE CONCENTRATION (ug/L)	RPD	RPD LIMITS
Ethylbenzene	<1.0	<1.0		0-20
Hexachloro-1,3-butadiene	<1.0	<1.0		0-20
Isopropylbenzene (Cumene)	<1.0	<1.0		0-20
Methyl-tert-butyl ether	<1.0	<1.0		0-20
Methylene Chloride	<1.0	<1.0		0-20
Naphthalene	<1.0	<1.0		0-20
Styrene	<1.0	<1.0		0-20
Tetrachloroethene	2.7	3.0	9	0-20
Toluene	<1.0	<1.0		0-20
Trichloroethene	4.2	4.1	3	0-20
Trichlorofluoromethane	<1.0	<1.0		0-20
Vinyl chloride	3.0	3.2	4	0-20
Xylene (Total)	<1.0	<1.0		0-20
cis-1,2-Dichloroethene	14.0	14.3	2	0-20
cis-1,3-Dichloropropene	<1.0	<1.0		0-20
m&p-Xylene	<2.0	<2.0		0-20
n-Butylbenzene	<1.0	<1.0		0-20
n-Propylbenzene	<1.0	<1.0		0-20
o-Xylene	<1.0	<1.0		0-20
p-Isopropyltoluene	<1.0	<1.0		0-20
sec-Butylbenzene	<1.0	<1.0		0-20
tert-Butylbenzene	<1.0	<1.0		0-20
trans-1,2-Dichloroethene	<1.0	<1.0		0-20
trans-1,3-Dichloropropene	<1.0	<1.0		0-20
trans-1,4-Dichloro-2-butene	<1.0	<1.0		0-20

RPD: 0 out of 5 outside limits.

MSV - FORM V VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA

Lab File ID: 121616.B\J30734.D BFB Injection Date: 12/16/2016

Instrument ID: 70MSV6 BFB Injection Time: 13:19

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	20.95	
75	30.00 - 60.00% of mass 95	50.06	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.38	
173	Less than 2.00% of mass 174	0.99	(1.51)[1]
174	50.00 - 100.00% of mass 95	65.29	
175	5.00 - 9.00% of mass 174	5.11	(7.83)[1]
176	95.00 - 101.00% of mass 174	63.04	(96.55)[1]
177	5.00 - 9.00% of mass 176	4.17	(6.62)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
8320187CAL1	8320187CAL1	121616.B\J30735.D	12/16/2016	14:01
8320188CAL2	8320188CAL2	121616.B\J30736.D	12/16/2016	14:18
8320189CAL3	8320189CAL3	121616.B\J30737.D	12/16/2016	14:36
8320190CAL4	8320190CAL4	121616.B\J30738.D	12/16/2016	14:54
8320191CAL5	8320191CAL5	121616.B\J30739.D	12/16/2016	15:12
8320192CAL6	8320192CAL6	121616.B\J30740.D	12/16/2016	15:30
8320193CAL7	8320193CAL7	121616.B\J30741.D	12/16/2016	15:48
8320194CAL8	8320194CAL8	121616.B\J30742.D	12/16/2016	16:06
8320195ICV	8320195ICV	121616.B\J30747.D	12/16/2016	18:03

MSV - FORM VI VOA-7
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 709443

Calibration Date(s): 12/16/2016 12/16/2016 Calibration Time(s): 14:01 16:06

LAB FILE ID

CAL1 = 121616.B\J30735.D CAL2 = 121616.B\J30736.D CAL3 = 121616.B\J30737.D

CAL4 = 121616.B\J30738.D CAL5 = 121616.B\J30739.D CAL6 = 121616.B\J30740.D

CAL7 = 121616.B\J30741.D CAL8 = 121616.B\J30742.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
Acetone	Linear		0.99720	0.01385	0.24870	
Benzene	Averaged	7.89722			1.98119	
Bromobenzene	Averaged	2.84014			1.02881	
Bromochloromethane	Averaged	7.99947			0.33537	
Bromodichloromethane	Averaged	7.39375			0.56235	
Bromoform	Averaged	14.74173			0.34037	
Bromomethane	Averaged	6.91419			0.43759	
2-Butanone (MEK)	Averaged	11.27967			0.87338	
n-Butylbenzene	Averaged	8.41866			3.43963	
sec-Butylbenzene	Averaged	5.03896			3.89031	
tert-Butylbenzene	Averaged	4.44410			2.68770	
Carbon disulfide	Averaged	2.91971			2.30302	
Carbon tetrachloride	Averaged	5.60673			0.44217	
Chlorobenzene	Averaged	4.75604			1.88334	
Chlorodifluoromethane	Averaged	4.57929			1.04646	
Chloroethane	Averaged	5.99223			0.63939	
Chloroform	Averaged	8.24439			1.32905	
Chloromethane	Averaged	3.93213			0.92648	
2-Chlorotoluene	Averaged	5.43127			3.76518	
4-Chlorotoluene	Averaged	6.67446			3.37099	
Dibromochloromethane	Averaged	12.01082			0.57622	
1,2-Dibromoethane (EDB)	Averaged	14.35178			0.35665	
Dibromomethane	Averaged	4.60950			0.24968	
1,2-Dichlorobenzene	Averaged	5.06228			1.65857	
1,3-Dichlorobenzene	Averaged	5.15793			1.71922	
1,4-Dichlorobenzene	Averaged	2.31996			1.78853	
trans-1,4-Dichloro-2-butene	Linear		0.99973	-0.01665	0.39492	
Dichlorodifluoromethane	Averaged	5.17247			0.49602	
1,1-Dichloroethane	Averaged	7.70700			1.66679	
1,2-Dichloroethane	Averaged	7.68668			1.02389	
1,1-Dichloroethene	Averaged	9.89571			0.57666	
cis-1,2-Dichloroethene	Averaged	5.67424			0.88151	
trans-1,2-Dichloroethene	Averaged	4.64001			0.77926	
1,2-Dichloropropane	Averaged	4.64275			0.57004	
1,3-Dichloropropane	Averaged	3.99242			1.28608	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-8
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 709443

Calibration Date(s): 12/16/2016 12/16/2016 Calibration Time(s): 14:01 16:06

LAB FILE ID

CAL1 = 121616.B\J30735.D CAL2 = 121616.B\J30736.D CAL3 = 121616.B\J30737.D

CAL4 = 121616.B\J30738.D CAL5 = 121616.B\J30739.D CAL6 = 121616.B\J30740.D

CAL7 = 121616.B\J30741.D CAL8 = 121616.B\J30742.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
2,2-Dichloropropane	Averaged	7.25858			1.12931	
1,1-Dichloropropene	Averaged	4.90246			0.66140	
cis-1,3-Dichloropropene	Averaged	15.35207			0.74118	
trans-1,3-Dichloropropene	Averaged	19.91113			0.60963	
1,4-Diethylbenzene	Averaged	6.46793			1.76934	
Ethanol	Averaged	9.39583			0.00841	
Ethylbenzene	Averaged	6.31941			1.05468	
Hexachloro-1,3-butadiene	Averaged	8.51217			0.27741	
2-Hexanone	Linear		0.99993	-0.01594	0.58967	
Isopropylbenzene (Cumene)	Averaged	5.88975			4.54191	
p-Isopropyltoluene	Averaged	5.67189			3.08751	
Methylene Chloride	Averaged	2.38800			0.85618	
4-Methyl-2-pentanone (MIBK)	Averaged	15.21924			0.45928	
Methyl-tert-butyl ether	Averaged	5.02513			2.71700	
Naphthalene	Averaged	18.27171			2.24772	
n-Propylbenzene	Averaged	6.46515			5.52532	
Styrene	Averaged	10.14038			2.12446	
1,1,1,2-Tetrachloroethane	Averaged	8.19592			0.57288	
1,1,2,2-Tetrachloroethane	Averaged	4.52068			1.40929	
Tetrachloroethene	Averaged	6.23811			0.62960	
1,2,4,5-tetramethylbenzene	Averaged	7.87879			2.55554	
Toluene	Averaged	4.60733			2.02816	
1,2,3-Trichlorobenzene	Averaged	16.28901			0.67117	
1,2,4-Trichlorobenzene	Averaged	16.13615			0.76531	
1,1,1-Trichloroethane	Averaged	4.16009			0.61334	
1,1,2-Trichloroethane	Averaged	8.17665			0.35982	
Trichloroethene	Averaged	4.76849			0.45240	
Trichlorofluoromethane	Averaged	10.09545			0.83350	
1,2,3-Trichloropropane	Averaged	14.09028			0.33408	
1,2,4-Trimethylbenzene	Averaged	7.11662			3.44940	
1,3,5-Trimethylbenzene	Averaged	3.55085			3.48999	
Vinyl chloride	Averaged	4.20515			1.00646	
m&p-Xylene	Averaged	10.56313			1.24420	
o-Xylene	Averaged	6.52703			1.24367	
4-Bromofluorobenzene (S)	Averaged	1.21580			0.80468	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM VI VOA-9

MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Instrument ID: 70MSV6 GC Column: Col 1 SDG No.: 709443

Calibration Date(s): 12/16/2016 12/16/2016 Calibration Time(s): 14:01 16:06

LAB FILE ID

CAL1 = 121616.B\J30735.D CAL2 = 121616.B\J30736.D CAL3 = 121616.B\J30737.D

CAL4 = 121616.B\J30738.D CAL5 = 121616.B\J30739.D CAL6 = 121616.B\J30740.D

CAL7 = 121616.B\J30741.D CAL8 = 121616.B\J30742.D

COMPOUND	CURVE TYPE	%RSD	R2	A1	A2	A3
1,2-Dichloroethane-d4 (S)	Averaged	2.62611			0.37261	
Toluene-d8 (S)	Averaged	0.95696			2.19630	

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

NO SAMPLES ASSOCIATED

SAMPLE NO.

8320195ICV

MSV - FORM VII VOA-1
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 12/16/2016 Time: 18:03

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 12/16/2016 12/16/2016

Lab File ID: 121616.B\J30747.D Init. Calib. Time(s): 14:01 16:06

SDG No.: 709443

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	74.67562	0.0100	49.3513	20.0000
Benzene	Averaged	1.98119	2.09475	0.0100	4.1690	20.0000
Bromobenzene	Averaged	1.02881	1.08070	0.0100	1.7069	20.0000
Bromochloromethane	Averaged	0.33537	0.35944	0.0100	5.3928	20.0000
Bromodichloromethane	Averaged	0.56235	0.61310	0.0100	7.6391	20.0000
Bromoform	Averaged	0.34037	0.38960	0.0100	17.7412	20.0000
Bromomethane	Averaged	0.43759	0.48250	0.0100	4.2870	20.0000
2-Butanone (MEK)	Averaged	0.87338	1.02432	0.0100	15.8471	20.0000
n-Butylbenzene	Averaged	3.43963	3.52614	0.0100	5.0844	20.0000
sec-Butylbenzene	Averaged	3.89031	3.83738	0.0100	1.6950	20.0000
tert-Butylbenzene	Averaged	2.68770	2.63998	0.0100	0.3561	20.0000
Carbon disulfide	Averaged	2.30302	2.36093	0.0100	-0.5938	20.0000
Carbon tetrachloride	Averaged	0.44217	0.46108	0.0100	2.1770	20.0000
Chlorobenzene	Averaged	1.88334	1.95206	0.0100	1.9736	20.0000
Chlorodifluoromethane	Averaged	1.04646	1.05455	0.0100	-0.1164	20.0000
Chloroethane	Averaged	0.63939	0.66551	0.0100	4.0513	20.0000
Chloroform	Averaged	1.32905	1.42190	0.0100	5.8468	20.0000
Chloromethane	Averaged	0.92648	0.91860	0.0100	0.2716	20.0000
2-Chlorotoluene	Averaged	3.76518	3.86040	0.0100	3.1766	20.0000
4-Chlorotoluene	Averaged	3.37099	3.52254	0.0100	4.4815	20.0000
Dibromochloromethane	Averaged	0.57622	0.64508	0.0100	13.6367	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.35665	0.40652	0.0100	14.2203	20.0000
Dibromomethane	Averaged	0.24968	0.26188	0.0100	4.6521	20.0000
1,2-Dichlorobenzene	Averaged	1.65857	1.72146	0.0100	3.0588	20.0000
1,3-Dichlorobenzene	Averaged	1.71922	1.78210	0.0100	2.6438	20.0000
1,4-Dichlorobenzene	Averaged	1.78853	1.84953	0.0100	0.8457	20.0000
trans-1,4-Dichloro-2-butene	Linear	50	51.14895	0.0100	2.2979	20.0000
Dichlorodifluoromethane	Averaged	0.49602	0.47849	0.0100	-5.4884	20.0000
1,1-Dichloroethane	Averaged	1.66679	1.77519	0.0100	6.1019	20.0000
1,2-Dichloroethane	Averaged	1.02389	1.09206	0.0100	7.0377	20.0000
1,1-Dichloroethene	Averaged	0.57666	0.62069	0.0100	4.4792	20.0000
cis-1,2-Dichloroethene	Averaged	0.88151	0.93164	0.0100	3.6156	20.0000
trans-1,2-Dichloroethene	Averaged	0.77926	0.81986	0.0100	4.3014	20.0000
1,2-Dichloropropane	Averaged	0.57004	0.60010	0.0100	3.6812	20.0000
1,3-Dichloropropane	Averaged	1.28608	1.35750	0.0100	3.7108	20.0000
2,2-Dichloropropane	Averaged	1.12931	1.28500	0.0100	5.5457	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

02/03/2017 10:34

SAMPLE NO.

8320195ICV

MSV - FORM VII VOA-2
MSV INITIAL CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 12/16/2016 Time: 18:03

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 12/16/2016 12/16/2016

Lab File ID: 121616.B\J30747.D Init. Calib. Time(s): 14:01 16:06

SDG No.: 709443

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloropropene	Averaged	0.66140	0.67581	0.0100	0.3508	20.0000
cis-1,3-Dichloropropene	Averaged	0.74118	0.86161	0.0100	16.1749	20.0000
trans-1,3-Dichloropropene	Averaged	0.60963	0.74091	0.0100	22.4864	20.0000
1,4-Diethylbenzene	Averaged	1.76934	1.79311	0.0100	3.2627	20.0000
Ethanol	Averaged	0.00841	0.00608	0.0100	1.8899	20.0000
Ethylbenzene	Averaged	1.05468	1.08120	0.0100	2.3470	20.0000
Hexachloro-1,3-butadiene	Averaged	0.27741	0.30370	0.0100	2.3707	20.0000
2-Hexanone	Linear	50	53.11378	0.0100	6.2276	20.0000
Isopropylbenzene (Cumene)	Averaged	4.54191	4.54280	0.0100	0.0447	20.0000
p-Isopropyltoluene	Averaged	3.08751	3.06623	0.0100	3.0293	20.0000
Methylene Chloride	Averaged	0.85618	0.87909	0.0100	0.4395	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.45928	0.51830	0.0100	17.6987	20.0000
Methyl-tert-butyl ether	Averaged	2.71700	2.89259	0.0100	4.7520	20.0000
Naphthalene	Averaged	2.24772	2.54175	0.0100	20.9430	20.0000
n-Propylbenzene	Averaged	5.52532	5.52997	0.0100	2.2752	20.0000
Styrene	Averaged	2.12446	2.29504	0.0100	8.9251	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.57288	0.62167	0.0100	9.0712	20.0000
1,1,2,2-Tetrachloroethane	Averaged	1.40929	1.50094	0.0100	6.2360	20.0000
Tetrachloroethene	Averaged	0.62960	0.63555	0.0100	2.6475	20.0000
1,2,4,5-tetramethylbenzene	Averaged	2.55554	2.67787	0.0100	6.4515	20.0000
Toluene	Averaged	2.02816	2.10472	0.0100	0.5982	20.0000
1,2,3-Trichlorobenzene	Averaged	0.67117	0.74327	0.0100	16.4573	20.0000
1,2,4-Trichlorobenzene	Averaged	0.76531	0.84247	0.0100	15.1098	20.0000
1,1,1-Trichloroethane	Averaged	0.61334	0.64177	0.0100	1.9318	20.0000
1,1,2-Trichloroethane	Averaged	0.35982	0.39078	0.0100	6.2808	20.0000
Trichloroethene	Averaged	0.45240	0.46879	0.0100	1.7611	20.0000
Trichlorofluoromethane	Averaged	0.83350	0.88608	0.0100	3.4522	20.0000
1,2,3-Trichloropropane	Averaged	0.33408	0.36967	0.0100	14.1832	20.0000
1,2,4-Trimethylbenzene	Averaged	3.44940	3.54918	0.0100	3.9048	20.0000
1,3,5-Trimethylbenzene	Averaged	3.48999	3.47445	0.0100	-0.5100	20.0000
Vinyl chloride	Averaged	1.00646	1.01724	0.0100	-1.0780	20.0000
m&p-Xylene	Averaged	1.24420	1.31800	0.0100	7.6655	20.0000
o-Xylene	Averaged	1.24367	1.28862	0.0100	4.0595	20.0000
4-Bromofluorobenzene (S)	Averaged	0.80468	0.81096	0.0100	0.6960	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.37261	0.35735	0.0100	-3.5846	20.0000
Toluene-d8 (S)	Averaged	2.19630	2.19485	0.0100	0.0325	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA
Lab File ID: 012017.B\J31838.D BFB Injection Date: 01/20/2017
Instrument ID: 70MSV6 BFB Injection Time: 06:08

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	21.25	
75	30.00 - 60.00% of mass 95	50.08	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.36	
173	Less than 2.00% of mass 174	0.87	(1.36)[1]
174	50.00 - 100.00% of mass 95	64.07	
175	5.00 - 9.00% of mass 174	4.82	(7.52)[1]
176	95.00 - 101.00% of mass 174	63.09	(98.47)[1]
177	5.00 - 9.00% of mass 176	4.16	(6.59)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
8440842CCV	8440842CCV	012017.B\J31839.D	01/20/2017	06:34
56861BLANK	56861BLANK	012017.B\J31841.D	01/20/2017	07:23
56862LCS	56862LCS	012017.B\J31842.D	01/20/2017	07:44
PZ-8	709443011	012017.B\J31852.D	01/20/2017	10:54
PZ-6	709443014	012017.B\J31853.D	01/20/2017	11:12
PZ-8	709443016	012017.B\J31854.D	01/20/2017	11:30
PZ-5	709443017	012017.B\J31855.D	01/20/2017	11:48
PZ-5	709443001	012017.B\J31856.D	01/20/2017	12:05
A1-PZ-2	709443002	012017.B\J31857.D	01/20/2017	12:23
MW-1	709443003	012017.B\J31858.D	01/20/2017	12:41
MW-2	709443004	012017.B\J31859.D	01/20/2017	12:59
PZ-11R	709443005	012017.B\J31860.D	01/20/2017	13:17
MW-21	709443006	012017.B\J31861.D	01/20/2017	13:35
MW-20	709443007	012017.B\J31862.D	01/20/2017	13:53
57614DUP	57614DUP	012017.B\J31863.D	01/20/2017	14:11
MW-18	709443008	012017.B\J31864.D	01/20/2017	14:29
57613MS	57613MS	012017.B\J31866.D	01/20/2017	15:05

SAMPLE NO.

8440842CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 01/20/2017 Time: 06:34

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 12/16/2016 12/16/2016

Lab File ID: 012017.B\J31839.D Init. Calib. Time(s): 14:01 16:06

SDG No.: 709443

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	87.21830	0.0100	74.4366	20.0000
Benzene	Averaged	1.98119	2.02075	0.0100	1.9966	20.0000
Bromobenzene	Averaged	1.02881	1.07813	0.0100	4.7932	20.0000
Bromochloromethane	Averaged	0.33537	0.32995	0.0100	-1.6163	20.0000
Bromodichloromethane	Averaged	0.56235	0.56979	0.0100	1.3217	20.0000
Bromoform	Averaged	0.34037	0.36691	0.0100	7.7961	20.0000
Bromomethane	Averaged	0.43759	0.41543	0.0100	-5.0632	20.0000
2-Butanone (MEK)	Averaged	0.87338	1.01138	0.0100	15.8016	20.0000
n-Butylbenzene	Averaged	3.43963	3.57222	0.0100	3.8547	20.0000
sec-Butylbenzene	Averaged	3.89031	3.95687	0.0100	1.7109	20.0000
tert-Butylbenzene	Averaged	2.68770	2.68639	0.0100	-0.0487	20.0000
Carbon disulfide	Averaged	2.30302	2.33878	0.0100	1.5528	20.0000
Carbon tetrachloride	Averaged	0.44217	0.46292	0.0100	4.6928	20.0000
Chlorobenzene	Averaged	1.88334	1.85800	0.0100	-1.3453	20.0000
Chlorodifluoromethane	Averaged	1.04646	1.11734	0.0100	6.7736	20.0000
Chloroethane	Averaged	0.63939	0.67611	0.0100	5.7420	20.0000
Chloroform	Averaged	1.32905	1.34638	0.0100	1.3041	20.0000
Chloromethane	Averaged	0.92648	0.97666	0.0100	5.4154	20.0000
2-Chlorotoluene	Averaged	3.76518	3.89033	0.0100	3.3239	20.0000
4-Chlorotoluene	Averaged	3.37099	3.52872	0.0100	4.6790	20.0000
Dibromochloromethane	Averaged	0.57622	0.60765	0.0100	5.4528	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.35665	0.37435	0.0100	4.9612	20.0000
Dibromomethane	Averaged	0.24968	0.25502	0.0100	2.1409	20.0000
1,2-Dichlorobenzene	Averaged	1.65857	1.70586	0.0100	2.8515	20.0000
1,3-Dichlorobenzene	Averaged	1.71922	1.78136	0.0100	3.6144	20.0000
1,4-Dichlorobenzene	Averaged	1.78853	1.81299	0.0100	1.3677	20.0000
trans-1,4-Dichloro-2-butene	Linear	50	45.25054	0.0100	-9.4989	20.0000
Dichlorodifluoromethane	Averaged	0.49602	0.42101	0.0100	-15.1216	20.0000
1,1-Dichloroethane	Averaged	1.66679	1.67671	0.0100	0.5956	20.0000
1,2-Dichloroethane	Averaged	1.02389	1.01939	0.0100	-0.4394	20.0000
1,1-Dichloroethene	Averaged	0.57666	0.60924	0.0100	5.6490	20.0000
cis-1,2-Dichloroethene	Averaged	0.88151	0.86238	0.0100	-2.1703	20.0000
trans-1,2-Dichloroethene	Averaged	0.77926	0.77726	0.0100	-0.2564	20.0000
1,2-Dichloropropane	Averaged	0.57004	0.57444	0.0100	0.7716	20.0000
1,3-Dichloropropane	Averaged	1.28608	1.27636	0.0100	-0.7559	20.0000
2,2-Dichloropropane	Averaged	1.12931	1.20635	0.0100	6.8223	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

8440842CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 01/20/2017 Time: 06:34

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 12/16/2016 12/16/2016

Lab File ID: 012017.B\J31839.D Init. Calib. Time(s): 14:01 16:06

SDG No.: 709443

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloropropene	Averaged	0.66140	0.67873	0.0100	2.6197	20.0000
cis-1,3-Dichloropropene	Averaged	0.74118	0.79963	0.0100	7.8858	20.0000
trans-1,3-Dichloropropene	Averaged	0.60963	0.68227	0.0100	11.9164	20.0000
1,4-Diethylbenzene	Averaged	1.76934	1.82283	0.0100	3.0231	20.0000
Ethanol	Averaged	0.00841	0.00612	0.0100	-27.2255	20.0000
Ethylbenzene	Averaged	1.05468	1.03080	0.0100	-2.2645	20.0000
Hexachloro-1,3-butadiene	Averaged	0.27741	0.31453	0.0100	13.3801	20.0000
2-Hexanone	Linear	50	54.31526	0.0100	8.6305	20.0000
Isopropylbenzene (Cumene)	Averaged	4.54191	4.63151	0.0100	1.9728	20.0000
p-Isopropyltoluene	Averaged	3.08751	3.18995	0.0100	3.3178	20.0000
Methylene Chloride	Averaged	0.85618	0.82496	0.0100	-3.6465	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.45928	0.50514	0.0100	9.9855	20.0000
Methyl-tert-butyl ether	Averaged	2.71700	2.65935	0.0100	-2.1217	20.0000
Naphthalene	Averaged	2.24772	2.26230	0.0100	0.6488	20.0000
n-Propylbenzene	Averaged	5.52532	5.69069	0.0100	2.9930	20.0000
Styrene	Averaged	2.12446	2.18523	0.0100	2.8608	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.57288	0.59136	0.0100	3.2259	20.0000
1,1,2,2-Tetrachloroethane	Averaged	1.40929	1.43882	0.0100	2.0954	20.0000
Tetrachloroethene	Averaged	0.62960	0.65189	0.0100	3.5396	20.0000
1,2,4,5-tetramethylbenzene	Averaged	2.55554	2.67025	0.0100	4.4887	20.0000
Toluene	Averaged	2.02816	1.97855	0.0100	-2.4461	20.0000
1,2,3-Trichlorobenzene	Averaged	0.67117	0.68955	0.0100	2.7384	20.0000
1,2,4-Trichlorobenzene	Averaged	0.76531	0.80063	0.0100	4.6148	20.0000
1,1,1-Trichloroethane	Averaged	0.61334	0.62632	0.0100	2.1172	20.0000
1,1,2-Trichloroethane	Averaged	0.35982	0.35248	0.0100	-2.0375	20.0000
Trichloroethene	Averaged	0.45240	0.45242	0.0100	0.0047	20.0000
Trichlorofluoromethane	Averaged	0.83350	0.90282	0.0100	8.3167	20.0000
1,2,3-Trichloropropane	Averaged	0.33408	0.36352	0.0100	8.8118	20.0000
1,2,4-Trimethylbenzene	Averaged	3.44940	3.50959	0.0100	1.7451	20.0000
1,3,5-Trimethylbenzene	Averaged	3.48999	3.58133	0.0100	2.6174	20.0000
Vinyl chloride	Averaged	1.00646	1.06356	0.0100	5.6730	20.0000
m&p-Xylene	Averaged	1.24420	1.27246	0.0100	2.2713	20.0000
o-Xylene	Averaged	1.24367	1.23091	0.0100	-1.0265	20.0000
4-Bromofluorobenzene (S)	Averaged	0.80468	0.79621	0.0100	-1.0524	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.37261	0.36732	0.0100	-1.4194	20.0000
Toluene-d8 (S)	Averaged	2.19630	2.18311	0.0100	-0.6005	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

MSV - FORM V VOA-1
VOLATILE ORGANICS ANALYSIS DATA SHEET
PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Pace Analytical - New York SDG No.: 709443 Contract: LMC UTICA
Lab File ID: 012217.B\J31867.D BFB Injection Date: 01/22/2017
Instrument ID: 70MSV6 BFB Injection Time: 09:55

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.00 - 40.00% of mass 95	21.24	
75	30.00 - 60.00% of mass 95	49.94	
95	Base Peak, 100.00% relative abundance	100.00	
96	5.00 - 9.00% of mass 95	6.62	
173	Less than 2.00% of mass 174	0.87	(1.35)[1]
174	50.00 - 100.00% of mass 95	64.67	
175	5.00 - 9.00% of mass 174	5.00	(7.74)[1]
176	95.00 - 101.00% of mass 174	61.96	(95.81)[1]
177	5.00 - 9.00% of mass 176	4.67	(7.53)[2]

1 - Value is % mass 174 2 - Value is % mass 176

SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
8441580CCV	8441580CCV	012217.B\J31868.D	01/22/2017	10:24
57604BLANK	57604BLANK	012217.B\J31870.D	01/22/2017	11:21
57605LCS	57605LCS	012217.B\J31871.D	01/22/2017	11:46
TRIP BLANK	709443021	012217.B\J31874.D	01/22/2017	12:40
MW-3	709443009	012217.B\J31880.D	01/22/2017	14:27
PZ-6	709443010	012217.B\J31881.D	01/22/2017	14:45
PZ-13R	709443012	012217.B\J31882.D	01/22/2017	15:03
MW-10	709443013	012217.B\J31883.D	01/22/2017	15:21
A2-PZ-1	709443015	012217.B\J31884.D	01/22/2017	15:39
A2-PZ-2	709443018	012217.B\J31887.D	01/22/2017	16:33
A2-PZ-2	709443018	012217.B\J31888.D	01/22/2017	16:51
A2-PZ-1	709443015	012217.B\J31889.D	01/22/2017	17:09
MW-4	709443019	012217.B\J31894.D	01/22/2017	18:40
MW-4-DUP	709443020	012217.B\J31895.D	01/22/2017	18:58
57615DUP	57615DUP	012217.B\J31896.D	01/22/2017	19:16
57616MS	57616MS	012217.B\J31897.D	01/22/2017	19:34

SAMPLE NO.

8441580CCV

MSV - FORM VII VOA-1
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 01/22/2017 Time: 10:24

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 12/16/2016 12/16/2016

Lab File ID: 012217.B\J31868.D Init. Calib. Time(s): 14:01 16:06

SDG No.: 709443

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
Acetone	Linear	50	65.58398	0.0100	31.1680	20.0000
Benzene	Averaged	1.98119	2.00467	0.0100	1.1851	20.0000
Bromobenzene	Averaged	1.02881	1.04831	0.0100	1.8947	20.0000
Bromochloromethane	Averaged	0.33537	0.34824	0.0100	3.8375	20.0000
Bromodichloromethane	Averaged	0.56235	0.59794	0.0100	6.3280	20.0000
Bromoform	Averaged	0.34037	0.40947	0.0100	20.3019	20.0000
Bromomethane	Averaged	0.43759	0.42490	0.0100	-2.8997	20.0000
2-Butanone (MEK)	Averaged	0.87338	1.03515	0.0100	18.5227	20.0000
n-Butylbenzene	Averaged	3.43963	3.50308	0.0100	1.8446	20.0000
sec-Butylbenzene	Averaged	3.89031	3.78332	0.0100	-2.7503	20.0000
tert-Butylbenzene	Averaged	2.68770	2.61029	0.0100	-2.8801	20.0000
Carbon disulfide	Averaged	2.30302	2.33370	0.0100	1.3321	20.0000
Carbon tetrachloride	Averaged	0.44217	0.45696	0.0100	3.3441	20.0000
Chlorobenzene	Averaged	1.88334	1.90644	0.0100	1.2267	20.0000
Chlorodifluoromethane	Averaged	1.04646	1.11602	0.0100	6.6479	20.0000
Chloroethane	Averaged	0.63939	0.67627	0.0100	5.7670	20.0000
Chloroform	Averaged	1.32905	1.37797	0.0100	3.6809	20.0000
Chloromethane	Averaged	0.92648	0.97370	0.0100	5.0964	20.0000
2-Chlorotoluene	Averaged	3.76518	3.62889	0.0100	-3.6198	20.0000
4-Chlorotoluene	Averaged	3.37099	3.32901	0.0100	-1.2454	20.0000
Dibromochloromethane	Averaged	0.57622	0.65608	0.0100	13.8589	20.0000
1,2-Dibromoethane (EDB)	Averaged	0.35665	0.37932	0.0100	6.3561	20.0000
Dibromomethane	Averaged	0.24968	0.26347	0.0100	5.5230	20.0000
1,2-Dichlorobenzene	Averaged	1.65857	1.73031	0.0100	4.3255	20.0000
1,3-Dichlorobenzene	Averaged	1.71922	1.78331	0.0100	3.7275	20.0000
1,4-Dichlorobenzene	Averaged	1.78853	1.85135	0.0100	3.5124	20.0000
trans-1,4-Dichloro-2-butene	Linear	50	44.15025	0.0100	-11.6995	20.0000
Dichlorodifluoromethane	Averaged	0.49602	0.41291	0.0100	-16.7550	20.0000
1,1-Dichloroethane	Averaged	1.66679	1.70832	0.0100	2.4918	20.0000
1,2-Dichloroethane	Averaged	1.02389	1.08032	0.0100	5.5119	20.0000
1,1-Dichloroethene	Averaged	0.57666	0.61428	0.0100	6.5223	20.0000
cis-1,2-Dichloroethene	Averaged	0.88151	0.87633	0.0100	-0.5875	20.0000
trans-1,2-Dichloroethene	Averaged	0.77926	0.77938	0.0100	0.0155	20.0000
1,2-Dichloropropane	Averaged	0.57004	0.58376	0.0100	2.4069	20.0000
1,3-Dichloropropane	Averaged	1.28608	1.32763	0.0100	3.2312	20.0000
2,2-Dichloropropane	Averaged	1.12931	1.23686	0.0100	9.5235	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

SAMPLE NO.

8441580CCV

MSV - FORM VII VOA-2
MSV CONTINUING CALIBRATION DATA

Lab Name: Pace Analytical - New York Calibration Date: 01/22/2017 Time: 10:24

Instrument ID: 70MSV6 GC Column: Col 1 Init. Calib. Date(s): 12/16/2016 12/16/2016

Lab File ID: 012217.B\J31868.D Init. Calib. Time(s): 14:01 16:06

SDG No.: 709443

COMPOUND	CURVE	$\overline{\text{RRF}}$ or Amount	RRF or Amount	MIN RRF	%D	MAX %D
1,1-Dichloropropene	Averaged	0.66140	0.65805	0.0100	-0.5069	20.0000
cis-1,3-Dichloropropene	Averaged	0.74118	0.82013	0.0100	10.6517	20.0000
trans-1,3-Dichloropropene	Averaged	0.60963	0.71961	0.0100	18.0414	20.0000
1,4-Diethylbenzene	Averaged	1.76934	1.82094	0.0100	2.9162	20.0000
Ethanol	Averaged	0.00841	0.01013	0.0100	20.4655	20.0000
Ethylbenzene	Averaged	1.05468	1.01923	0.0100	-3.3615	20.0000
Hexachloro-1,3-butadiene	Averaged	0.27741	0.30133	0.0100	8.6220	20.0000
2-Hexanone	Linear	50	53.33818	0.0100	6.6764	20.0000
Isopropylbenzene (Cumene)	Averaged	4.54191	4.13158	0.0100	-9.0342	20.0000
p-Isopropyltoluene	Averaged	3.08751	3.09523	0.0100	0.2500	20.0000
Methylene Chloride	Averaged	0.85618	0.85400	0.0100	-0.2547	20.0000
4-Methyl-2-pentanone (MIBK)	Averaged	0.45928	0.54290	0.0100	18.2054	20.0000
Methyl-tert-butyl ether	Averaged	2.71700	2.84384	0.0100	4.6684	20.0000
Naphthalene	Averaged	2.24772	2.22412	0.0100	-1.0500	20.0000
n-Propylbenzene	Averaged	5.52532	5.04716	0.0100	-8.6540	20.0000
Styrene	Averaged	2.12446	2.18442	0.0100	2.8225	20.0000
1,1,1,2-Tetrachloroethane	Averaged	0.57288	0.62272	0.0100	8.7002	20.0000
1,1,2,2-Tetrachloroethane	Averaged	1.40929	1.38979	0.0100	-1.3842	20.0000
Tetrachloroethene	Averaged	0.62960	0.63524	0.0100	0.8955	20.0000
1,2,4,5-tetramethylbenzene	Averaged	2.55554	2.72361	0.0100	6.5768	20.0000
Toluene	Averaged	2.02816	1.96087	0.0100	-3.3177	20.0000
1,2,3-Trichlorobenzene	Averaged	0.67117	0.68455	0.0100	1.9933	20.0000
1,2,4-Trichlorobenzene	Averaged	0.76531	0.79158	0.0100	3.4327	20.0000
1,1,1-Trichloroethane	Averaged	0.61334	0.62307	0.0100	1.5867	20.0000
1,1,2-Trichloroethane	Averaged	0.35982	0.37428	0.0100	4.0207	20.0000
Trichloroethene	Averaged	0.45240	0.44611	0.0100	-1.3889	20.0000
Trichlorofluoromethane	Averaged	0.83350	0.92553	0.0100	11.0418	20.0000
1,2,3-Trichloropropane	Averaged	0.33408	0.36129	0.0100	8.1437	20.0000
1,2,4-Trimethylbenzene	Averaged	3.44940	3.51977	0.0100	2.0402	20.0000
1,3,5-Trimethylbenzene	Averaged	3.48999	3.37115	0.0100	-3.4051	20.0000
Vinyl chloride	Averaged	1.00646	1.07119	0.0100	6.4315	20.0000
m&p-Xylene	Averaged	1.24420	1.26473	0.0100	1.6503	20.0000
o-Xylene	Averaged	1.24367	1.21784	0.0100	-2.0771	20.0000
4-Bromofluorobenzene (S)	Averaged	0.80468	0.79155	0.0100	-1.6308	20.0000
1,2-Dichloroethane-d4 (S)	Averaged	0.37261	0.37666	0.0100	1.0855	20.0000
Toluene-d8 (S)	Averaged	2.19630	2.27376	0.0100	3.5267	20.0000

The values for compounds reported as total are based on a summation of the components within the laboratory information management system.

DO NOT USE DUPLICATE ANALYSIS

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

PZ-5

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:05 Lab Sample ID: 709443001

Date Analyzed: 01/20/2017 12:05 Lab File ID: 012017.B\J31856.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	40.2	
156-60-5	trans-1,2-Dichloroethene	1.5	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

DO NOT USE DUPLICATE ANALYSIS

SAMPLE NO.

PZ-5

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 12:05 Lab Sample ID: 709443001

Date Analyzed: 01/20/2017 12:05 Lab File ID: 012017.B\J31856.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	1.3	
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	169	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	67.2	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

DO NOT USE DUPLICATE ANALYSIS

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

PZ-6

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 14:45 Lab Sample ID: 709443010

Date Analyzed: 01/22/2017 14:45 Lab File ID: 012217.B\J31881.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	1.9	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	12.9	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	1.1	
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U

SAMPLE NO.

PZ-6

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/22/2017 14:45 Lab Sample ID: 709443010

Date Analyzed: 01/22/2017 14:45 Lab File ID: 012217.B\J31881.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	1.4	
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	<1.0	U
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	34.3	
156-60-5	trans-1,2-Dichloroethene	<1.0	U
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

DO NOT USE DUPLICATE ANALYSIS

SAMPLE NO.

PZ-8

MSV - FORM I VOA-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 10:54 Lab Sample ID: 709443011

Date Analyzed: 01/20/2017 10:54 Lab File ID: 012017.B\J31852.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
67-64-1	Acetone	<5.0	U
71-43-2	Benzene	<1.0	U
108-86-1	Bromobenzene	<1.0	U
74-97-5	Bromochloromethane	<1.0	U
75-27-4	Bromodichloromethane	<1.0	U
75-25-2	Bromoform	<1.0	U
74-83-9	Bromomethane	<1.0	U
78-93-3	2-Butanone (MEK)	<1.0	U
104-51-8	n-Butylbenzene	<1.0	U
135-98-8	sec-Butylbenzene	<1.0	U
98-06-6	tert-Butylbenzene	<1.0	U
75-15-0	Carbon disulfide	<1.0	U
56-23-5	Carbon tetrachloride	<1.0	U
108-90-7	Chlorobenzene	<1.0	U
75-45-6	Chlorodifluoromethane	<1.0	U
75-00-3	Chloroethane	<1.0	U
67-66-3	Chloroform	<1.0	U
74-87-3	Chloromethane	<1.0	U
95-49-8	2-Chlorotoluene	<1.0	U
106-43-4	4-Chlorotoluene	<1.0	U
124-48-1	Dibromochloromethane	<1.0	U
106-93-4	1,2-Dibromoethane (EDB)	<1.0	U
74-95-3	Dibromomethane	<1.0	U
95-50-1	1,2-Dichlorobenzene	<1.0	U
541-73-1	1,3-Dichlorobenzene	<1.0	U
106-46-7	1,4-Dichlorobenzene	<1.0	U
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	U
75-71-8	Dichlorodifluoromethane	<1.0	U
75-34-3	1,1-Dichloroethane	2.6	
107-06-2	1,2-Dichloroethane	<1.0	U
75-35-4	1,1-Dichloroethene	<1.0	U
156-59-2	cis-1,2-Dichloroethene	26.8	
156-60-5	trans-1,2-Dichloroethene	1.7	
78-87-5	1,2-Dichloropropane	<1.0	U
142-28-9	1,3-Dichloropropane	<1.0	U
594-20-7	2,2-Dichloropropane	<1.0	U
563-58-6	1,1-Dichloropropene	<1.0	U

SAMPLE NO.

PZ-8

MSV - FORM I VOA-2

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: Pace Analytical - New York Contract: LMC UTICA

Date Received: 01/19/2017 09:15 Matrix: Water SDG No.: 709443

Date Extracted: 01/20/2017 10:54 Lab Sample ID: 709443011

Date Analyzed: 01/20/2017 10:54 Lab File ID: 012017.B\J31852.D

Initial wt/vol: 5 mL Final wt/vol: 5 mL Dilution: 1 Instrument: 70MSV6 Percent Moisture:

CAS NO.	COMPOUND	CONCENTRATION UNITS: ug/L	Q
10061-01-5	cis-1,3-Dichloropropene	<1.0	U
10061-02-6	trans-1,3-Dichloropropene	<1.0	U
105-05-5	1,4-Diethylbenzene	<1.0	U
64-17-5	Ethanol	<250	U
100-41-4	Ethylbenzene	<1.0	U
87-68-3	Hexachloro-1,3-butadiene	<1.0	U
591-78-6	2-Hexanone	<1.0	U
98-82-8	Isopropylbenzene (Cumene)	<1.0	U
99-87-6	p-Isopropyltoluene	<1.0	U
75-09-2	Methylene Chloride	<1.0	U
108-10-1	4-Methyl-2-pentanone (MIBK)	<1.0	U
1634-04-4	Methyl-tert-butyl ether	<1.0	U
91-20-3	Naphthalene	<1.0	U
103-65-1	n-Propylbenzene	<1.0	U
100-42-5	Styrene	<1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	U
127-18-4	Tetrachloroethene	150	
95-93-2	1,2,4,5-tetramethylbenzene	<1.0	U
108-88-3	Toluene	<1.0	U
87-61-6	1,2,3-Trichlorobenzene	<1.0	U
120-82-1	1,2,4-Trichlorobenzene	<1.0	U
71-55-6	1,1,1-Trichloroethane	<1.0	U
79-00-5	1,1,2-Trichloroethane	<1.0	U
79-01-6	Trichloroethene	172	
75-69-4	Trichlorofluoromethane	<1.0	U
96-18-4	1,2,3-Trichloropropane	<1.0	U
95-63-6	1,2,4-Trimethylbenzene	<1.0	U
108-67-8	1,3,5-Trimethylbenzene	<1.0	U
75-01-4	Vinyl chloride	<1.0	U
1330-20-7	Xylene (Total)	<1.0	U
179601-23-1	m&p-Xylene	<2.0	U
95-47-6	o-Xylene	<1.0	U