



GTE Operations Support Incorporated
One Verizon Way (VC34W443)
Basking Ridge, NJ 07920-1097
908-559-3691

December 17, 2015

Mr. Christopher Magee
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 12th Floor
Albany, NY 12233-7017

Re: *September 2015 Semi-Annual Groundwater Sampling Event*

Dear Mr. Magee:

Attached are the September 2015 semi-annual groundwater sampling results for the Former Philips Display Components Facility in Seneca Falls, New York. Chlorinated volatile organic compounds, primarily trichloroethene and cis-1,2-dichloroethene, were reported in select groundwater samples at concentrations greater than New York State Department of Environmental Conservation (NYSDEC) Class GA Standards.

The next semi-annual groundwater sampling event is tentatively scheduled for the week of March 21, 2016. Please call me at (908) 559-3691 if you have any questions.

Sincerely,

Matthew T. Walsh
Manager – Corporate Workplace Safety &
Environmental Compliance

ec:

Ms. Denise Radtke (NYSDEC)
Mr. Justin Deming (New York State Department of Health)
Mr. Nidal Azzam (USEPA)
Mr. Sam Ezekwo (USEPA)
Ms. Patricia Jones (Seneca County Industrial Development Agency)
Mr. Stephen Bregande (H.P. Neun)
Mr. J. Christopher Woods (H.P. Neun)
Ms. Anna Kunkel (Environmental Consultant)
Ms. Pam Cox (GTE Operations Support Incorporated)
Mr. Daniel Lang (ARCADIS U.S., Inc.)
Mr. Mark Flusche (ARCADIS U.S., Inc.)

September 2015 Semi-Annual Groundwater Sampling

On September 10, 2015, ARCADIS U.S., Inc. measured depths to water in 17 monitoring wells and retrieved passive diffusion bags (PDBs) from 14 monitoring wells where PDBs were deployed on April 1, 2015 (Figure 1). Samples were collected for analysis of volatile organic compounds (VOC) from PDBs retrieved from nine shallow monitoring wells (MW-1, MW-20, MW-22 through MW-26, MW-28, and MW-29), one weathered bedrock monitoring well (MW-BR-06), and four bedrock monitoring wells (MW-BR-01, MW-BR-02, MW-BR-04 and MW-BR-05). One trip blank and one duplicate sample were collected. The samples were shipped overnight to TestAmerica Laboratories, Inc., of Buffalo, New York. The samples were analyzed for VOCs using United States Environmental Protection Agency Method 8260C. Data Validation Services, Inc., of North Creek, New York, performed third-party data validation. Sample results are usable as reported or with minor qualification (Attachment A). Graphs of groundwater VOC analytical results are in Attachment B.

Table 1 provides depth to water measurements and groundwater elevations. Table 2 provides analytical results for the September 2015 groundwater and quality assurance and quality control samples. VOC concentrations in the September 2015 samples were compared to the New York State Department of Environmental Conservation (NYSDEC) Class GA Standards.

- Trichloroethene (TCE) was reported at concentrations greater than the NYSDEC Class GA Standard of 5 micrograms per liter ($\mu\text{g/l}$) in samples from monitoring wells MW-23, MW-25, MW-26, MW-28, MW-BR-06, and in the duplicate sample from monitoring well MW-25.
- *cis*-1,2-Dichloroethene (*cis*-1,2-DCE) was reported at concentrations greater than the NYSDEC Class GA Standard of 5 $\mu\text{g/l}$ in samples from monitoring wells MW-22 through MW-26, MW-29, MW-BR-06, and in the duplicate sample from monitoring well MW-25.
- Vinyl chloride was reported in the samples from monitoring wells MW-24 and MW-26 at concentrations greater than the NYSDEC Class GA Standard of 2 $\mu\text{g/l}$.
- 1,1-Dichloroethane (1,1-DCA) was reported at concentrations greater than the NYSDEC Class GA Standard of 5 $\mu\text{g/l}$ in the sample from monitoring well MW-25 and in the duplicate sample from monitoring well MW-25.
- Methylene Chloride was reported at an estimated concentration greater than the NYSDEC Class GA Standard of 5 $\mu\text{g/l}$ in the sample from monitoring well MW-23.

On September 10, 2015, after groundwater samples were collected, new PDBs were deployed in the eight monitoring wells scheduled for groundwater sampling in March 2016. The PDBs were installed in the middle of the well screen, consistent with previous sampling procedures.

Figures

Figure 1 – Monitoring Well Locations

Tables

Table 1 – Depth to Water Measurements

Table 2 – Groundwater Analytical Results (September 2015)

Attachments

Data Validation Report

Groundwater VOC Concentration Graphs

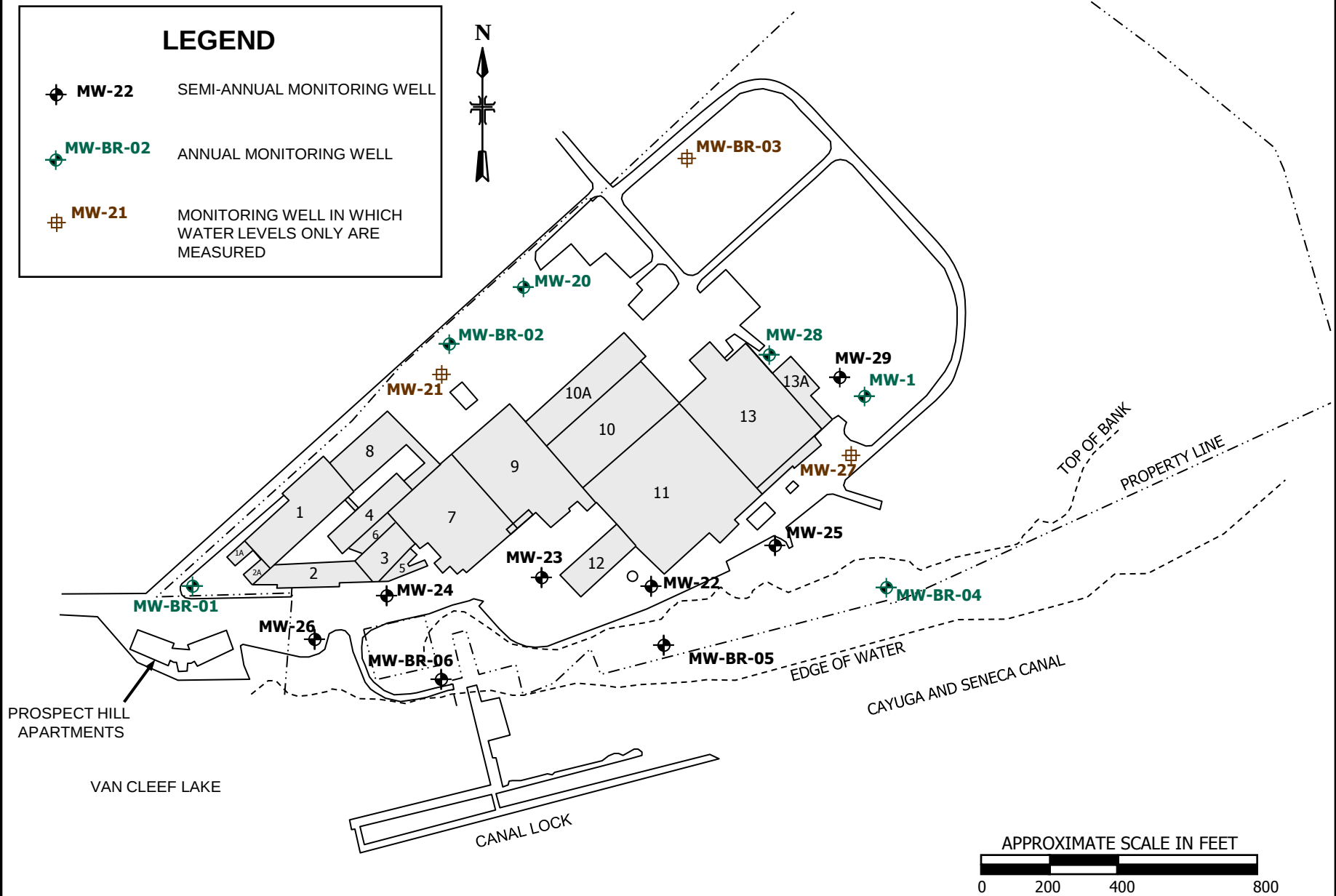
Figures

LEGEND

 **MW-22** SEMI-ANNUAL MONITORING WELL

 **MW-BR-02** ANNUAL MONITORING WELL

 **MW-21** MONITORING WELL IN WHICH WATER LEVELS ONLY ARE MEASURED



Tables

Table 1
Depth to Water Measurements
Former Philips Display Components Facility
Seneca Falls, New York

Well Number	Datum Elevation	Depth to Water (feet)	Water Level Elevation (feet AMSL)
MW-1	460.83	12.64	448.19
MW-20	463.42	2.87	460.55
MW-21	467.39	2.61	464.78
MW-22	460.77	7.20	453.57
MW-23	460.59	2.50	458.09
MW-24	462.76	4.20	458.56
MW-25	460.74	5.32	455.42
MW-26	458.80	6.52	452.28
MW-27	460.45	8.68	451.77
MW-28	461.26	8.57	452.69
MW-29	459.89	11.03	448.86
MW-BR-01	462.64	34.40	428.24
MW-BR-02	467.87	30.21	437.66
MW-BR-03	457.06	13.92	443.14
MW-BR-04	396.39	--	Artesian
MW-BR-05	401.34	18.51	382.83
MW-BR-06	436.30	37.21	399.09

Notes:

AMSL - Above mean sea level

NA - Not Applicable

Depth to water measurements were recorded September 10, 2015.

Table 2
Groundwater Analytical Results (September 2015)
Former Philips Display Components Facility
Seneca Falls, New York

VOCs	CAS #	NYS Class GA Standard	MW-1	MW-20	MW-22	MW-23	MW-24	MW-25	MW-25 DUPLICATE	MW-26	MW-28	MW-29	MW-BR-01	MW-BR-02	MW-BR-04	MW-BR-05	MW-BR-06	TRIP BLANK
1,1,1-Trichloroethane	71-55-6	5	3.3 J	5 U	5 U	100 U	2000 U	40 U	2.1 J	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	79-34-5	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	79-00-5	1	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethane	75-34-3	5	2.5 J	5 U	5 U	100 U	2000 U	15 J	16	1.4 J	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
1,1-Dichloroethene	75-35-4	5	5 U	5 U	5 U	100 U	2000 U	40 U	2.5	1.4 J	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloroethane	107-06-2	0.6	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	0.57 J	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
1,2-Dichloropropane	78-87-5	1	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	591-78-6	50	10 U	10 U	10 U	200 U	4000 U	80 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	67-64-1	50	10	13	9.8 J	200 U	4000 U	80 U	20	17	17	50 U	8.5 J	12	19	12	22	10 U
Benzene	71-43-2	1	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromodichloromethane	75-27-4	50	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromoform	75-25-2	50	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Bromomethane	74-83-9	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon disulfide	75-15-0	60	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Carbon tetrachloride	56-23-5	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Chlorobenzene	108-90-7	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroethane	75-00-3	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloroform	67-66-3	7	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Chloromethane	74-87-3	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
cis-1,2-Dichloroethene	156-59-2	5	5 U	5 U	11	310	30000 J	200	230	180	5 U	140	5 U	5 U	5 U	5 U	6.3	5 U
cis-1,3-Dichloropropene	10061-01-5	0.4	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Dibromochloromethane	124-48-1	50	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Dichlorodifluoromethane	75-71-8	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Ethylbenzene	100-41-4	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Butanone (MEK)	78-93-3	50	10 U	10 U	10 U	200 U	4000 U	80 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-pentanone (MIBK)	108-10-1	5	10 U	10 U	10 U	200 U	4000 U	80 U	10 U	10 U	10 U	50 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene Chloride	75-09-2	5	5 U	5 U	5 U	11 J	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Styrene	100-42-5	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Tetrachloroethene	127-18-4	5	5 U	5 U	5 U	100 U	2000 U	40 U	0.48 J	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Toluene	108-88-3	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,2-Dichloroethene	156-60-5	5	5 U	5 U	5 U	100 U	2000 U	40 U	1 J	1.7 J	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
trans-1,3-Dichloropropene	10061-02-6	0.4	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Trichloroethene	79-01-6	5	5 U	5 U	4.2 J	1200	2000 U	9.5 J	9.8	110	5.4	25 U	5 U	5 U	5 U	5 U	6.4	5 U
Trichlorofluoromethane	75-69-4	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl acetate	108-05-4	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Vinyl chloride	75-01-4	2	5 U	0.96 J	5 U	100 U	1800 J	40 U	5 U	8.5	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U
Xylenes, Total	1330-20-7	5	5 U	5 U	5 U	100 U	2000 U	40 U	5 U	5 U	5 U	25 U	5 U	5 U	5 U	5 U	5 U	5 U

NOTES:

Bolded results were greater than the NYSDEC Class GA Standards
All values are shown in units of micrograms per liter (ug/L).

U - Not detected. Reporting limit shown.
J - Estimated

Attachment A
Data Validation Report

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

October 23, 2015

Mark Flusche
ARCADIS Malcolm Pirnie, Inc.
855 Route 146 Suite 210
Clifton Park, NY 12065

RE: Validation of GTE-OSI--Seneca Falls, NY Site Data Package-Groundwaters
TAL-Buffalo SDG No. 480-87143-1

Dear Mr. Flusche:

Review has been completed for the data package generated by TestAmerica Laboratories that pertains to samples collected 09/10/15 at the GTE-OSI--Seneca Falls, NY site. Fourteen aqueous samples, a field duplicate, and a trip blank were analyzed for volatiles by USEPA SW846 method 8260C.

Data validation was performed with guidance from the USEPA Region II validation SOP HW-6, the USEPA CLP National Functional Guidelines for Organic Data Review, and the specific requirements of the analytical methodologies. The data packages were reviewed for the following items:

- * Data Completeness
- * Case Narrative
- * Custody Documentation
- * Holding Times
- * Surrogate Standard Recoveries
- * Matrix Spike Evaluations
- * Blind Field Duplicate Correlations
- * Blank Contamination
- * Laboratory Control Samples (LCSs)
- * Calibration Standard Responses
- * Internal Standard Responses
- * Method Compliance
- * Sample Results Verification

Those items showing deficiencies are discussed in the following sections of this report. All others were found to be acceptable as outlined in the above-mentioned validation procedures, and as applicable for the methodology. Unless noted specifically in the following text, reported results of validated sample analytes are substantiated by the raw data, and generated in compliance with project requirements.

In summary, samples were generally processed in compliance with stated protocols. Field sample results are usable either as reported or with minor qualification.

Copies of the sample identifications and laboratory case narrative are attached to this text, and should be reviewed in conjunction with this report. Also included are laboratory results forms with recommended qualifications applied in red ink.

VOA Analyses by EPA 8260C

Matrix spikes (MSs) of MW-24 show recoveries and correlations that are within validation guidelines for the eleven evaluated analytes, with the exception of the recoveries of cis-1,2-dichloroethene (31% and 58%). The result for that compound in the parent sample is qualified as estimated. An observed elevated duplicate correlation for cis-1,3-dichloropropene does not affect the sample reported results. The analytical protocol requires that all analytes be evaluated in MSs and LCSs.

The blind field duplicate correlations of MW-25 are acceptable.

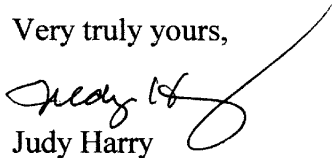
Surrogate and internal standard responses are within required range, and holding times were met. Blanks show no contamination. Calibration standards show acceptable responses.

Results of analytes flagged by the laboratory as "E" have been edited to reflect the corresponding result from the dilution analyses, thus reflecting responses within the established linear ranges of the instrument.

Some of the samples were processed only at initial dilution due to high concentrations of target analytes. Reporting limits for non-detected analytes in those samples are therefore proportionally elevated. Although sample MW-25 was processed at eightfold dilution, its field duplicate was processed undiluted, and provides a characterization of the lower level constituency.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,


Judy Harry

VALIDATION DATA QUALIFIER DEFINITIONS

U	The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
J-	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
J+	The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
UJ	The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
NJ	The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
EMPC	The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

**CLIENT and LABORATORY SAMPLE IDs
and CASE NARRATIVES**

SAMPLE SUMMARY

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
480-87143-1	MW-1	Water	09/10/2015 1000	09/12/2015 0210
480-87143-2	MW-20	Water	09/10/2015 0925	09/12/2015 0210
480-87143-3	MW-22	Water	09/10/2015 1140	09/12/2015 0210
480-87143-4	MW-23	Water	09/10/2015 1300	09/12/2015 0210
480-87143-5	MW-24	Water	09/10/2015 1315	09/12/2015 0210
480-87143-5MS	MW-24	Water	09/10/2015 1315	09/12/2015 0210
480-87143-5MSD	MW-24	Water	09/10/2015 1315	09/12/2015 0210
480-87143-6	MW-25	Water	09/10/2015 1155	09/12/2015 0210
480-87143-7	MW-26	Water	09/10/2015 1355	09/12/2015 0210
480-87143-8	MW-28	Water	09/10/2015 0935	09/12/2015 0210
480-87143-9	MW-29	Water	09/10/2015 0950	09/12/2015 0210
480-87143-10	MW-BR-01	Water	09/10/2015 1410	09/12/2015 0210
480-87143-11	MW-BR-02	Water	09/10/2015 0850	09/12/2015 0210
480-87143-12	MW-BR-04	Water	09/10/2015 1100	09/12/2015 0210
480-87143-13	MW-BR-05	Water	09/10/2015 1045	09/12/2015 0210
480-87143-14	MW-BR-06	Water	09/10/2015 1330	09/12/2015 0210
480-87143-15	DUP-091015-01	Water	09/10/2015 0000	09/12/2015 0210
480-87143-16	TRIP BLANK	Water	09/10/2015 0000	09/12/2015 0210

Job Narrative
480-87143-1

Receipt

The samples were received on 9/12/2015 2:10 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 0.4° C.

GC/MS VOA

Method(s) 8260C: The following samples was diluted to bring the concentration of target analytes within the calibration range: MW-23 (480-87143-4), MW-24 (480-87143-5), MW-24 (480-87143-5[MS]), MW-24 (480-87143-5[MSD]), MW-25 (480-87143-6) and MW-29 (480-87143-9). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-26 (480-87143-7). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: DUP-091015-01 (480-87143-15). Elevated reporting limits (RLs) are provided.

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

QUALIFIED REPORT OF ANALYSIS RESULTS FORMS

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-1

Lab Sample ID: 480-87143-1

Client Matrix: Water

Date Sampled: 09/10/2015 1000

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263532	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9865.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 0505			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 0505				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	3.3	J	0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	2.5	J	0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	10		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	106		71 - 126
4-Bromofluorobenzene (Surr)	107		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-20

Lab Sample ID: 480-87143-2

Client Matrix: Water

Date Sampled: 09/10/2015 0925

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-263532	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P9866.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 09/15/2015 0533		Final Weight/Volume: 5 mL
Prep Date: 09/15/2015 0533		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	13		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	0.96	J	0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 137
Toluene-d8 (Surr)	98		71 - 126
4-Bromofluorobenzene (Surr)	99		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-22

Lab Sample ID: 480-87143-3

Client Matrix: Water

Date Sampled: 09/10/2015 1140

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-263532	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P9867.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 09/15/2015 0600		Final Weight/Volume: 5 mL
Prep Date: 09/15/2015 0600		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	9.8	J	3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	11		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	4.2	J	0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		66 - 137
Toluene-d8 (Surr)	97		71 - 126
4-Bromofluorobenzene (Surr)	95		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-23

Lab Sample ID: 480-87143-4

Client Matrix: Water

Date Sampled: 09/10/2015 1300

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263532	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9868.D
Dilution:	20			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 0627			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 0627				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		16	100
1,1,2,2-Tetrachloroethane	ND		4.2	100
1,1,2-Trichloroethane	ND		4.6	100
1,1-Dichloroethane	ND		7.6	100
1,1-Dichloroethene	ND		5.8	100
1,2-Dichloroethane	ND		4.2	100
1,2-Dichloropropane	ND		14	100
2-Hexanone	ND		25	200
Methyl ethyl ketone (MEK)	ND		26	200
Methyl isobutyl ketone (MIBK)	ND		42	200
Acetone	ND		60	200
Benzene	ND		8.2	100
Bromodichloromethane	ND		7.8	100
Bromoform	ND		5.2	100
Bromomethane	ND		14	100
Carbon disulfide	ND		3.8	100
Carbon tetrachloride	ND		5.4	100
Chlorobenzene	ND		15	100
Dibromochloromethane	ND		6.4	100
Chloroethane	ND		6.4	100
Chloroform	ND		6.8	100
Chloromethane	ND		7.0	100
cis-1,2-Dichloroethene	310		16	100
cis-1,3-Dichloropropene	ND		7.2	100
Dichlorodifluoromethane	ND		14	100
Ethylbenzene	ND		15	100
Methylene Chloride	11	J	8.8	100
Styrene	ND		15	100
Tetrachloroethene	ND		7.2	100
Toluene	ND		10	100
trans-1,2-Dichloroethene	ND		18	100
trans-1,3-Dichloropropene	ND		7.4	100
Trichloroethene	1200		9.2	100
Trichlorofluoromethane	ND		18	100
Vinyl chloride	ND		18	100
Xylenes, Total	ND		13	100
Vinyl acetate	ND		17	100

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	113		66 - 137
Toluene-d8 (Surr)	92		71 - 126
4-Bromofluorobenzene (Surr)	98		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-24

Lab Sample ID: 480-87143-5

Client Matrix: Water

Date Sampled: 09/10/2015 1315

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-263532	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P9869.D
Dilution: 400		Initial Weight/Volume: 5 mL
Analysis Date: 09/15/2015 0654		Final Weight/Volume: 5 mL
Prep Date: 09/15/2015 0654		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		330	2000
1,1,2,2-Tetrachloroethane	ND		84	2000
1,1,2-Trichloroethane	ND		92	2000
1,1-Dichloroethane	ND		150	2000
1,1-Dichloroethene	ND		120	2000
1,2-Dichloroethane	ND		84	2000
1,2-Dichloropropane	ND		290	2000
2-Hexanone	ND		500	4000
Methyl ethyl ketone (MEK)	ND		530	4000
Methyl isobutyl ketone (MIBK)	ND		840	4000
Acetone	ND		1200	4000
Benzene	ND		160	2000
Bromodichloromethane	ND		160	2000
Bromoform	ND		100	2000
Bromomethane	ND		280	2000
Carbon disulfide	ND		76	2000
Carbon tetrachloride	ND		110	2000
Chlorobenzene	ND		300	2000
Dibromochloromethane	ND		130	2000
Chloroethane	ND		130	2000
Chloroform	ND		140	2000
Chloromethane	ND		140	2000
cis-1,2-Dichloroethene	30000	J F1	320	2000
cis-1,3-Dichloropropene	ND	F2	140	2000
Dichlorodifluoromethane	ND		270	2000
Ethylbenzene	ND		300	2000
Methylene Chloride	ND		180	2000
Styrene	ND		290	2000
Tetrachloroethene	ND		140	2000
Toluene	ND		200	2000
trans-1,2-Dichloroethene	ND		360	2000
trans-1,3-Dichloropropene	ND		150	2000
Trichloroethene	ND		180	2000
Trichlorofluoromethane	ND		350	2000
Vinyl chloride	1800	J	360	2000
Xylenes, Total	ND		260	2000
Vinyl acetate	ND		340	2000

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	103		66 - 137
Toluene-d8 (Surr)	101		71 - 126
4-Bromofluorobenzene (Surr)	93		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-25

Lab Sample ID: 480-87143-6

Client Matrix: Water

Date Sampled: 09/10/2015 1155

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263532	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9870.D
Dilution:	8.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 0722			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 0722				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		6.6	40
1,1,2,2-Tetrachloroethane	ND		1.7	40
1,1,2-Trichloroethane	ND		1.8	40
1,1-Dichloroethane	15	J	3.0	40
1,1-Dichloroethene	ND		2.3	40
1,2-Dichloroethane	ND		1.7	40
1,2-Dichloropropane	ND		5.8	40
2-Hexanone	ND		9.9	80
Methyl ethyl ketone (MEK)	ND		11	80
Methyl isobutyl ketone (MIBK)	ND		17	80
Acetone	ND		24	80
Benzene	ND		3.3	40
Bromodichloromethane	ND		3.1	40
Bromoform	ND		2.1	40
Bromomethane	ND		5.5	40
Carbon disulfide	ND		1.5	40
Carbon tetrachloride	ND		2.2	40
Chlorobenzene	ND		6.0	40
Dibromochloromethane	ND		2.6	40
Chloroethane	ND		2.6	40
Chloroform	ND		2.7	40
Chloromethane	ND		2.8	40
cis-1,2-Dichloroethene	200		6.5	40
cis-1,3-Dichloropropene	ND		2.9	40
Dichlorodifluoromethane	ND		5.4	40
Ethylbenzene	ND		5.9	40
Methylene Chloride	ND		3.5	40
Styrene	ND		5.8	40
Tetrachloroethene	ND		2.9	40
Toluene	ND		4.1	40
trans-1,2-Dichloroethene	ND		7.2	40
trans-1,3-Dichloropropene	ND		3.0	40
Trichloroethene	9.5	J	3.7	40
Trichlorofluoromethane	ND		7.0	40
Vinyl chloride	ND		7.2	40
Xylenes, Total	ND		5.3	40
Vinyl acetate	ND		6.8	40

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	95		71 - 126
4-Bromofluorobenzene (Surr)	93		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-26

Lab Sample ID: 480-87143-7

Client Matrix: Water

Date Sampled: 09/10/2015 1355

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263532	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9871.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 0749			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 0749				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	1.4	J	0.38	5.0
1,1-Dichloroethene	1.4	J	0.29	5.0
1,2-Dichloroethane	0.57	J	0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	17		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	180	-E-	0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	1.7	J	0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	-120 110	-E--	0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	8.5		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	112		66 - 137
Toluene-d8 (Surr)	100		71 - 126
4-Bromofluorobenzene (Surr)	94		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-28

Lab Sample ID: 480-87143-8

Client Matrix: Water

Date Sampled: 09/10/2015 0935

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263634	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9885.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 1500			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 1500				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	17		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	5.4		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	99		71 - 126
4-Bromofluorobenzene (Surr)	97		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-29

Lab Sample ID: 480-87143-9

Client Matrix: Water

Date Sampled: 09/10/2015 0950

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263532	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9873.D
Dilution:	5.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 0843			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 0843				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		4.1	25
1,1,2,2-Tetrachloroethane	ND		1.1	25
1,1,2-Trichloroethane	ND		1.2	25
1,1-Dichloroethane	ND		1.9	25
1,1-Dichloroethene	ND		1.5	25
1,2-Dichloroethane	ND		1.1	25
1,2-Dichloropropane	ND		3.6	25
2-Hexanone	ND		6.2	50
Methyl ethyl ketone (MEK)	ND		6.6	50
Methyl isobutyl ketone (MIBK)	ND		11	50
Acetone	ND		15	50
Benzene	ND		2.1	25
Bromodichloromethane	ND		2.0	25
Bromoform	ND		1.3	25
Bromomethane	ND		3.5	25
Carbon disulfide	ND		0.95	25
Carbon tetrachloride	ND		1.4	25
Chlorobenzene	ND		3.8	25
Dibromochloromethane	ND		1.6	25
Chloroethane	ND		1.6	25
Chloroform	ND		1.7	25
Chloromethane	ND		1.8	25
cis-1,2-Dichloroethene	140		4.1	25
cis-1,3-Dichloropropene	ND		1.8	25
Dichlorodifluoromethane	ND		3.4	25
Ethylbenzene	ND		3.7	25
Methylene Chloride	ND		2.2	25
Styrene	ND		3.7	25
Tetrachloroethene	ND		1.8	25
Toluene	ND		2.6	25
trans-1,2-Dichloroethene	ND		4.5	25
trans-1,3-Dichloropropene	ND		1.9	25
Trichloroethene	ND		2.3	25
Trichlorofluoromethane	ND		4.4	25
Vinyl chloride	ND		4.5	25
Xylenes, Total	ND		3.3	25
Vinyl acetate	ND		4.3	25

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	100		71 - 126
4-Bromofluorobenzene (Surr)	95		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-BR-01

Lab Sample ID: 480-87143-10

Client Matrix: Water

Date Sampled: 09/10/2015 1410

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-263532	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P9874.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 09/15/2015 0910		Final Weight/Volume: 5 mL
Prep Date: 09/15/2015 0910		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	8.5	J	3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	116		66 - 137
Toluene-d8 (Surr)	99		71 - 126
4-Bromofluorobenzene (Surr)	94		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-BR-02

Lab Sample ID: 480-87143-11

Client Matrix: Water

Date Sampled: 09/10/2015 0850

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263634	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9886.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 1528			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 1528				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	12		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	95		71 - 126
4-Bromofluorobenzene (Surr)	93		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-BR-04

Lab Sample ID: 480-87143-12

Client Matrix: Water

Date Sampled: 09/10/2015 1100

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263634	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9887.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 1555			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 1555				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	19		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	95		71 - 126
4-Bromofluorobenzene (Surr)	90		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-BR-05

Lab Sample ID: 480-87143-13

Client Matrix: Water

Date Sampled: 09/10/2015 1045

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method: 8260C	Analysis Batch: 480-263634	Instrument ID: HP5973P
Prep Method: 5030C	Prep Batch: N/A	Lab File ID: P9888.D
Dilution: 1.0		Initial Weight/Volume: 5 mL
Analysis Date: 09/15/2015 1623		Final Weight/Volume: 5 mL
Prep Date: 09/15/2015 1623		

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	12		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	114		66 - 137
Toluene-d8 (Surr)	93		71 - 126
4-Bromofluorobenzene (Surr)	91		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: MW-BR-06

Lab Sample ID: 480-87143-14

Client Matrix: Water

Date Sampled: 09/10/2015 1330

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263634	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9889.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 1650			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 1650				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	22		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	6.3		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	6.4		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	93		71 - 126
4-Bromofluorobenzene (Surr)	92		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: DUP-091015-01

Lab Sample ID: 480-87143-15

Client Matrix: Water

Date Sampled: 09/10/2015 0000

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263634	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9890.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 1718			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 1718				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	2.1	J	0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	16		0.38	5.0
1,1-Dichloroethene	2.5	J	0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	20		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	-220 230	-E-	0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	0.48	J	0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	1.0	J	0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	9.8		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	106		66 - 137
Toluene-d8 (Surr)	96		71 - 126
4-Bromofluorobenzene (Surr)	86		73 - 120

Analytical Data

Client: ARCADIS U.S. Inc

Job Number: 480-87143-1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-87143-16

Client Matrix: Water

Date Sampled: 09/10/2015 0000

Date Received: 09/12/2015 0210

8260C Volatile Organic Compounds by GC/MS

Analysis Method:	8260C	Analysis Batch:	480-263634	Instrument ID:	HP5973P
Prep Method:	5030C	Prep Batch:	N/A	Lab File ID:	P9891.D
Dilution:	1.0			Initial Weight/Volume:	5 mL
Analysis Date:	09/15/2015 1745			Final Weight/Volume:	5 mL
Prep Date:	09/15/2015 1745				

Analyte	Result (ug/L)	Qualifier	MDL	RL
1,1,1-Trichloroethane	ND		0.82	5.0
1,1,2,2-Tetrachloroethane	ND		0.21	5.0
1,1,2-Trichloroethane	ND		0.23	5.0
1,1-Dichloroethane	ND		0.38	5.0
1,1-Dichloroethene	ND		0.29	5.0
1,2-Dichloroethane	ND		0.21	5.0
1,2-Dichloropropane	ND		0.72	5.0
2-Hexanone	ND		1.2	10
Methyl ethyl ketone (MEK)	ND		1.3	10
Methyl isobutyl ketone (MIBK)	ND		2.1	10
Acetone	ND		3.0	10
Benzene	ND		0.41	5.0
Bromodichloromethane	ND		0.39	5.0
Bromoform	ND		0.26	5.0
Bromomethane	ND		0.69	5.0
Carbon disulfide	ND		0.19	5.0
Carbon tetrachloride	ND		0.27	5.0
Chlorobenzene	ND		0.75	5.0
Dibromochloromethane	ND		0.32	5.0
Chloroethane	ND		0.32	5.0
Chloroform	ND		0.34	5.0
Chloromethane	ND		0.35	5.0
cis-1,2-Dichloroethene	ND		0.81	5.0
cis-1,3-Dichloropropene	ND		0.36	5.0
Dichlorodifluoromethane	ND		0.68	5.0
Ethylbenzene	ND		0.74	5.0
Methylene Chloride	ND		0.44	5.0
Styrene	ND		0.73	5.0
Tetrachloroethene	ND		0.36	5.0
Toluene	ND		0.51	5.0
trans-1,2-Dichloroethene	ND		0.90	5.0
trans-1,3-Dichloropropene	ND		0.37	5.0
Trichloroethene	ND		0.46	5.0
Trichlorofluoromethane	ND		0.88	5.0
Vinyl chloride	ND		0.90	5.0
Xylenes, Total	ND		0.66	5.0
Vinyl acetate	ND		0.85	5.0

Surrogate	%Rec	Qualifier	Acceptance Limits
1,2-Dichloroethane-d4 (Surr)	110		66 - 137
Toluene-d8 (Surr)	96		71 - 126
4-Bromofluorobenzene (Surr)	93		73 - 120

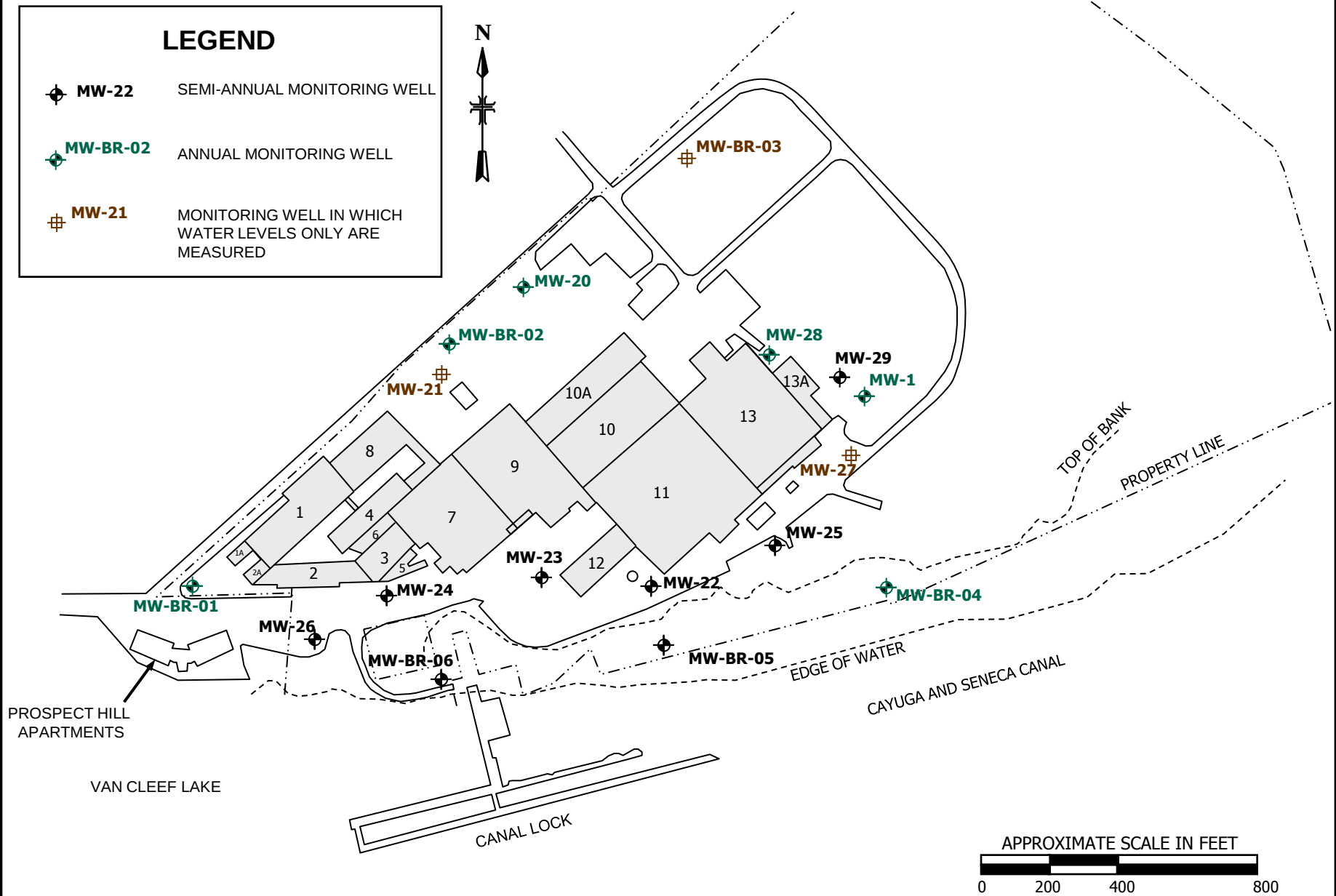
Attachment B
Groundwater VOC Concentration Graphs

LEGEND

 **MW-22** SEMI-ANNUAL MONITORING WELL

 **MW-BR-02** ANNUAL MONITORING WELL

 **MW-21** MONITORING WELL IN WHICH WATER LEVELS ONLY ARE MEASURED



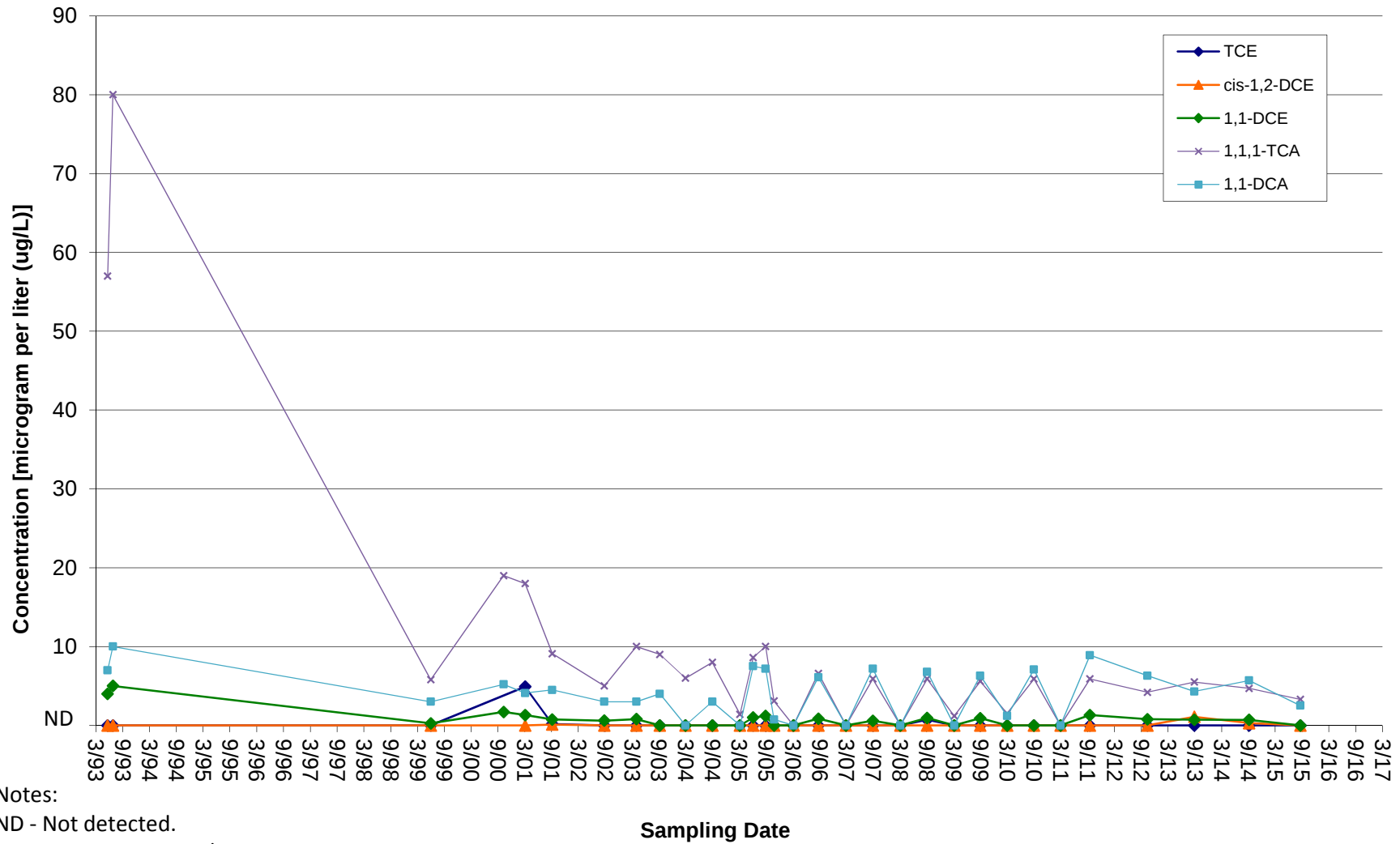
PROSPECT HILL
APARTMENTS

VAN CLEEF LAKE

CANAL LOCK

APPROXIMATE SCALE IN FEET
0 200 400 800

MW-1



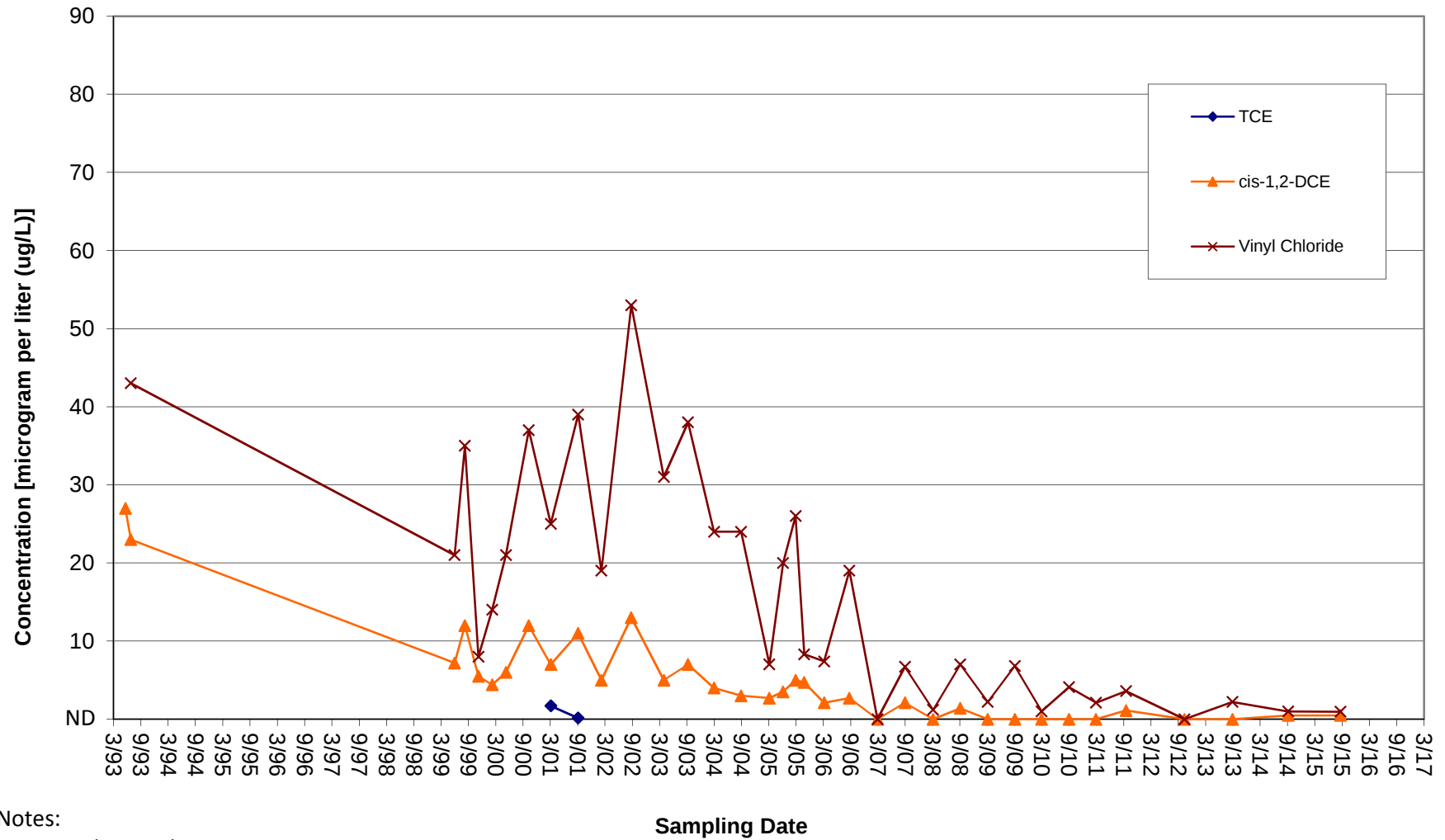
Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

MW-20



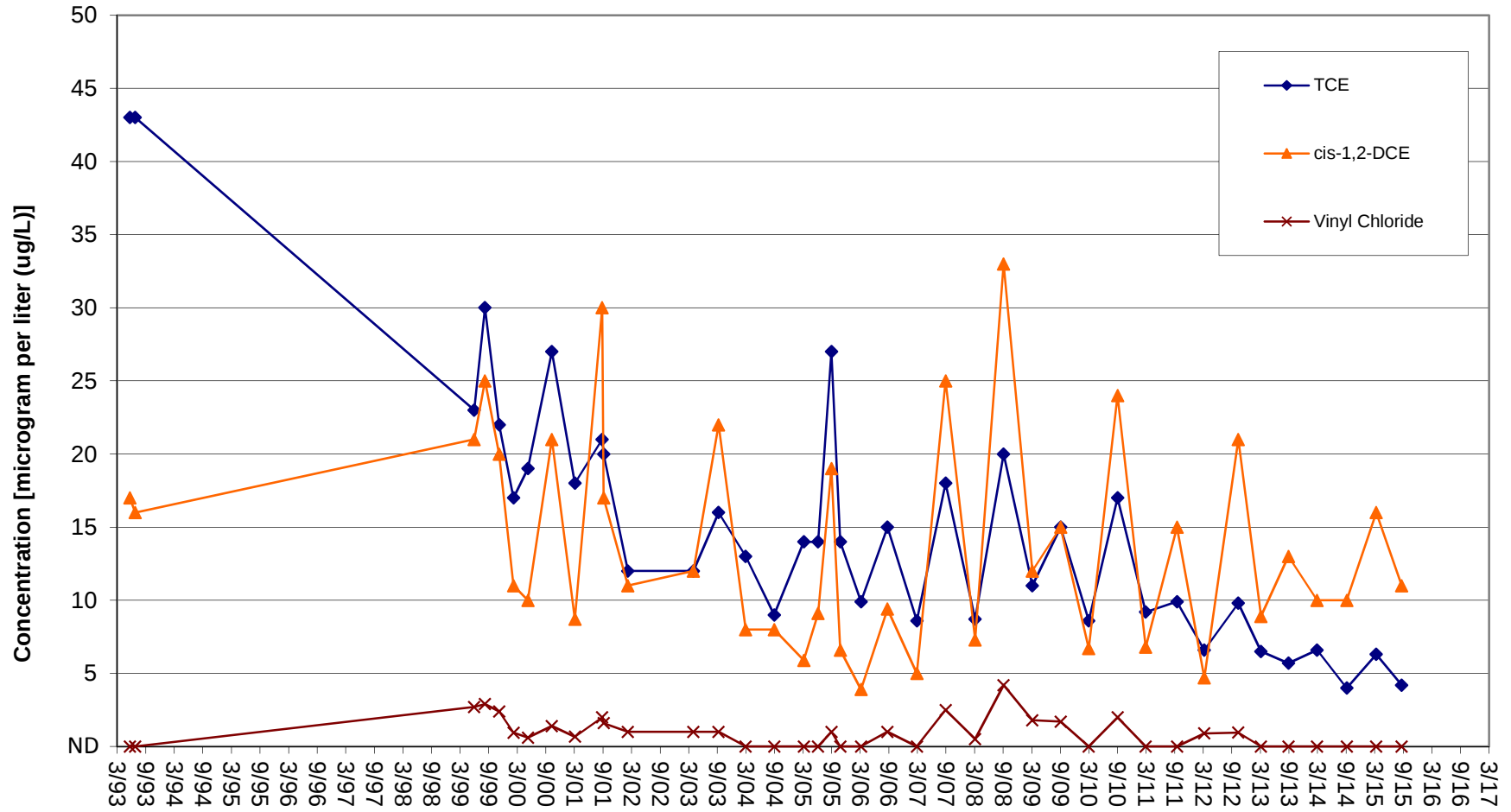
Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

MW-22



Notes:

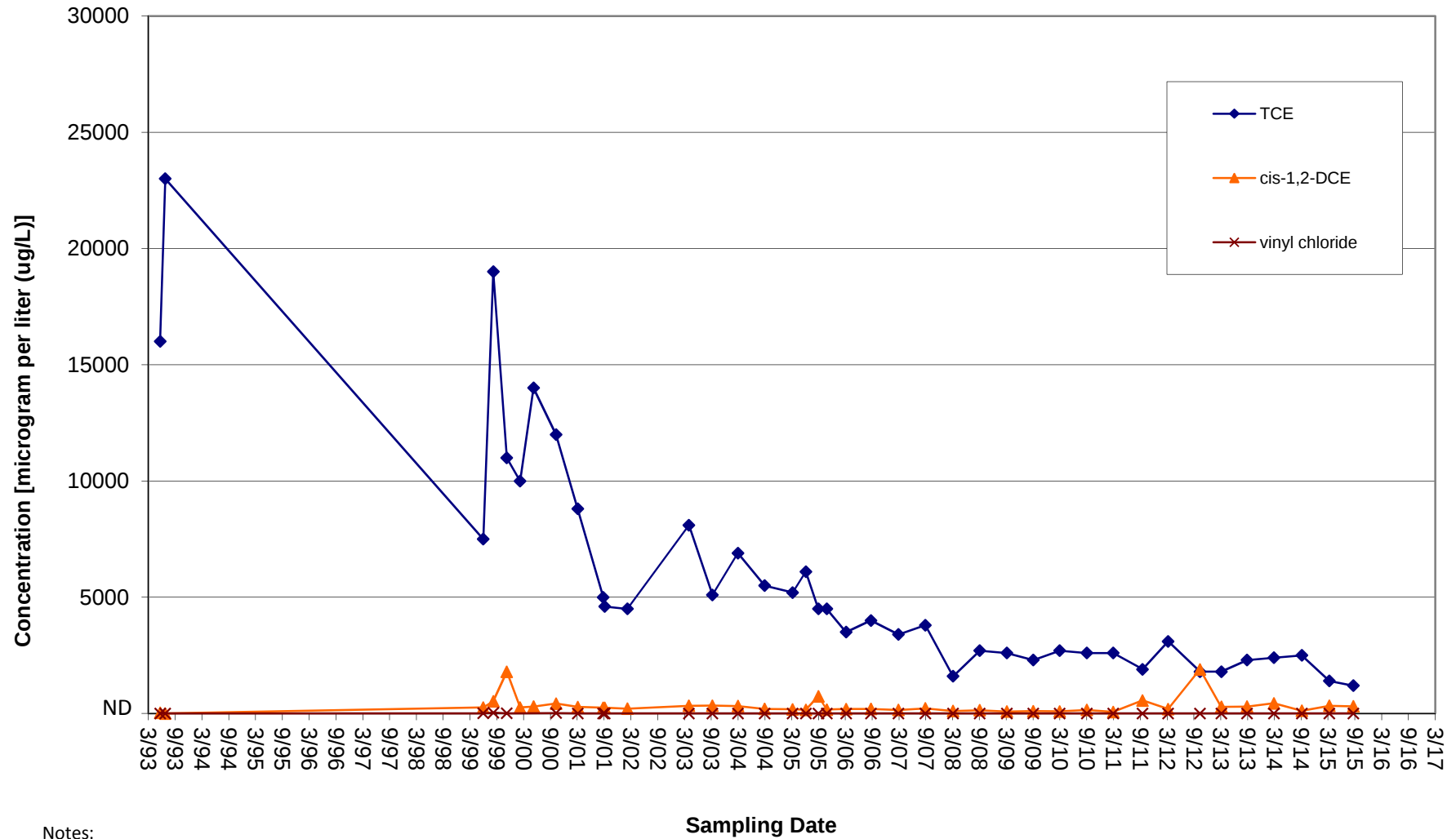
ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

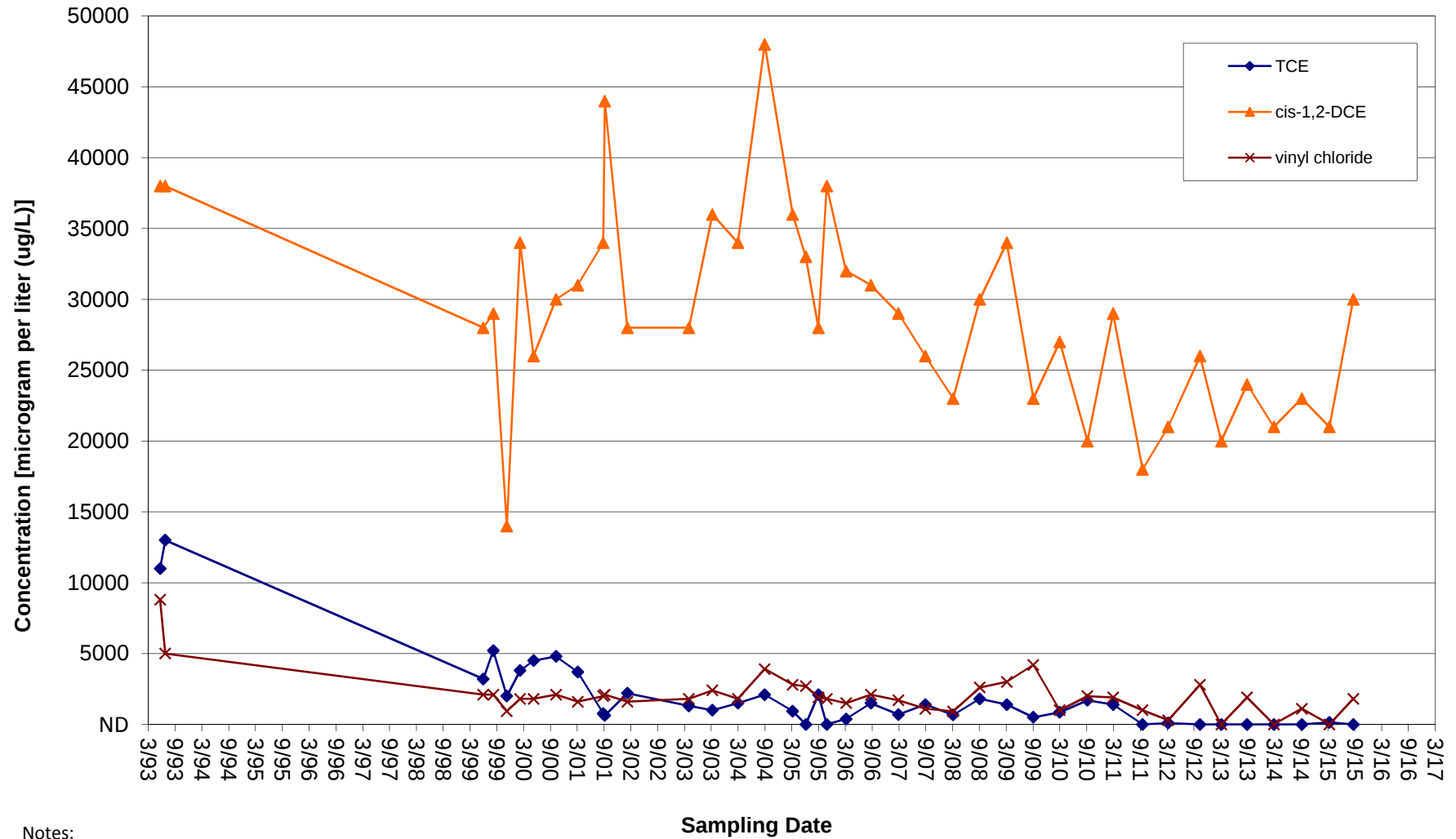
Volatile organic compounds not shown were analyzed but not reported by the laboratory.

MW-23



Notes:
 ND - Not detected.
 Reporting limit is variable.
 Volatile organic comopunds not shown were analyzed but not reported by the laboratory.

MW-24



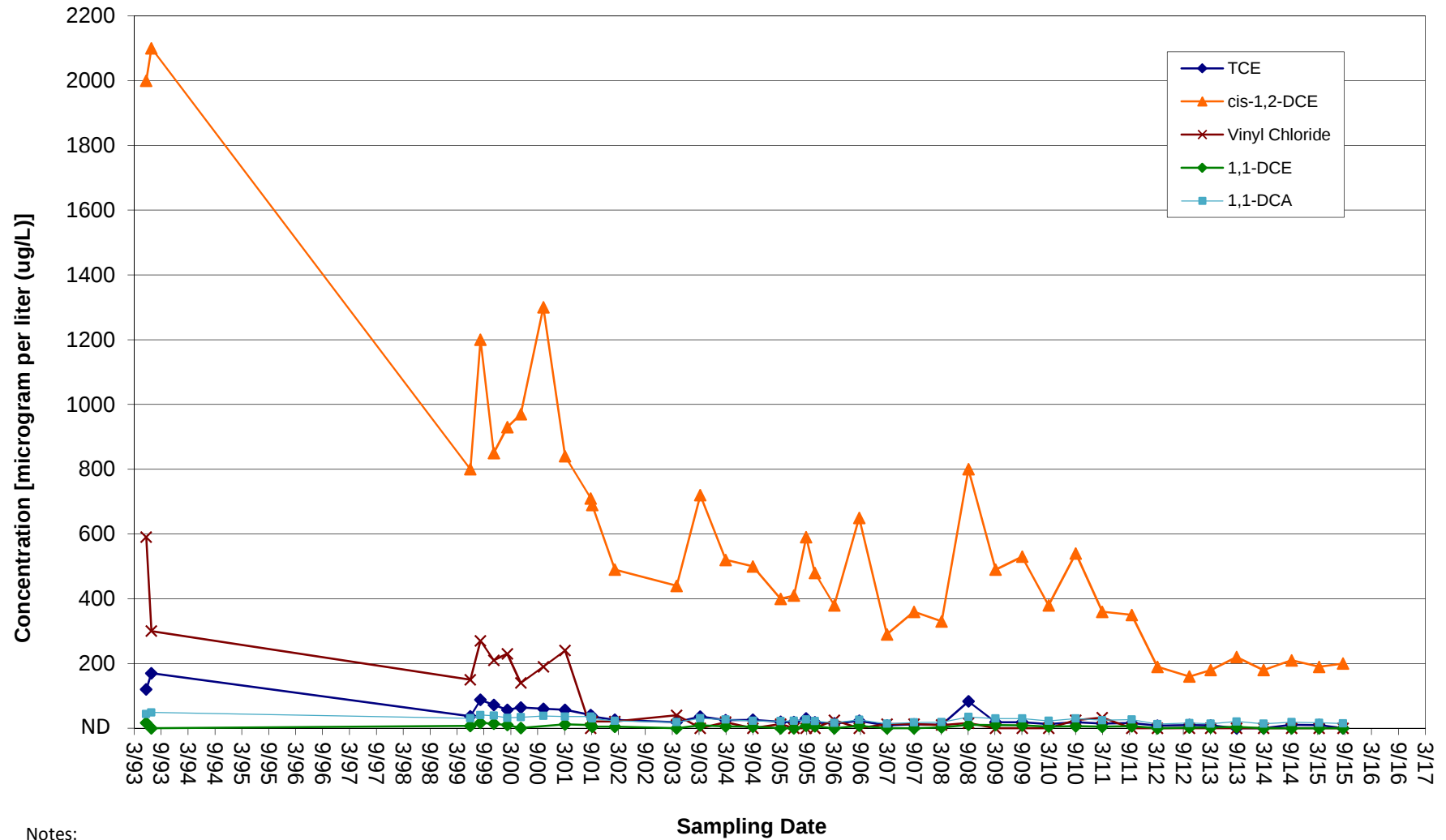
Notes:

ND - Not detected.

Reporting limit is variable.

Volatile organic compounds not shown were analyzed but not reported by the laboratory.

MW-25



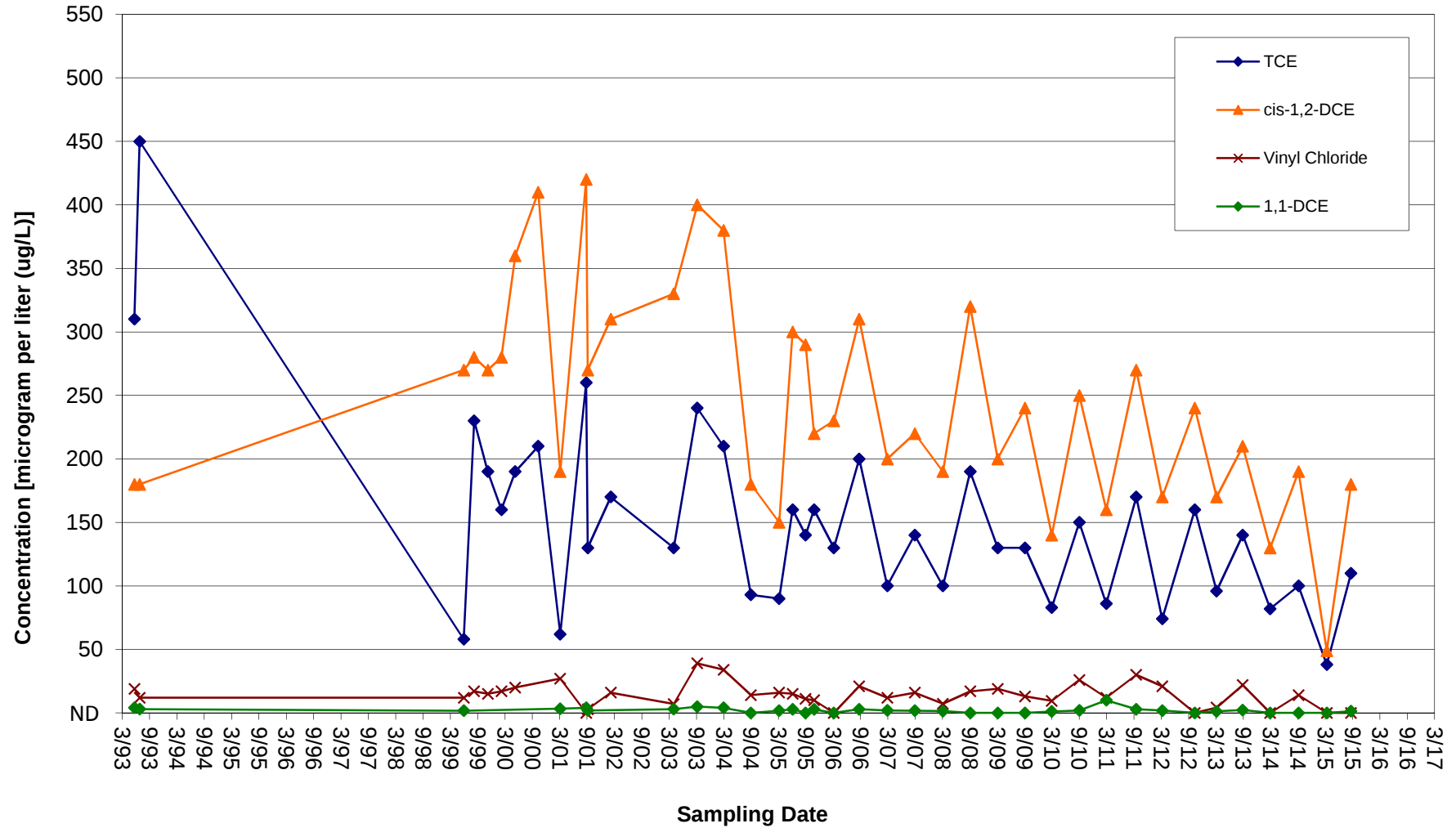
Notes:

ND - Not detected.

Reporting limit is variable.

Volatile organic compunds not shown were analyzed but not reported by the laboratory.

MW-26



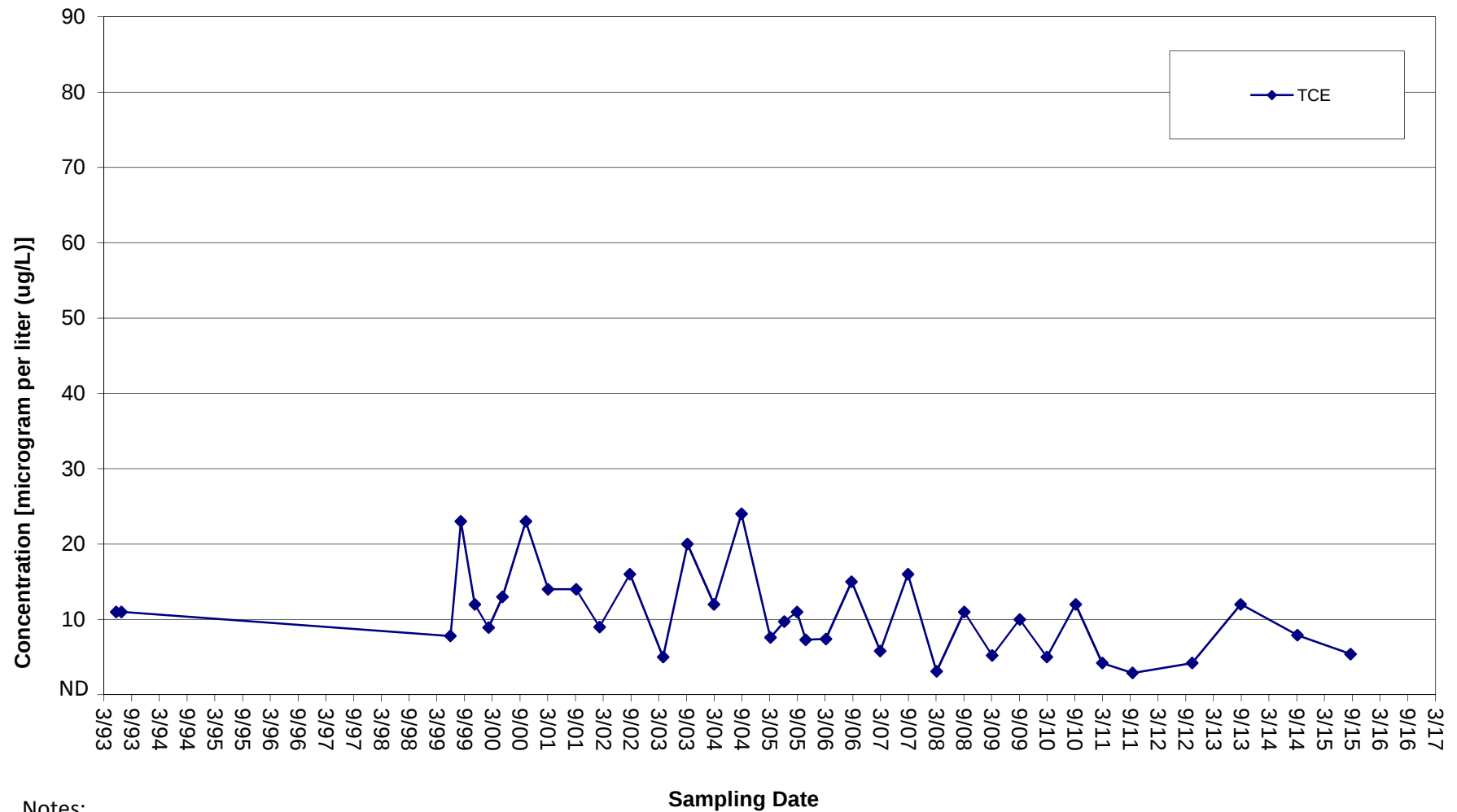
Notes:

ND - Not detected.

Reporting limit is variable.

Volatile organic comopunds not shown were analyzed but not reported by the laboratory.

MW-28



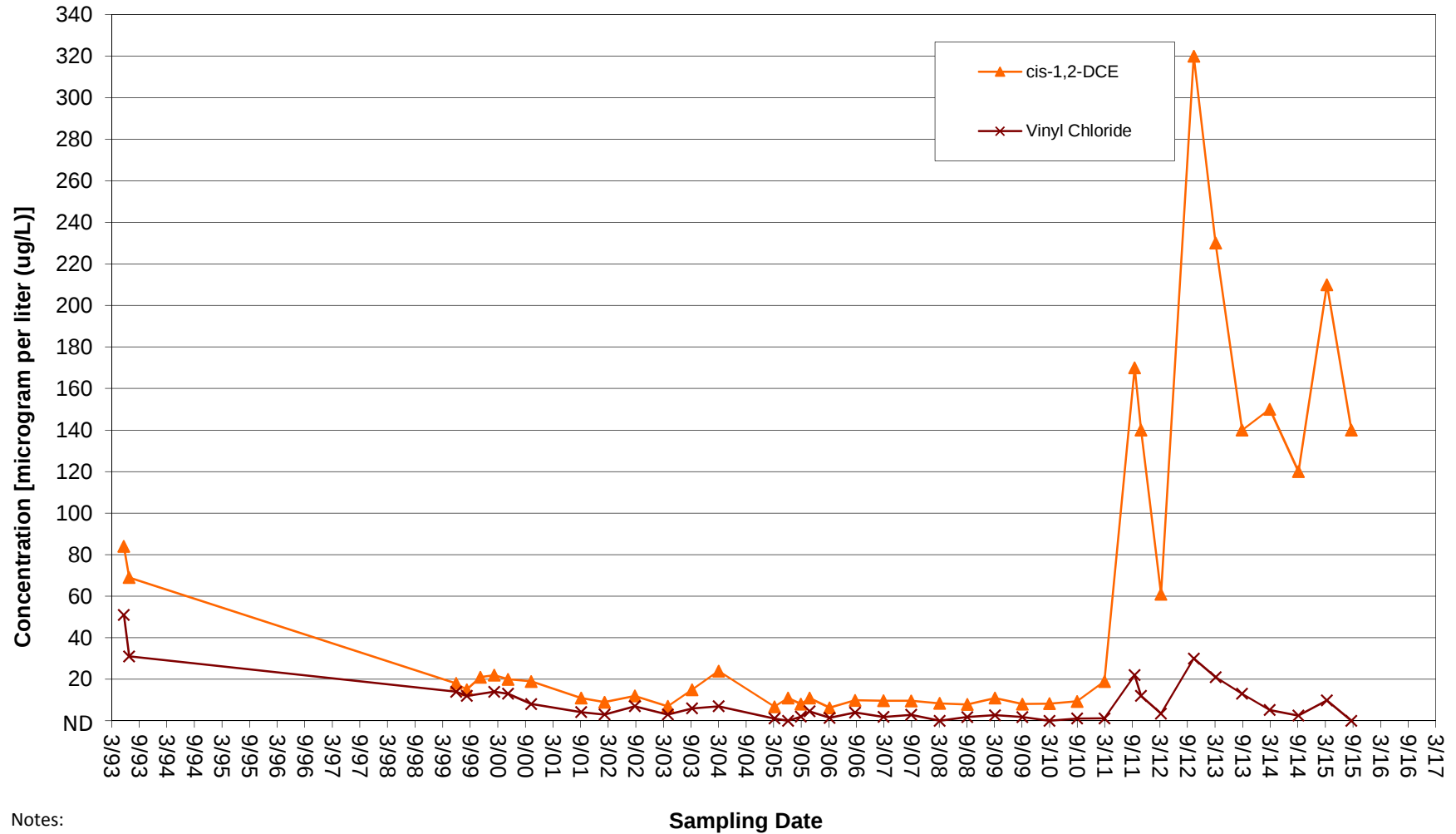
Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

MW-29



Notes:

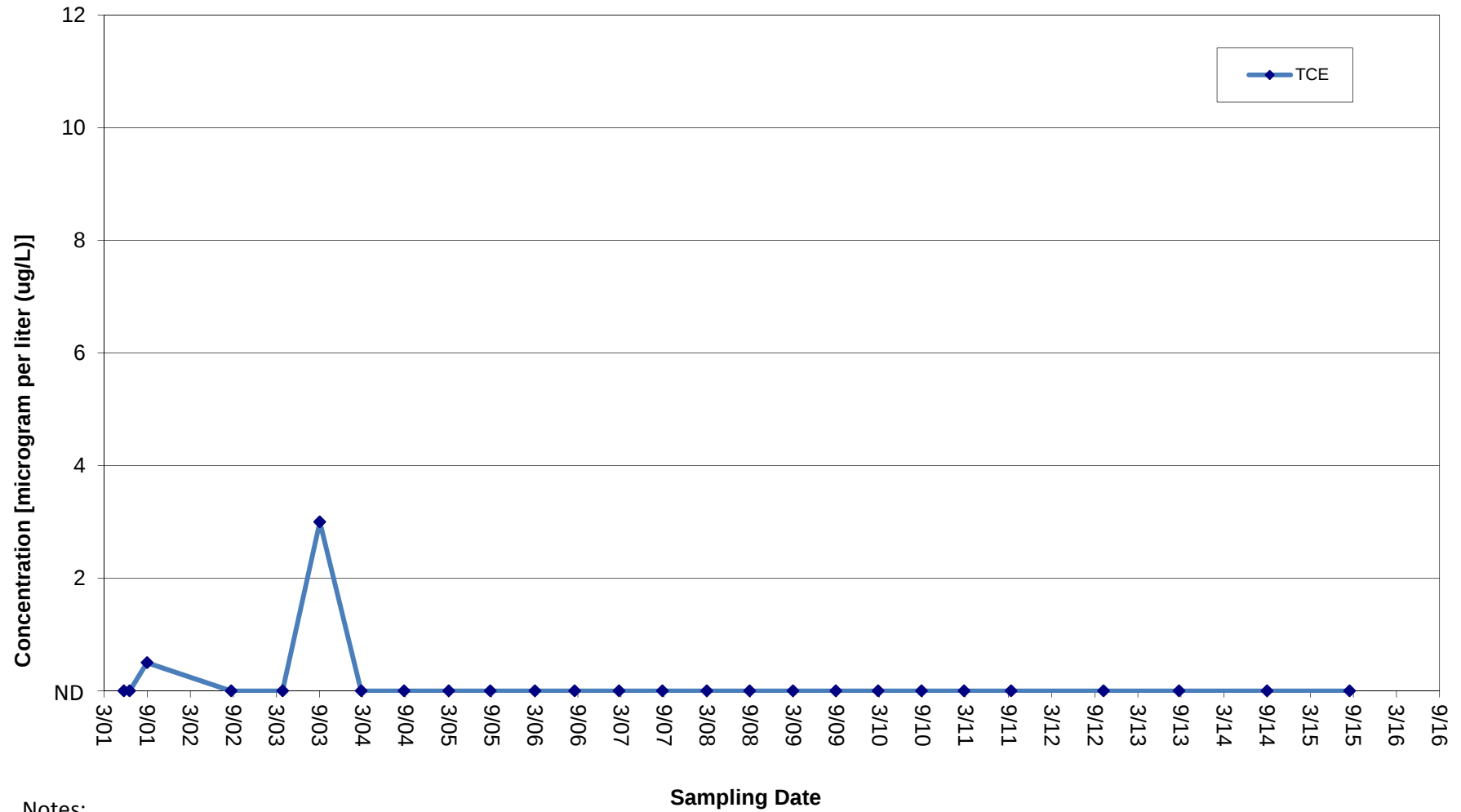
ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

Volatile organic compounds not shown were analyzed but not reported by the laboratory.

MW-BR-01



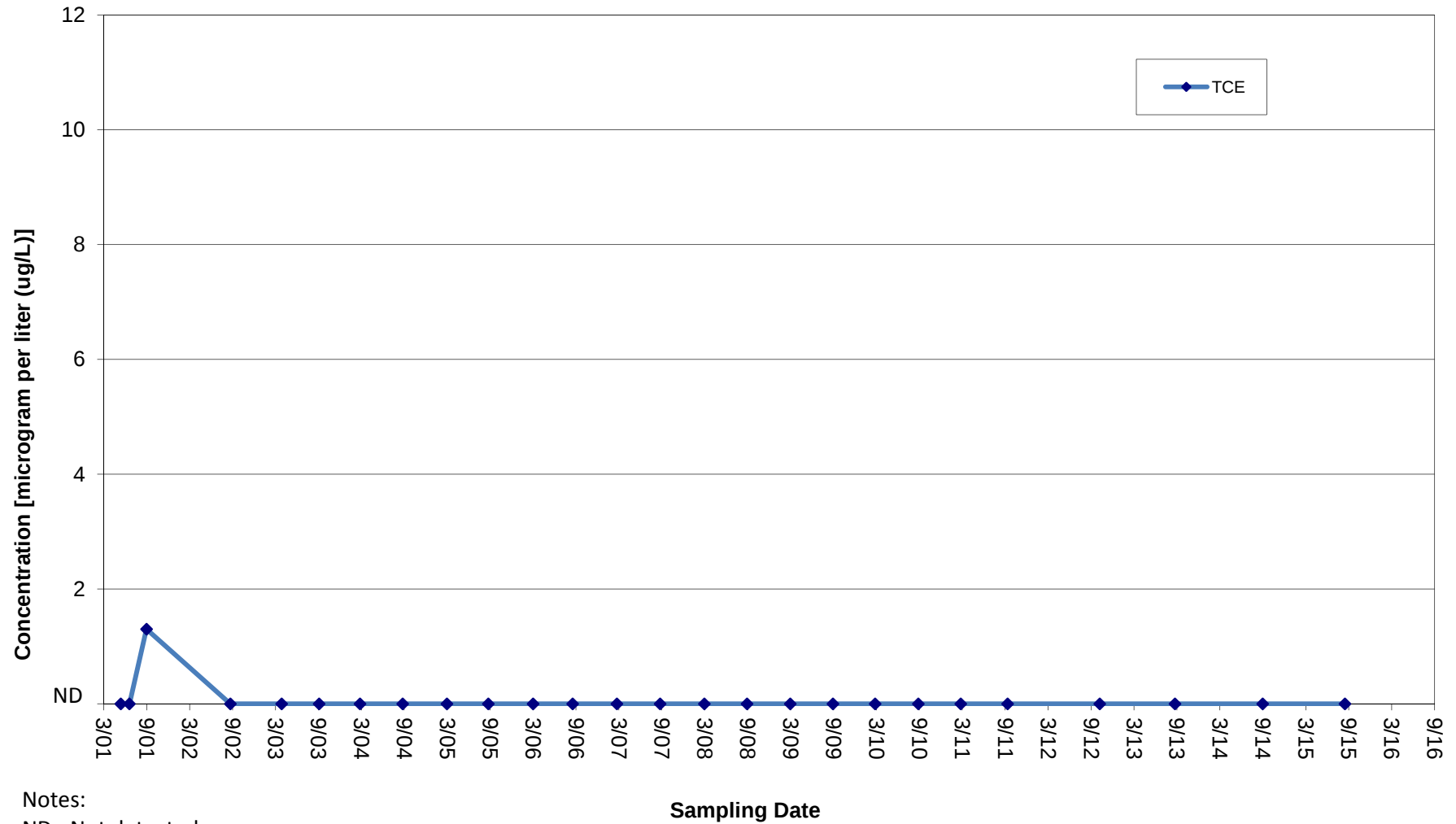
Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

MW-BR-02



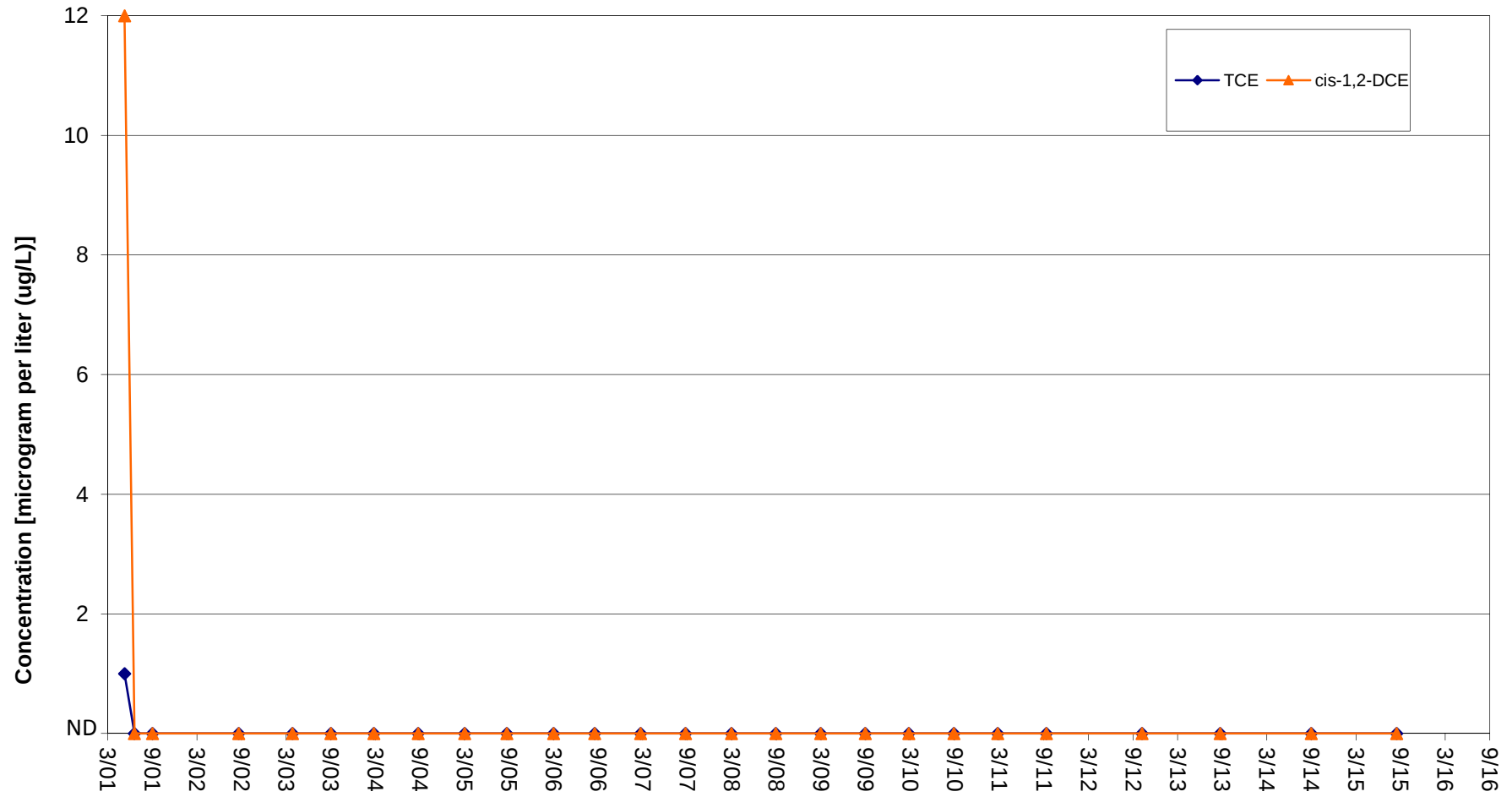
Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

MW-BR-04



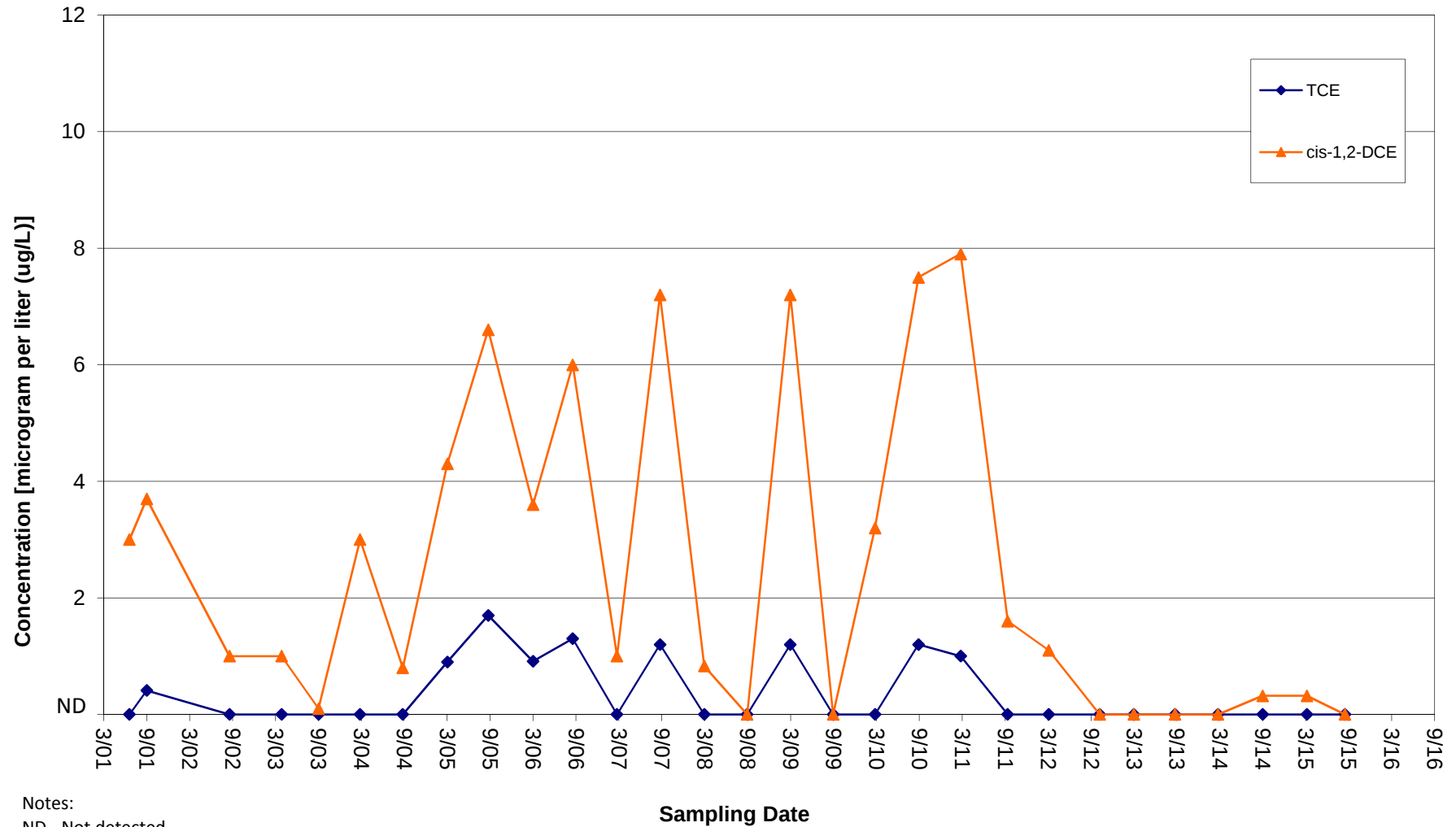
Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

MW-BR-05



Notes:

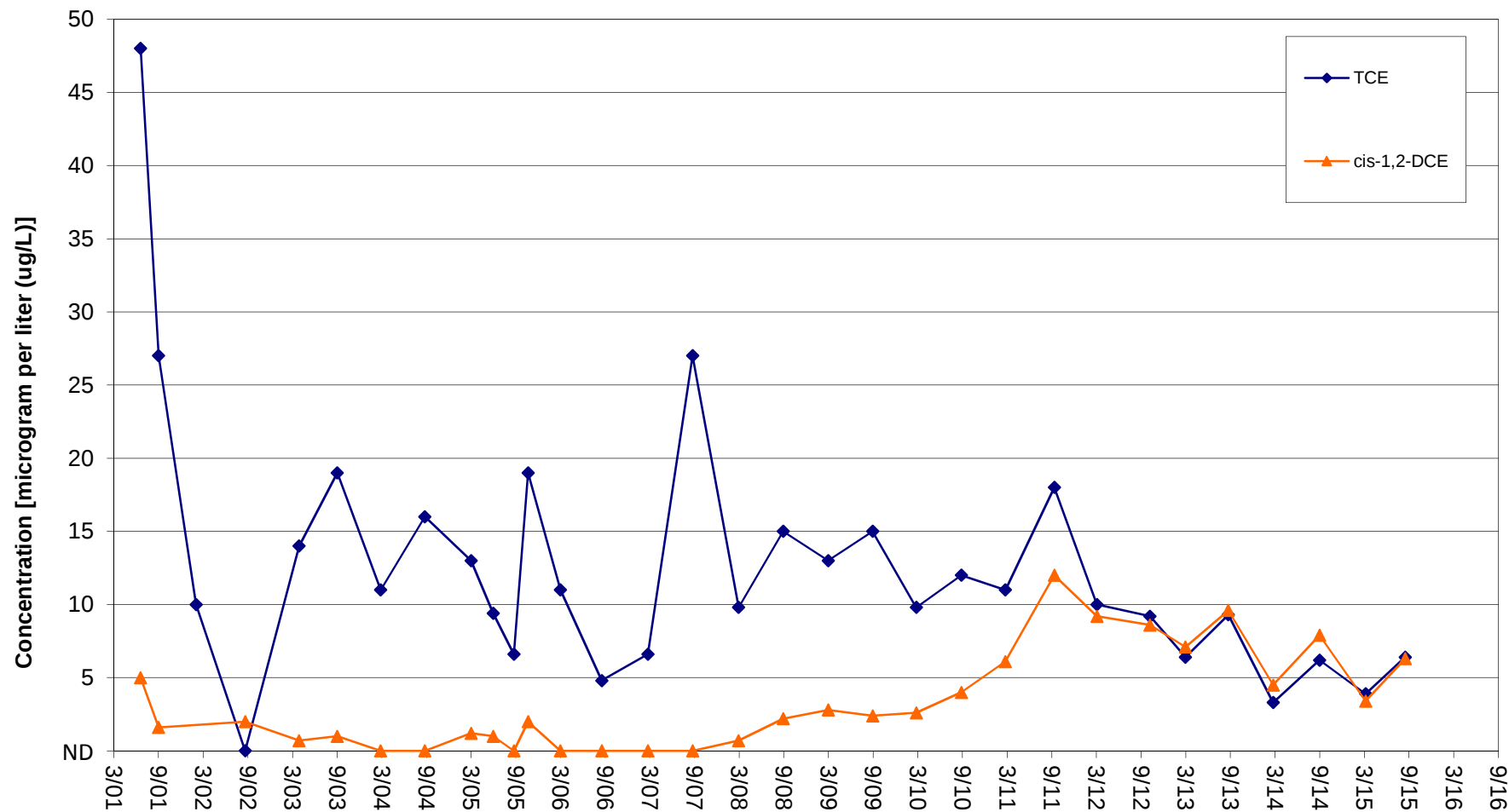
ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

Volatile organic compounds not shown were analyzed but not reported by the laboratory.

MW-BR-06



Notes:

ND - Not detected.

Reporting limit is 5 ug/L.

Results less than the reporting limit are estimated.

Volatile organic compounds not shown were analyzed but not reported by the laboratory.