



Environment

Prepared by:
AECOM
Buffalo, NY
60481767
January 2025

Alternatives Analysis Report Ekonol Polyester Resins Site Wheatfield, New York NYSDEC BCP Site No. C932173

Submitted to:

New York State Department of Environmental Conservation
Division of Environmental Remediation
700 Delaware Avenue
Buffalo, NY 14209

On behalf of:

Elm Holdings Inc.

Alternatives Analysis Report

Ekonol Polyester Resins Site

Wheatfield, New York

NYSDEC BCP Site No. C932173

Submitted to:

New York State Department of Environmental Conservation
Division of Environmental Remediation
700 Delaware Avenue
Buffalo, NY 14209

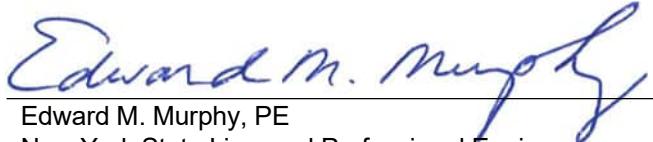
On behalf of:

Elm Holdings Inc.



CERTIFICATION

I, Edward M. Murphy, certify that I am currently a NYS registered professional engineer and that this Report was prepared in accordance with all applicable statutes and regulations and in substantial conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that all activities were performed in full accordance with the DER-approved work plan and any DER-approved modifications.


Edward M. Murphy, PE
New York State Licensed Professional Engineer
No. 081543

01/31/2025

Date

Contents

CERTIFICATION.....	2
1.0 Introduction.....	1-1
2.0 Background.....	2-1
2.1 Site Description and Features.....	2-1
2.2 Site History and Land Use.....	2-1
2.3 Adjacent Property Land Use.....	2-2
2.4 Geology/Hydrogeology.....	2-2
2.4.1 Site Geology	2-2
2.4.2 Site Hydrogeology.....	2-2
3.0 Summary of Previous Activities	3-1
3.1 Previous Investigations.....	3-1
3.1.1 Underground Storage Tank Closure Report - July 2000	3-1
3.1.2 Phase I Site Characterization Report– February 2001.....	3-1
3.1.3 Phase II Site Characterization Report – March 2003.....	3-2
3.1.4 Voluntary Cleanup Program – June 2003.....	3-2
3.1.5 Phase III Site Characterization Report – January 2004	3-2
3.1.6 Supplemental Phase III Site Characterization Report – September 2004.....	3-2
3.1.7 Remedial Alternative Report including Addendums and Bench Scale Testing – February 2006, December 2006, and June 2007	3-2
3.1.8 Pilot Test Report – April 2009	3-3
3.1.9 Soil Vapor Intrusion Air Sampling – June 2009 / Fall 2015	3-3
3.1.10 Proposed Decision Document 2010	3-3
3.1.11 Remedial Actions 2010-2011	3-4
3.1.12 Construction Completion Report and Initial Performance Assessment – August 2012.....	3-5
3.1.13 Supplemental Remedial Actions – November 2012	3-5
3.1.14 Performance Monitoring Reports 2012-2018	3-5
3.1.15 VCP Site Management Plan July 2015.....	3-6
3.1.16 Revised Decision Document and Fact Sheet February 2018.....	3-6
3.1.17 Transition from the VCP to the BCP – 2018.....	3-6
3.1.18 Remedial Investigation Report – December 2021	3-7
3.2 Nature and Extent of Contamination	3-8
3.2.1 Analytical Data.....	3-8
3.2.2 Soil Analytical Results	3-9
3.2.3 Groundwater Analytical Data	3-10
3.2.4 Vapor Intrusion Analytical Results.....	3-18

3.3	Potential Exposure Pathways	3-18
3.3.1	Soil and Ground Surface Materials.....	3-19
3.3.2	Outdoor Air	3-19
3.3.3	Indoor Air and Sub-Slab Vapor	3-19
3.3.4	Groundwater.....	3-19
3.3.5	Surface Water/Sediment.....	3-19
3.3.6	Routes of Exposure.....	3-19
3.3.7	Summary	3-19
3.4	Fate and Transport in the Unsaturated Zone	3-20
3.4.1	Migration.....	3-20
3.4.2	Degradation	3-20
3.5	Fate and Transport in the Saturated Zone	3-21
3.5.1	Migration.....	3-21
3.5.2	Degradation	3-21
3.6	Site Contaminants of Concern.....	3-22
4.0	Remedial Action Objectives and Goals.....	4-1
4.1	Potential Standards, Criteria, and Guidance.....	4-1
4.1.1	Chemical-Specific SCGs	4-1
4.1.2	Action-Specific SCGs	4-1
4.1.3	Location-Specific SCGs.....	4-1
4.2	Remedial Action Goals and Objectives	4-2
4.2.1	Remedial Action Goals	4-2
4.2.2	Remedial Action Objectives	4-2
4.3	Summary of Extent of Contamination to be Addressed	4-3
5.0	General Response Action and Identification of Remedial Technologies.....	5-1
6.0	Evolution of Technologies and Process Options	6-1
7.0	Detailed Analysis of Retained Remedial Alternatives.....	7-1
7.1	Evaluation Criteria.....	7-1
7.1.1	Overall Protection of Human Health and the Environment.....	7-1
7.1.2	Compliance with Standards, Criteria, and Guidance	7-1
7.1.3	Long-Term Effectiveness and Permanence	7-1
7.1.4	Reduction of Toxicity, Mobility or Volume	7-1
7.1.5	Short-term Effectiveness	7-1
7.1.6	Implementability	7-2
7.1.7	Cost.....	7-2
7.1.8	Land Use	7-2

7.1.9	Community Acceptance.....	7-2
7.2	Other Criteria Considered.....	7-2
7.2.1	Green Remediation	7-2
7.3	Cost Evaluation Approach.....	7-2
7.4	Potential Remedial Action Alternatives	7-2
7.4.1	Alternative 1: No Action	7-2
7.4.2	Alternative 2: Maintenance of Site Cover, Maintain Bioreactor Trenches, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs	7-3
7.4.3	Alternative 3: Maintenance of Site Cover, Maintain Bioreactor Trenches, Enhanced In-situ Treatment of Bedrock Groundwater, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs	7-4
8.0	Comparative Analysis of Remedial Alternatives.....	8-1
8.1	Overall Protection of Human Health and the Environment.....	8-1
8.2	Compliance with SCGs	8-1
8.3	Long-Term Effectiveness and Permanence.....	8-1
8.4	Reduction of Toxicity, Mobility, and Volume.....	8-2
8.5	Short-Term Effectiveness	8-2
8.6	Implementability	8-2
8.7	Land Use.....	8-2
8.8	Green Remediation.....	8-2
8.9	Cost	8-3
8.10	Community Acceptance	8-3
9.0	Recommended Remedial Alternative	9-1
9.1	Elements of Remediation	9-1
9.2	Remedial Design.....	9-2
9.3	Cover System.....	9-2
9.4	Groundwater Remedy	9-2
9.5	Enhanced Bioremediation	9-3
9.6	Engineering and Institutional Controls.....	9-3
9.7	Site Management Plan.....	9-3
9.8	Cost	9-4
10.0	References	10-1

List of Tables

- Table 2-1 Water Level Measurements – September 8, 2020
- Table 3-1 Existing Monitoring Well Completion Details, 2020 Remedial Investigation
- Table 3-2 BCP Subsurface Soil Analytical Results Summary, 2020 Remedial Investigation
- Table 3-3 Subsurface Soil Emerging Contaminants Analytical Results Summary – 2020 RI
- Table 3-4 BCP Groundwater Analytical Result Summary - 2020 RI
- Table 3-5 Groundwater Emerging Contaminants Analytical Result Summary - 2020 RI
- Table 3-6 VOC Plume Status Groundwater Analytical Result Summary - 2020 RI
- Table 3-7 Groundwater Sampling Field Parameter Results – 2020 RI
- Table 3-8 Indoor/Outdoor Air Sample Results (April 22, 2021)
- Table 5-1 Preliminary Screening of General Response Actions for Soil
- Table 5-2 Preliminary Screening of General Response Actions for Groundwater
- Table 6-1 Evaluation of Technologies and Process Options
- Table 7-1 Criteria Comparison and Ranking of Remedial Alternatives

List of Figures

- Figure 1-1 Project Location Map
- Figure 2-1 BCP Site Boundary
- Figure 2-2 Site Plan Map
- Figure 2-3 Property Map
- Figure 2-4 Overburden Groundwater Elevations (September 8 & 9 and October 2, 2020)
- Figure 2-5 Bedrock Groundwater Elevations (September 8 & 9 and October 2, 2020)
- Figure 3-1 Historical Soil Exceedances
- Figure 3-2 2020 BCP RI Soil Exceedances
- Figure 3-3 2020 BCP RI Groundwater Exceedances

- Figure 3-4 Overburden Groundwater VOC Exceedances (September – October 2020)
- Figure 3-5 Bedrock Groundwater VOC Exceedances (September – October 2020)
- Figure 3-6 Overburden Trichloroethene Isoconcentrations (September – October 2020)
- Figure 3-7 Overburden cis-1,2-Dichloroethene Isoconcentrations (September – October 2020)
- Figure 3-8 Overburden Vinyl Chloride Isoconcentrations (September – October 2020)
- Figure 3-9 Overburden Total VOCs Isoconcentrations (September – October 2020)
- Figure 3-10 Bedrock Trichloroethene Isoconcentrations (September – October 2020)
- Figure 3-11 Bedrock cis-1,2-Dichloroethene Isoconcentrations (September – October 2020)
- Figure 3-12 Bedrock Vinyl Chloride Isoconcentrations (September – October 2020)
- Figure 3-13 Bedrock Total VOCs Isoconcentrations (September – October 2020)
- Figure 3-14 Bedrock 1,1,1-Trichloroethane Isoconcentrations (September – October 2020)
- Figure 3-15 Overburden 1,4-Dioxane Isoconcentrations (September – October 2020)
- Figure 3-15 Bedrock 1,4-Dioxane Isoconcentrations (September – October 2020)
- Figure 3-17 Historical Soil Gas/Air Sample Results
- Figure 3-18 Indoor/Outdoor Air Sample Results (April 2021)
- Figure 9-1 Components of Recommended Remedy

List of Appendices

Appendix A Historical Well Tables

Appendix B Cost Estimate Summary

Appendix C Cost Estimate Backup

List of Acronyms

1,1-DCA	1,1-dichloroethane
1,1-DCE	1,1-dichloroethene
1,1,1-TCA	1,1,1-trichloroethane
1,2-DCE	1,2-dichloroethene
6:2 FTS	1H,1H,2H,2H-perfluorooctanesulfonic acid
AAR	Alternatives Analysis Report
AECOM	AECOM USA, Inc.
AMSL	above mean sea level
ARAR	applicable or relevant and appropriate requirements
BCA	Brownfield Cleanup Agreement
BCP	Brownfield Cleanup Program
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene and xylene
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
Cis-1,2-DCE	cis-1,2-dichloroethene
CPC	contaminant of potential concern
CVOC	chlorinated volatile organic compound
DCA	dichloroethane
DCE	cis-1,2-dichloroethene
DHB	Dehalobacter
DHC	Dehalococcoides
DER	Division of Environmental Remediation
DER-10	NYSDEC Technical Guidance for Site Investigation and Remediation
DER-31	NYSDEC Green Remediation Program Policy
DNAPL	dense, non-aqueous phase liquid
DO	dissolved oxygen
EC	engineering control
EE	environmental easement
EPA	Environmental Protection Agency
EVO	emulsified vegetable oil
ft	feet/foot
ft ² /day	feet squared per day

FWIA	fish and wildlife impact analysis
GRA	general response action
IC	institutional control
IRM	interim remedial measure
J	estimated concentration
K	hydraulic conductivity
MC	methylene chloride
MEE	methane, ethane and ethene
MEK	methyl ethyl ketone
ml	milliliter
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
MNA	monitored natural attenuation
mS/cm	millSiemens per centimeter
mV	milliVolts
ng/L	nanograms per liter
NTU	nephelometric turbidity unit
NYCRR	New York Codes, Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OM&M	operation, maintenance, and monitoring
ORP	oxidation-reduction potential
PAH	polycyclic aromatic hydrocarbons
PCB	polychlorinated biphenyl
PCE	tetrachloroethene
PFAS	per- and polyfluoroalkyl substances
PFBA	perfluorobutanoic acid
PFHxA	perfluorohexanoic acid
PFHpA	perfluorooctanoic acid
PFHxS	perfluorohexanesulfonic acid
PFPeA	perfluoropentanoic acid
PFOA	polyfluorooctanoic acid
PFOS	polyfluorooctanesulfonic acid
RAA	remedial alternative analysis

RAG	remedial action goal
RAR	Remedial Action Report
RAO	remedial action objective
RI/FS	Remedial Action/Feasibility Study
RIR	remedial investigation report
RIWP	remedial investigation work plan
SCG	standard, criteria, and guidance
SCO	soil cleanup objective
SMP	site amangement plan
SSD	sub-slab depressurization
SVI	soil vapor intrusion
SVOC	semi-volatile organic compound
TAGM	Technical and Administrative Guidance Document
TAL	Target Analyte List
TCA	1,1,1-trichloroethane
TCE	trichloroethene
TCEr	trichloroethene reductase
TCL	Target Compound List
TCLP	Toxicity Characteristic Leachate Procedure
TICs	tentatively identified compounds
TOC	total organic carbon
TOGS	Technical and Operational Guidance Series
µg/L	micrograms per liter
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VCr	vinyl chloride reductase
VCP	Voluntary Cleanup Program
VOC	volatile organic compound
ZVI	zero-valent iron

1.0 Introduction

On behalf of Elm Holdings Inc., c/o Remediation Management Services Company, AECOM USA, Inc. (AECOM), an AECOM company, prepared this Alternatives Analysis Report (AAR) for the Ekonol Polyester Resins Brownfield Cleanup Program (BCP) Site (Site) located at 6600 Walmore Road in Wheatfield, Niagara County, New York (**Figure 1-1**).

The Site transitioned from the Voluntary Cleanup Program (VCP) to the BCP in 2019 (see Section 3.1.17 for additional information associated with VCP activities). The Site has been accepted into the BCP pursuant to the Brownfield Cleanup Agreement (BCA) between New York State Department of Environmental Conservation (NYSDEC) and Elm Holdings Inc., (Participant), dated May 30, 2019.

Following acceptance into the BCP, a Remedial Investigation Work Plan (RIWP) was developed to address data gaps at the Site that were identified as necessary for the BCP and included an investigation assessing subsurface conditions throughout the remainder of the BCP parcel. In addition to volatile organic compounds (VOCs), the Remedial Investigation (RI) analytical list was expanded to include semi-volatile organic compounds (SVOCs), polychlorinated biphenyls (PCBs), pesticides, metals, and emerging contaminants per- and polyfluoroalkyl substances (PFAS) and 1,4-dioxane. A draft RIWP was submitted to NYSDEC on October 4, 2019.

NYSDEC/New York State Department of Health (NYSDOH) comments were received June 4, 2020. Response to comments were provided on July 8, 2020, and the final RIWP (AECOM, 2020) was submitted on August 11, 2020, in accordance with DEC approval of response to comments. The RI activities were performed September 8, 2020, through October 2, 2020. The Revised Remedial Investigation Report (RIR) was submitted on December 15, 2021 (AECOM 2021b).

On October 5, 2020, during completion of the RI, NYSDOH submitted a review letter to NYSDEC regarding the August 2020 Final RIWP with additional comments. NYSDEC provided the NYSDOH letter to AECOM of February 9, 2021 and recommended “assessing the potential for soil vapor intrusion (SVI) in the off-site buildings that are underlain by chlorinated degradation products in groundwater” and requested confirmation of the working status of the existing sub-slab depressurization (SSD) system located in the main office building at the Site. AECOM submitted a letter work plan for the SVI assessment to NYSDEC on March 11, 2021. On April 12, 2021, NYSDEC contacted AECOM indicating favorable weather conditions for SVI sampling were anticipated in the next two weeks. AECOM responded by conducting the indoor and outdoor air sampling on April 22, 2021. The *Remedial Investigation – Soil Vapor Intrusion Assessment Letter Report* was submitted to NYSDEC and NYSDOH on August 8, 2021 (AECOM, 2021a). NYSDEC and NYSDOH supplied comments to the RIR on June 28, 2021. The revised RIR was submitted to NYSDEC and NYSDOH on December 16, 2021.

On December 21, 2021, AECOM submitted the *Preliminary Remedial Alternatives Analysis, Ekonol Polyester Resins BCP Site No. C932173(RAA)* (AECOM, 2021c) to NYSDEC. The RAA presented a summary of Site conditions and an evaluation of remedial alternatives that could be utilized to meet the remedial goals for the Site. This AAR presents a more thorough evaluation of remedial measures for the Ekonol site employing procedures described in Chapter 4 of NYSDEC Department of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation (DER-10) (NYSDEC 2010a).

The AAR has been completed in accordance with the following:

- NYSDEC BCP guidance (NYSDEC 2004)
- 6 New York Codes, Rules and Regulations (NYCRR) Part 375 Environmental Remediation Programs
- NYSDEC DER-10 / Technical Guidance for Site Investigation and Remediation (DER-10) (NYSDEC 2010a)
- NYSDEC DER-31 / Green Remediation (DER-31) (NYSDEC 2010b)

The goal of the remedial program is to select a remedy for the BCP Site that is protective of public health and the environment for the Site's reasonably anticipated commercial or industrial use. The primary purpose of the AAR is to identify and evaluate the most appropriate remedial alternatives to eliminate or mitigate, through the proper application of scientific and engineering principles, significant threats to public health and to the environment presented by contaminants disposed at the Site. The ultimate goal of the AAR is to select a remedy that will allow continued use of the Site as a commercial or industrial facility. This AAR presents the remedy selection process and the proposed remedy for the Site based upon a risk-based, land use approach.

The AAR identifies one or more remedial alternatives and evaluates the effectiveness of each alternative with respect to the remedy selection evaluation criteria as presented in 6 NYCRR Part 375 and DER-10. Remedies in the BCP are selected from up to four of the following cleanup tracks:

- Track 1 – no restrictions on the use of the property.
- Track 2 – restricted use with generic soil cleanup objectives (SCOs) based on the intended use of the property – residential, restricted residential (single family houses not allowed), commercial, or industrial.
- Track 3 – restricted use with modified SCOs based on the same uses described in Track 2 above.
- Track 4 – restricted use with site-specific SCOs, where the shallow exposed soils must meet the generic SCOs used for Track 2 above.

Once a remedy has been proposed, a fact sheet will be issued noticing the availability of the Remedial Work Plan and presenting the proposed remedy for a 45-day public comment period. NYSDEC will consider the public comments for final remedy selection, have the plan revised as necessary, and issue a final Decision Document which describes the selected remedy.

2.0 Background

2.1 Site Description and Features

The BCP Site is a 1.006-acre area located within the operating facility located at 6600 Walmore Road, approximately one-half mile north of Niagara Falls Boulevard (NYS Route 62), in the Town of Wheatfield, Niagara County, New York. The BCP Site boundary is located immediately south of the Ekonol Polyester Resins facility building. The Ekonol Polyester Resins facility is an active manufacturing facility currently operated by Saint-Gobain Ceramics and Plastics, Inc. (current leaseholder), and located in a building at the northeast end of a larger, active industrial parcel. The western approximately two-thirds portion of the building that houses the Ekonol Polyester Resins facility is vacant. The investigation area, immediately south of the Ekonol building is currently asphalt and concrete and has been primarily used for parking and equipment storage for the nearby manufacturing facility. The term "Site" or "BCP Site" used herein refers to the area outlined in red on **Figure 2-1**.

During the VCP, a set of overburden bioreactor trenches was installed immediately south and east of a former underground storage tank (since removed; see Section 3.1.1 for additional description). Outside of the BCP Site boundary, additional industrial buildings and asphalt and concrete pavement are present. Further south beyond the additional industrial buildings, the southern portion of the parent parcel is undeveloped and consists of open brush and grass, gravel roadways, and asphalt and concrete pavement (**Figure 2-2**).

The topography at the operating facility is relatively flat and located at an approximate elevation of 600 feet above mean sea level (ft AMSL). The facility receives its potable water supply from the Town of Wheatfield, New York. A chain link fence surrounds the operating facility property. A portion of the fence is immediately adjacent to, but is not a component of, the BCP Site. The facility fence includes a secure vehicle access gate.

2.2 Site History and Land Use

The overall Ekonol site is within a general industrial (zoning) area of the Town of Wheatfield and is comprised of a portion of the approximately 15.10-acre parcel No. 146.00-10-9.21. Parcel No 140.00-10-9.21 is a sub-parcel divided off as a condo from the parent parcel 146.00-1-9.2 listed on the Town of Wheatfield Tax Map. The parent parcel is 55.10 acres. As depicted on the Town of Wheatfield Zoning Map adopted January 31, 2018, The Site is located in the following zoning district(s): M-2, Industrial-2, and O-3, Airport Zone One Overlay. Consistent with this zoning, Niagara County tax records indicate the property use is identified as light industrial manufacturing. The reasonably anticipated future use of the Site is industrial/manufacturing.

The Ekonol Polyester Resins building was historically (and is currently) used for production of a polyester resin that is used as a spray-on coating for turbine engines. The Carborundum Company opened operations at the polyester resins facility in May 1963. A series of corporate ownership changes (sales and mergers) occurred over the next several decades, including sale of the property at 6600 Walmore Road. Operations of the polyester resins facility was maintained by the Carborundum Company (operating as a subsidiary under the umbrella of British Petroleum) up until 1996 when operations were sold to Saint-Gobain, the current operator.

An underground concrete tank was used at the Ekonol facility from the mid-1970s through 1999 for collection of wastewater rinsate from the floor drains inside the process area of the plant. This

tank was constructed of reinforced concrete walls, approximately 9.5 inches thick, and was approximately 18 feet long, 6 feet wide, and 9 feet deep (a volume of approximately 7,800 gallons). During the 1999 tank removal, trichloroethene (TCE) in soil was detected at concentrations ranging from 1.2 to 200 milligrams per kilogram (mg/kg), cis-1,2-dichloroethene (DCE) concentrations ranged from 2.9 to 100 mg/kg. Phenols were detected at concentrations ranging from 4.5 to 12.0 mg/kg. Following removal of the tank, additional excavation was completed to remove contaminated soils surrounding the tank. Approximately 180 cubic yards of material were removed from an excavation that was approximately 29 feet long, 16 feet wide and 12.7 feet deep (top of the bedrock surface).

2.3 Adjacent Property Land Use

The Site is located to the east of the Niagara Falls International Airport, north of a parcel formerly known as the Bell Aerospace facility currently owned by Wheatfield Business Park II, LLC, and Niagara Falls Boulevard (NYS Route 62), and to the south of the Niagara Falls Air National Guard Base. Properties to the east of Walmore Road are primarily zoned industrial; however, residential properties do exist on the east side of Walmore Road east-southeast of the site (**Figure 2-3**).

2.4 Geology/Hydrogeology

2.4.1 Site Geology

Overburden at the BCP Site consists of a thin layer of imported fill overlying natural deposits of upper lacustrine silty red-brown clay, laminated with thin gray silty clay lenses, grading into a red-brown silt and clay. Fine to coarse sand and fine to coarse gravel was found at the interface of the bedrock surface. The Site is underlain by approximately 12-14 feet of unconsolidated materials overlying bedrock. Previous investigative areas downgradient of the BCP Site boundary described unconsolidated material up to 18.7 feet below ground surface (bgs).

The bedrock in the area of the Site is Middle Silurian Lockport Dolostone, which consists mainly of light to dark gray, fine- to coarse-grained dolostone. The uppermost member of the Lockport, the Guelph Dolostone is the uppermost bedrock formation at the Ekonol site, is roughly 10-20 feet thick, is a water bearing zone, and overlies the upper part of the Eramosa Formation member of the Lockport group which is primarily massive and relatively unfractured. The top part of the upper Eramosa was only penetrated during drilling the deepest VCP Site wells. Poorly preserved fossils, stylolites, carbonaceous partings, vugs, gypsum seams, metal sulfides, and stromatolites are observed in the Lockport. The Lockport group has a generally east-west strike, and dips to the south at approximately 25 feet per mile. This formation contains weathered bedding planes and fracture zones amid relatively competent rock. Fractures consist predominantly of horizontal bedding plane fractures with minor near vertical jointing. A fracture zone was encountered during drilling at the Site at depths ranging from 20.25 to 29.70 feet bgs.

2.4.2 Site Hydrogeology

The surface of the Site is almost entirely covered by asphalt and/or pavement, with additional nearby buildings up and downgradient of the Site. Precipitation that falls is directed to storm sewer catch basins down gradient or temporarily ponds on the pavement and slowly disappears by either evaporation and/or downward percolation through cracks in the surface material and into the overburden.

Overburden groundwater during the September-October 2020 RI occurred between 2.5 to approximately 8 feet bgs. Overburden groundwater elevations ranged from 576.94 ft AMSL (MW-13S)

to 583.16 ft AMSL (PMW-1S) with a very shallow gradient to the south-southeast. The presence of buildings and pavement limits vertical recharge to the overburden at the Site.

Bedrock groundwater is semi-confined. Regional bedrock groundwater flow is to the south-southwest towards Bergholtz Creek with depth to groundwater during the RI investigation occurring between 4.5 to 12 feet bgs. Bedrock groundwater elevations ranged from 574.28 ft AMSL (MW-16D) to 580.85 ft AMSL (PMW-8D) with an overall flow to the southwest. In the bedrock water-bearing zone, the gradients are low, and groundwater flow is dependent on travel through interconnecting fractures. Variations in fracture size and direction could result in variations in preferential flow directions at the Site.

Water level measurements recorded during the September-October 2020 RI groundwater sampling event are presented in **Table 2-1**. Using the measurements in **Table 2-1**, **Figures 2-4** (Overburden) and **2-5** (Bedrock) present the groundwater elevation contour maps.

3.0 Summary of Previous Activities

Site investigation and remediation activities have been ongoing at the Site since the 1999 removal of the underground concrete tank just south of the Ekonol Polyester Resins building. After the tank closure and soil excavation, a multi-phase Site Characterization Study and series of Interim Remedial Measures (IRMs) were completed prior to and following entry into New York's VCP in 2003 (VCP Site No. V00653-9).

3.1 Previous Investigations

The findings of multiple studies revealed that the main constituents of concern are chlorinated VOCs (TCE and breakdown products) historically found at high concentrations in soil, overburden, and bedrock groundwater in the area of the former concrete tank. While the source of the contamination (tank and associated soils) was removed, impacts to overburden soil and bedrock groundwater remained. The extent of bedrock groundwater VOC impact has been determined with concentrations highest near the former underground concrete tank and progressively decreasing to non-detect values in downgradient wells south of the former tank area. Bedrock groundwater impacts are essentially limited to within the 6600 Walmore Road property boundary. Site contaminants were also found in sub-slab soil vapor under the office area of a manufacturing building on the parent property. Existing Site wells from the various investigations, IRMs, and remedies are indicated on **Figure 2-2**. Construction details for existing historical wells installed during previous investigations and remedial actions plus the wells installed during the RI are presented in **Table 3-1**.

Brief summaries of historical investigations, reports, and remedial work are outlined in the subsections below.

3.1.1 Underground Storage Tank Closure Report - July 2000

This report detailed the August 1999 removal of the underground storage tank and excavation efforts during the removal of the tank (Frontier Technical Associates, Inc., 2000). The concrete tank was sampled for Toxicity Characteristic Leaching Procedure (TCLP) volatiles and semi-volatiles; sample results indicated the concrete tank needed to be disposed of as hazardous waste due to TCE presence in the concrete. Water encountered during the removal process was collected and sampled. Excavation of surrounding clay soils and stone backfill from around the tank and inlet pipes was completed. The area was excavated to bedrock at around 12.67 feet bgs and until dry clay was noted in the sidewalls. Target Compound List (TCL) VOC and SVOC compounds were collected from the sidewalls approximately 3 feet up from the top of bedrock. Based on these results, additional soil excavation took place in October 1999 and all soil assumed hazardous and shipped for offsite disposal as such. The excavation was halted after a cave in due to proximity to the building foundation. Residual contamination remained in the surrounding soils.

3.1.2 Phase I Site Characterization Report– February 2001

A Phase I Site Characterization (Parsons, 2001) investigated the extent of impacts on soil and groundwater near the former concrete tank. The Phase I activities took place in November 2000 and included soil borings, temporary well installations, soil and groundwater sampling, and surveying. In soils, VOC concentrations for TCE and total 1,2-dichloroethene (1,2-DCE) and the SVOCs aniline and phenol were above NYSDEC Technical and Administrative Guidance Memorandum (TAGM) 4046 cleanup objectives in some samples (NYSDEC, 1994). In groundwater, multiple VOCs, three SVOCs, lead, and zinc were above respective standards of the

time. The highest concentrations were observed near the former containment tank and associated piping. The Phase I work was summarized and presented to NYSDEC. NYSDEC reviewed the report and requested further characterization of soil and groundwater.

3.1.3 Phase II Site Characterization Report – March 2003

A Phase II Site Characterization (Parsons, 2003) addressed NYSDEC comments on the Phase I report. Phase II field activities took place in December 2001 and included additional soil borings, soil sampling with groundwater field screening, overburden and bedrock monitoring well installation, groundwater sampling, and an investigation of Site sewers. Field and analytical data from the Phase II characterization showed impacts to groundwater, including a dense non-aqueous phase liquid (DNAPL), and further defined the extent of impacts to groundwater in overburden and deeper bedrock groundwater. After reviewing the Phase II data, NYSDEC concurred that additional work was warranted for groundwater in the bedrock.

3.1.4 Voluntary Cleanup Program – June 2003

On June 27, 2003 NYSDEC accepted the Site into the VCP (VCP Site No. V00653-9). This program was designed to enhance private sector cleanups and address environmental, legal, and financial barriers that often hinder the redevelopment of contaminated properties (NYSDEC, 2002).

3.1.5 Phase III Site Characterization Report – January 2004

The Phase III Site Characterization (Parsons, 2004a) activities took place in September–December 2003 and included additional groundwater field screening, bedrock monitoring well installation and packer testing, and groundwater sampling to investigate impacts to groundwater in bedrock. Samples were collected for targeted VOCs and SVOCs. The results indicated the extent of the dissolved phase groundwater plume was reasonably defined but additional information was required. The report concluded that the groundwater plume was defined to the north, west, and northeast, but additional data was needed to the east across Walmore Road and to the south within the parent property boundary. Additionally, the report included a qualitative exposure assessment which described the potential exposure setting, exposure pathways, and fate and transport of site constituents of concern.

3.1.6 Supplemental Phase III Site Characterization Report – September 2004

The Supplemental Phase III Site Characterization (Parsons, 2004b) activities took place in July 2004 and included installation of temporary off-site bedrock wells, installation of two additional off-site groundwater monitoring wells, groundwater screening, and two rounds of groundwater sampling from all site related wells. The supplemental report also updated the qualitative exposure assessment to include the results of the Supplemental Phase III sampling.

3.1.7 Remedial Alternative Report including Addendums and Bench Scale Testing – February 2006, December 2006, and June 2007

The Remedial Alternatives Report (RAR; Parsons, 2007) evaluated different options for remediation at the Site which led to bench scale testing. Two letter addendums added information to the original RAR. The RAR focused on remediation of site groundwater given that the soils immediately around the former tank had already been excavated. These documents concluded that an enhanced reductive dechlorination “bioreactor trench” was the proposed treatment for overburden groundwater and that, of the options reviewed, in-situ enhanced reductive

dechlorination bioremediation was determined to be the most viable and cost-effective technique for bedrock groundwater.

3.1.8 Pilot Test Report – April 2009

Field work for the pilot test (Parsons, 2009a) took place between November 2007 and December 2008. Initial remedial actions included pilot testing, and performance monitoring groundwater sampling after the pilot test (Parsons, 2009b; Parsons, 2009c; Parsons, 2010), which demonstrated appreciable molar reduction of TCE, DCE, and vinyl chloride (VC). Observations of DNAPL, moderately low pH, elevated sulfide and groundwater transport rates were determined to be factors influencing bioremediation. Based on the results of the pilot studies, applicability and cost, bioremediation was selected and approved as the preferred alternative.

3.1.9 Soil Vapor Intrusion Air Sampling – June 2009 / Fall 2015

Due to the known presence of contaminants released into soil and groundwater at the Site and known TCE within overburden groundwater, the NYSDEC sent a letter in January 2009 suggesting an SVI assessment be conducted in the office building area of the Saint-Gobain facility. The Saint-Gobain offices were downgradient of the source plume. The Ekonol building located to the north and in an upgradient groundwater flow direction was not sampled. Indoor, sub-slab, and outdoor air samples were collected in February 2009 (GZA, 2009). TCE, tetrachloroethylene (PCE), and cis-1,2-DCE were detected at concentrations above method detection limits. Results were compared to the NYSDOH Soil Vapor Intrusion Guidance document matrices (NYSDOH, 2006 and amendments to 2009). PCE concentrations detected within the sub-slab samples required mitigation according to the decision matrices. An SSD system was installed in the Saint-Gobain office building in November 2010 and inspected quarterly according to the approved Site Operation, Maintenance, and Monitoring (OM&M) plan (Parsons, 2011).

A January 2016 letter to the NYSDEC detailed additional sampling of the SSD system. In accordance with the February 22, 2011 NYSDEC and NYSDOH-approved Sub-slab Depressurization System Operations, Maintenance, and Management Plan for the Ekonol Polyester Resins Site, the 2015 sampling was performed on the SSD system to determine if cessation of operation of the SSD system could be proposed. Two samples of sub-slab vapor were collected from the SSD system in 2015. Samples were analyzed for VOCs using Environmental Protection Agency (EPA) Method TO-15. The first sample was collected with the system running in August 2015. Following the receipt and review of the non-detect results of the first sample, the second sample was collected in October 2015 24-hours after the system was shut down. The results for each of the 2015 sample events collected from the SSD system were below method detection limits for all constituents of concern suggesting that the SSD system was successfully mitigating constituents of concern in sub-slab vapor to a concentration no longer expected to impact indoor air quality as it relates to the project constituents of concern. The January 2016 letter requested approval to decommission the SSD system. This approval was not provided, and the SSD system has been operated and maintained without interruption since. The SSD system will continue to operate until termination is approved by NYSDEC/NYSDOH.

3.1.10 Proposed Decision Document 2010

The Proposed Decision Document (NYSDEC, 2010c) suggested a remedy for the Site which included a passive bioreactor for the treatment of shallow groundwater by enhancing the degradation of the contaminants. The trenches were designed to create a preferential pathway for overburden groundwater flow with groundwater-mulch contact enhancing natural biodegradation

of site contaminants. A remedy for the deep (Bedrock) groundwater was proposed to be addressed via injections of emulsified vegetable oil (EVO) into the bedrock aquifer, and then monitored to assess if additional injection treatments were necessary to achieve biodegradation of site contaminants.

3.1.11 Remedial Actions 2010-2011

Full-scale remedial actions were implemented as IRMs in overburden and bedrock between 2010 and 2011. The bioreactor suggested in the 2010 Proposed Decision Document was installed and is comprised of two parallel trenches excavated to bedrock (approximately 15 feet bgs), filled with a mixture of gravel and organic wood-chip mulch, covered with a non-woven geotextile to prevent fines from entering the bioreactor, additional gravel, and a high-strength woven geotextile. Soil samples from above the existing water table (i.e., from the top 6 feet in the area of the bioreactors) were collected and tested. If the results met the DER-10 guidance values for the reuse of soil, then that soil was used as backfill for the bioreactor excavation. The two trenches were segmented into 4 parts each, leaving soils in place around existing utilities. Mulch provided organic substrate to support the microbiological growth and enhance the rates of the in-situ biodegradation of the constituents of concern. The limestone gravel mixed with sand for iron supply in the bioreactor provided geotechnical strength, permeability, and had the additional purpose of limiting reduction of hydraulic conductivity. Emulsified vegetable oil (SRS-FR® - a proprietary vegetable-oil substrate with emulsifiers) was added to the media during installation. Additionally, 18 bioreactor monitoring wells (OR-1SI- through OR-18SM) were installed in overburden in the bioreactor trench area. Eleven new overburden performance monitoring wells were also installed within and around the bioreactor trench area.

The emulsified vegetable oil injections for bedrock groundwater treatment were also completed. Eight new bedrock injection wells (INJ-6D through INJ-13D) were installed in the target treatment area. The SRS-FR® emulsified vegetable oil (carbon source), and other additives to the injection substrate (i.e., sodium bromide (increase conductivity) and sodium bicarbonate (pH buffer)) were used to create conditions in the groundwater favorable to biodegradation of site contaminants. A bioaugmentation culture (*Dehalococcoides* [DHC] and *Dehalobacter* [DHB] species) was added to INJ-06D. Nine new bedrock performance monitoring wells were also installed within and around the targeted bedrock remediation area.

Performance monitoring of the remedy took place after completion of the remedial actions to monitor the remedy and plan additional injections if needed to boost enhanced degradation. Performance monitoring tracked geochemical conditions for anaerobic dechlorination and looked at evidence of enhanced in-situ degradation of TCE to DCE, VC, and ultimately ethene and ethane. Post remedy, concentrations of all chlorinated VOCs within the bioreactor trenches were notably lower than upgradient and downgradient well locations. Outside the bioreactor trenches there were both increases and decreases, with increases likely due to short-term degradation product increases. Bedrock wells that were located farthest downgradient and side gradient showed no changes in concentrations, relative to background in the first six months following the remedy.

3.1.12 Construction Completion Report and Initial Performance Assessment – August 2012

A Construction Completion Report (Parsons, 2012) was prepared for the overburden bioreactor and bedrock enhanced reductive dechlorination remedial actions. The report was prepared in accordance with DER-10, was submitted to NYSDEC, and was approved.

3.1.13 Supplemental Remedial Actions – November 2012

As part of a supplemental remedial action, in November 2012, additional SRS-FR® substrate injections were completed on the western side of the injection area in the bedrock treatment zone (INJ-7D, INJ-9D, INJ-10D, and INJ-13D). The supplemental injections were implemented to increase total organic carbon (TOC), which was nearly depleted in some wells, buffer pH in areas where it was low, and increase the microbial populations (using bioaugmentation) to support reductive dechlorination. RNAS-Neutral Zone®, a proprietary calcium carbonate buffer solution was used instead of sodium bicarbonate to provide a more long-term buffer for pH. However, performance monitoring following the injections reported that the added carbonate buffer appeared to lack enough buffering capacity to prevent an initial pH drop following injections, though the pH of most wells in the area recovered with time (by April 2014). During this additional action, changes in buffer and addition of iron were tested in INJ-07 to determine if the remedy could be improved and hydrogen sulfide concentrations reduced. Also, additional bench scale testing was completed.

3.1.14 Performance Monitoring Reports 2012-2018

Following completion of the remedial actions, performance monitoring reports were prepared from 2012 through Spring 2018. Initial performance monitoring, evaluation, and reporting was performed on a quarterly basis. In 2015, these activities were moved to a semi-annual basis.

Performance monitoring after the remedy indicated that in general the conditions appropriate for anaerobic in-situ bioremediation were met for the overburden bioreactors in wells in the trenches and that target VOC concentrations decreased compared to pre-treatment levels. TCE was generally depleted from the shallow groundwater within approximately the first six months of completion of the bioreactor installations. In Spring 2018 (the last monitoring event before the Site entered the BCP), TCE was below detection limits at all locations within the bioreactor except for a low detection on the western side of the southern trench (OR-4SM). Concentrations of cis-1,2-DCE and VC declined during the first year of monitoring and remained below pre-treatment concentrations, except for decreasing but cyclical behavior in two bioreactor wells in the southern trench (OR-6SM and OR-10SM). Other locations within the bioreactor trenches demonstrate very low concentration to non-detect results for chlorinated VOCs.

Outside of the bioreactor trenches overburden shallow groundwater results were more variable and exhibited a range of target VOC concentrations. Overall, overburden wells outside the bioreactor trenches with higher chlorinated VOC concentrations correspond to higher oxidation-reduction potential (ORP) levels, low TOC, and lower extents of sulfate reduction (which would occur with active bioactivity). However, the presence of appreciable levels of VC and ethene indicate that some biodegradation has occurred and/or such degradation products have migrated from the upgradient active bioreactors.

In the bedrock treatment area and downgradient of the bedrock treatment area monitoring results show enhanced chlorinated VOC biodegradation immediately downgradient of the November

2012 treatment area and indicate that degradation is incomplete but ongoing in the bedrock. All monitored bedrock wells show increased ethene and ethane concentrations (one to three orders of magnitude) from September 2012 (i.e., prior to the November 2012 injections) to Spring 2018 inferring anaerobic dechlorination. The data suggested that as of the Spring 2018 monitoring event biodegradation was still taking place but was possibly occurring at a decreased rate at some locations.

3.1.15 VCP Site Management Plan July 2015

A Site Management Plan (SMP) was developed and submitted to NYSDEC in July 2015 (Parsons, 2015). The SMP outlined the long-term Institutional and Engineering Controls, OM&M, and reporting requirements for the Site. A deed restriction for the Site dated May 22, 2014 was included as an attachment in the SMP. No comments or formal NYSDEC approval were received on the submitted SMP. The recommended OM&M plan presented in the SMP was implemented as of fall 2015.

3.1.16 Revised Decision Document and Fact Sheet February 2018

The NYSDEC prepared and posted a Fact Sheet in February 2018 for public comment. The fact sheet announced a public comment period on the Proposed Plan and provided a summary of site investigations, remedial actions, and long-term monitoring for the Site. Based on the completed actions and monitoring of the reductions in Site contaminants, the fact sheet announced that "No Further Action" was being proposed by the NYSDEC as the remedy for the Site. The "No Further Action" remedy included the following:

1. The continued operation and maintenance of the enhanced bioremediation systems and the sub-slab depressurization system;
2. Placement of a Deed Restriction on the Site restricting it to commercial or industrial use. The Deed Restriction was filed with the Niagara County Clerk's Office on May 22, 2014;
3. Development of a Site Management Plan that includes the following: (a) An Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the Site and details the steps and media-specific requirements necessary to ensure that the institutional and engineering controls remain in place and effective; (b) An Excavation Plan that details the provisions for management of future excavations in areas of remaining contamination; (c) An evaluation of the potential for soil vapor intrusion for any buildings developed on the Site, including provision for implementing actions recommended to address exposures related to soil vapor intrusion; (d) A Monitoring Plan to assess the performance and effectiveness of the remedy that will include monitoring of soil vapor, indoor air and groundwater; and (e) An Operation and Maintenance Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy (NYSDEC, 2018).

3.1.17 Transition from the VCP to the BCP – 2018

In November 2016, NYSDEC announced the planned phase-out of the VCP by June 28, 2018. On May 25, 2018, NYSDEC notified Elm Holdings Inc. that the Ekonol site was not going to receive a certificate of completion under the VCP and that the Site should transition to another regulated program. Elm Holdings Inc. applied to enter the Site into the BCP. The application was accepted, and the BCA was executed in May 2019.

Investigation and remediation activities conducted under the VCP to that point had been focused on VOCs. However, the BCP requires that a broader range of potential Site contaminants be investigated. The resulting supplemental investigation included additional activities to evaluate the possible presence of additional contaminants.

3.1.18 Remedial Investigation Report – December 2021

AECOM performed a Remedial Investigation in 2020 to characterize the current state of soil and groundwater conditions at the BCP Site, confirm the concentrations of known constituents at the Site, and to collect data on the list of BCP required contaminants of concern, some of which had not been sampled for previously at the Site.

The purpose of the BCP RI was to address data gaps at the Site that were identified with respect to the BCP and included an investigation assessing subsurface conditions throughout the remainder of the BCP parcel. In addition to VOCs, the RI analytical list was expanded to include SVOCs, PCBs, pesticides, metals, and emerging contaminants PFAS and 1,4-dioxane.

With the exception of 1,4-dioxane not previously investigated, the RI did not identify any contaminants that were not previously documented at the Site. The general occurrence and range of concentrations for the contaminants is consistent with prior investigations and semi-annual monitoring conducted under the VCP 2012 – 2018. The current data confirmed the trend of overall reduction in chlorinated VOC concentrations pursuant to VCP remedial actions. During the BCP RI, chlorinated VOCs were observed in subsurface soil and groundwater at similar concentrations and in similar locations as documented during the VCP phase of site investigations and remedies. As such, chlorinated VOCs (PCE, TCE, 1,2-DCE, VC, 1,1,1-trichloroethane (TCA), 1,1-dichloroethane (DCA)) are considered to be contaminants of potential concern (COPCs).

Current data supports the site conceptual model indicating the former concrete storage tank is the likely source for the contaminants of concern. Soil and groundwater concentrations for these contaminants are remnant expressions of the remediated source area. In-situ remedial actions focusing on reductive dechlorination in the overburden and bedrock, as part of the VCP phase, have been effective in reducing remnant concentrations in overburden and bedrock groundwater. The remedies have produced significant reduction of source area and downgradient contaminant concentrations as demonstrated in the concentration vs. time series plots in **Appendix A**. Greatly reduced levels of PCE, TCE and TCA, along with appreciable levels of 1,2-DCE, VC, and 1,1-DCA and ethene indicate that the enhanced biodegradation remedy has been effective at the Site. Favorable conditions for reductive anaerobic dechlorination to occur also demonstrate such degradation has occurred and is likely to continue to occur.

Phenol and phenolic compounds were observed in groundwater at similar concentrations and in similar locations as documented during the VCP phase of site investigations and remedies. Phenol is considered to be a contaminant of potential concern. The emerging contaminant 1,4-dioxane exceeded current NYSDOH standards, criteria, and guidance (SCGs) for groundwater. It is considered to be a contaminant of potential concern.

Data show that the VCP enhanced reductive dechlorination remedies have been effective at reducing concentrations for contaminants of potential concern and that the remedies have established a favorable setting for continued reductions. However, some locations with higher concentrations may benefit from remedy enhancements. The information obtained to date should be sufficient for use in the selection of enhancements of the remedial approach for the Site.

There are multiple historical sampling events for targeted VOCs, SVOCs, and metals; however, prior to this remedial investigation, there were limited samples for the full Target Compound List (TCL) VOCs, SVOCs, Target Analyte List (TAL) metals, and a lack of data on PCBs, pesticides, and the emerging contaminants 1,4-dioxane and PFAS, which are necessary to fully characterize the Site for the BCP. A summary of historical soil exceedances of contaminants at the Site is presented in **Figure 3-1** (Historic Soil). A summary of soil exceedances from the 2020 RI are presented in **Figure 3-2**. There is a large amount of data from numerous sampling events for target contaminant VOCs at the Site. However, the most recent groundwater data was collected during the 2020 RI. A summary of groundwater exceedances in the BCP Site during the 2020 RI is presented in **Figure 3-3**. VOC exceedances in the overburden and groundwater during the 2020 RI are presented in **Figure 3-4** and **Figure 3-5**, respectively.

3.2 Nature and Extent of Contamination

3.2.1 Analytical Data

The sampling results from the 2020 RI represent the most current view of Site contaminant conditions. The subsurface soil, groundwater, sub-slab soil vapor and co-located indoor air, and outdoor air samples were submitted to Environmental Laboratory Accreditation Program-certified laboratories. All analytical results were validated by an AECOM chemist in accordance with NYSDEC DER-10 and United States Environmental Protection Agency (USEPA) Region II data validation procedures. The analytical results are presented in **Tables 3-2** through **3-8**.

The soil analytical results were compared to Unrestricted Use, Protection of Groundwater, and Industrial Use SCOs presented in Title 6 New York Codes, Rules, and Regulations (NYCRR) Chapter IV Part 375 (NYSDEC, 2006). The criteria include parameters present in NYSDEC's CP-51 Soil Cleanup Guidance (NYSDEC 2010d). The emergent contaminant 1,4-dioxane has criteria as listed in Part 375.

Concentrations of emergent contaminants PFAS have been compared to guidance values from *Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS) Under NYSDEC's Part 375 Remedial Programs*, NYSDEC, April 2023.

The groundwater analytical results were compared to NYSDEC Technical & Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, including January 1999 Errata Sheet, April 2000 and June 2004 Addenda (TOGS) for Class GA (NYSDEC, 1998).

Concentrations of emergent contaminants PFAS were compared to drinking water standards presented in *Analysis, and Assessment of PFAS under NYSDEC's Part 375 Remedial Programs, January 2021*. The emergent contaminant 1,4-dioxane was compared to drinking water standards presented in *Public Water Systems and NYS Drinking Water Standards for PFOA, PFOS, and 1,4-Dioxane*, NYSDOH, Center for Environmental Health, September 2020.

The SVI analytical results were compared to Air Guideline Values Derived by NYSDOH (NYSDOH, October 2006, Updated September 2013, August 2015, May 2017, and February 2024).

Indoor air samples were compared to New York State Department of Health (NYSDOH) indoor air guidelines for trichloroethene (NYSDOH, 2015) and tetrachloroethene (NYSDOH, 2013), and co-located indoor air and sub-slab samples were compared to NYSDOH document titled Guidance

for Evaluating Soil Vapor Intrusion in New York State, dated 2006 with a 2017 update, which identifies sub-slab and indoor air concentration limits for eight chlorinated volatile organic compounds (CVOCs), which are assigned to three decision matrices:

Matrix A	Matrix B	Matrix C
Trichloroethene (TCE)	Tetrachloroethene (PCE)	Vinyl chloride (VC)
Carbon tetrachloride (CCl ₄)	1,1,1-Trichloroethane (1,1,1-TCA)	
1,1-Dichloroethene (1,1-DCE)	Methylene chloride (MC)	
cis-1,2-Dichloroethene (cis-1,2-DCE)		

In the guidance document, NYSDOH provides recommendations of no further action, monitor, or mitigate for various concentrations of these compounds in sub-slab vapor and indoor air.

3.2.2 Soil Analytical Results

Prior to the 2020 RI, soil samples collected in the BCP Site were generally only analyzed for VOCs and SVOCs. Soil samples collected during the Phase II investigations were only analyzed for VOCs. Following acceptance into the BCP, soil samples from the borings for wells MW-14 through MW-21 and soil borings SB-05 though SB-08 were analyzed for VOCs, SVOCs, PCBs, pesticides, and metals. Surface soil samples collected during the RI in February/March 2017 were analyzed for VOCs, SVOCs, PCBs, pesticides, and metals. Supplemental surface soil samples collected in April 2018 were analyzed for SVOCs only. Historical exceedances of SCOs are presented on **Figure 3-1**. Soil sample exceedances from the 2020 RI are presented n **Figure 3-2**.

VOC Subsurface Soil Analytical Results

The entire BCP Site is paved, so no surface soil samples were collected. All soil samples collected during the 2020 RI were subsurface soil samples. Four VOCs were detected at a concentration above the Unrestricted Use SCO or Protection of Groundwater SCO in at least one sample. TCE was detected at a concentration above the Unrestricted Use and Protection of Groundwater SCOs in one location (SB2020-02). Cis-1,2-DCE was detected at a concentration above the Unrestricted Use and Protection of Groundwater SCOs in eight samples plus the duplicate at five locations (SB2020-02, SB2020-03, SB2020-04, SB2020-05, and SB2020-08). VC was detected at a concentration above the Unrestricted Use and Protection of Groundwater SCOs in one location (SB2020-04). Methyl ethyl ketone (MEK) was detected at a concentration above the Unrestricted Use and Protection of Groundwater SCOs in six samples at four locations (SB2020-03, SB2020-04, SB2020-05, and SB2020-08). Acetone was detected at a concentration equal to but not exceeding the Unrestricted Use and Protection of Groundwater SCOs in one location in the bedrock interface sample in SB2020-07.

All VOCs in subsurface soil collected during the 2020 RI were below the respective Industrial Use SCO.

SVOC Subsurface Soil Analytical Results

None of the 13 subsurface soil samples had SVOCs that were detected above the relevant SCOs. Four SVOCs in soil were detected at concentrations below the Unrestricted Use SCO (1,1-biphenyl at two locations; acetophenone at one location and the duplicate; chrysene at five locations and fluorene at one location).

PCB Subsurface Soil Analytical Results

None of the 13 subsurface soil samples had PCBs that were detected above the relevant SCOs. One PCB (Aroclor 1254) was detected at an estimated concentration of 43 micrograms per kilogram ($\mu\text{g}/\text{kg}$) in one subsurface soil sample (SB2020-03) but did not exceed the Unrestricted Use SCO (100 $\mu\text{g}/\text{kg}$).

Pesticide Subsurface Soil Analytical Results

None of the 13 subsurface soil samples had pesticides that were detected above the relevant SCOs. One pesticide (beta-BHC) was detected at estimated concentrations at two sample locations (SB2020-02 [6.8 $\mu\text{g}/\text{kg}$] and SB2020-07 [10 $\mu\text{g}/\text{kg}$]) but did not exceed the Unrestricted Use SCO (36 $\mu\text{g}/\text{kg}$).

Metals Subsurface Soil Analytical Results

Ten subsurface soil samples plus one duplicate were collected for metals analysis from nine RI boring locations. Metals detected above Unrestricted Use SCOs in each sample included aluminum, calcium, and iron; there are no Protection of Groundwater or Industrial Use SCOs for these metals. Nickel was detected above the Unrestricted Use SCO but below Protection of Groundwater and Industrial Use SCOs in eight of 10 samples. No metals were detected at concentrations exceeding SCOs in any other sample.

1,4-Dioxane Subsurface Soil Analytical Results

The emerging contaminant 1,4-dioxane was detected in soil in ten subsurface soil samples plus the one duplicate from the nine locations. None of the detections were in exceedance of the relevant Part 375 SCOs.

PFAS Subsurface Soil Analytical Results

The emerging contaminants PFAS were not detected in any of the 10 subsurface soil samples or the duplicate from the nine locations sampled.

3.2.3 Groundwater Analytical Data

Groundwater samples for the 2020 RI were collected between September 9, 2020 and October 2, 2020. Groundwater samples were collected from two different analyses groups: BCP Site monitoring locations and groundwater plume status monitoring locations.

BCP Monitoring - Twelve monitoring wells within the BCP Site were analyzed for TCL VOCs, TCL SVOCs, PCBs, pesticides, (Target Analyte List (TAL) metals (total and dissolved), and the emerging contaminants 1,4-dioxane, and PFAS. Each well was also sampled for monitored

natural attenuation (MNA) parameters (dissolved iron, dissolved potassium, methane, ethane, and ethene (MEE), TOC, sulfate, sulfide); three of these wells were also sampled for microbial CENSUS analyses (DHC and DHC functional genes). Field testing analyses (HACH®) kits for alkalinity, carbon dioxide, hydrogen sulfide, and ferrous iron were collected immediately following collection of laboratory samples at each of the 12 locations.

Plume Status Monitoring – An additional 31 monitoring wells located within (20) and outside (11) the BCP Site footprint were sampled for VCP-defined plume status monitoring which included a Site-specific subset of VOCs and MNA parameters (dissolved iron, dissolved potassium, MEE, TOC, sulfate, sulfide.). Field testing analyses (HACH®) kits for alkalinity, carbon dioxide, hydrogen sulfide, and ferrous iron were collected immediately following collection of laboratory samples at each of the 31 locations. Nine locations were also selected for microbial CENSUS analyses (DHC and DHC functional genes).

The groundwater analytical results are summarized in **Tables 3-4, 3-5, and 3-6** and **Figures 3-3 through 3-16**.

3.2.3.1 VOC Groundwater Analytical Results

TCL VOCs - BCP Site Monitoring

Between September 9 and 18, 2020, groundwater samples from 12 well locations for TCL VOCs + 10 tentatively identified compounds (TICs) were collected from wells located within the BCP Site.

Seven VOCs (all chlorinated) were detected at a concentration above TOGS 1.1.1 criteria in at least one sample. Estimated concentrations are presented with a “J” qualifier. The VOCs found to be in excess of the relevant criteria (in parentheses) are summarized as follows and in **Table 3-4** and **Figures 3-4** (Overburden) and **3-5** (Bedrock):

- TCE (5 micrograms per liter ($\mu\text{g/L}$)) – Detections in samples from nine locations ranged from 0.13 J to 7,300 $\mu\text{g/L}$; TCE was detected above criteria at four locations and the duplicate: MW-4S, INJ-8D, PMW-1D, and PMW-11D with Duplicate.
- Cis-1,2-DCE (5 $\mu\text{g/L}$) – Detections in samples from ten locations ranged from 2.0 to 180,000 $\mu\text{g/L}$. Cis-1,2-DCE was detected above criteria at nine locations and the duplicate: MW-4S, MW-10S, MW-13S, PMW-1S, INJ-8D, PMW-1D, PMW-11D with Duplicate, RMW-3D, and RMW-4D.
- Trans-1,2-DCE (5 $\mu\text{g/L}$) – Detections in samples from four locations ranged from 8.7 J to 28 J $\mu\text{g/L}$. Trans-1,2-DCE was detected above criteria at all four locations where it was detected: MW-4S, MW-13S, PMW-1S and INJ-8D.
- 1,1-DCE (5 $\mu\text{g/L}$) - Detections in samples from three locations ranged from 66 J to 72 J $\mu\text{g/L}$. 1,1-DCE was detected above criteria at all three locations where it was detected: INJ-8D, PMW-11D with Duplicate, and RMW-3D.
- VC (2 $\mu\text{g/L}$) – Detections in samples from 11 locations ranged from 0.20 J to 12,000 $\mu\text{g/L}$. VC was detected above criteria at ten locations and the duplicate: MW-4S, MW-10S, MW-13S, PMW-1S, PMW-10S, INJ-8D, PMW-1D, PMW-11D with Duplicate, RMW-3D, and RMW-4D.

- 1,1,1-TCA (5 µg/L) – Detections in samples from four locations ranged from 4.8 to 3,800 µg/L. 1,1,1-TCA was detected above criteria at three locations and the duplicate: INJ-8D, PMW-11D with Duplicate, and RMW-3D.
- 1,1-DCA (5 µg/L) – Detections in samples from four locations ranged from 1.4 to 600 µg/L. 1,1-DCA was detected above criteria at three locations and the duplicate: INJ-8D, PMW-11D with Duplicate, and RMW-3D.

Several other individual contaminants were detected at one or more locations but were not in excess of the TOGS 1.1.1 criteria, including: 1,3 dichlorobenzene, benzene, chlorobenzene, isopropylbenzene (cumene), MEK, PCE, and xylene.

In general, the greater impacts were near the former underground tank and immediately southwest and downgradient of the former tank.

Plume Monitoring VOCs - Short List Chlorinated VOCs

Between September 9 and 18, 2020, groundwater samples for an additional 31 well locations were analyzed for the Ekonol Specific compound list of chlorinated VOCs and benzene, toluene, ethylbenzene, and xylene (BTEX) (see **Table 3-6**). The results from the 12 locations for BCP Monitoring section above will be used in conjunction with data from the 31 monitoring wells located within (20) and outside (11) the BCP Site footprint to draw conclusions regarding the overall state of the Ekonol Polyester Resins VOCs plume.

Inside BCP Footprint

At the 20 wells for plume monitoring inside the site boundary (not including the 12 BCP locations discussed above), nine VOCs were detected at a concentration above the NYSDEC TOGS 1.1.1 Class GA groundwater SCGs in at least one sample. The VOCs found to be in excess of the relevant TOGS 1.1.1 criteria (in parentheses) are summarized as follows and in **Table 3-4** and **Figures 3-4** (Overburden) and **3-5** (Bedrock):

- TCE (5 µg/L) – Detections in samples from 13 locations ranged from 0.5 J to 21,000 µg/L; TCE was detected above criteria at 11 locations: PMW-3S, INJ-7D, INJ-11D, INJ-13D, PMW-2D, PMW-6D, PMW-8D, PMW-9D, PMW-10D, PMW-16D, and RMW-2D.
- Cis-1,2-DCE (5 µg/L) – Detections in samples from 20 locations ranged from 0.46 J to 350,000 µg/L. Cis-1,2-DCE was detected above criteria at 18 locations: MW-2S, OR-6SM, OR-14SM, OR-18SM, PMW-3S, PMW-4S, PMW-6S, INJ-7D, INJ-11D, INJ-13D, PMW-2D, PMW-6D, PMW-8D, PMW-9D, PMW-10D, PMW-16D, PMW-17D, and RMW-2D.
- Trans-1,2-DCE (5 µg/L) – Detections in samples from 16 locations ranged from 0.86 J to 1,200 J µg/L. Trans-1,2-DCE was detected above criteria at 11 locations: MW-2S, PMW-3S, PMW-4S, PMW-6S, INJ-7D, PMW-6D, PMW-8D, PMW-10D, PMW-16D, PMW-17D, and RMW-2D.
- 1,1-DCE (5 µg/L) - Detections in samples from two locations ranged from 3.8 J to 420 J µg/L. 1,1-DCE was detected above criteria at one location: INJ-7D.
- VC (2 µg/L) – Detections in samples from all 20 locations ranged from 1.7 J to 32,000 µg/L. VC was detected above criteria at 18 locations: MW-2S, OR-4SM, OR-6SM, OR-10SM, OR-14SM, OR-18SM, PMW-3S, PMW-4S, PMW-6S, INJ-7D, INJ-11D, INJ-13D, PMW-2D, PMW-6D, PMW-8D, PMW-9D, PMW-10D, PMW-16D, PMW-17D, and RMW-2D.

- 1,1,1-TCA (5 µg/L) – Detections in samples from two locations ranged from 380 to 1,900 µg/L. 1,1,1-TCA was detected above criteria at the two locations where it was detected: PMW-16D and PMW-17D.
- 1,1-DCA (5 µg/L) – Detections in samples from eight locations ranged from 0.30 J to 440 J ug/L. 1,1-DCA was detected above criteria at three locations: PMW-10D, PMW-16D, and PMW-17D.
- Benzene (1 µg/L) – Detections in samples from four locations ranged from 1.1 to 2.5 ug/L. Benzene was detected above criteria at all four locations where it was detected: OR-4SM, OR-6SM, OR-10SM, and OR-14SM.
- Xylenes, Total (5 µg/L) – Detections in samples from four locations ranged from 1.4 to 600 ug/L. Xylene was detected above criteria at two locations: OR-4SM and OR-6SM.

Other individual contaminants were detected at one or more locations but were not in excess of the TOGS 1.1.1 criteria, including: PCE, chloroethane, ethylbenzene, naphthalene, and toluene.

Outside BCP Footprint

Six VOCs (all chlorinated) were detected at a concentration above TOGS 1.1.1 criteria in at least one sample. The VOCs found to be in excess of the relevant criteria (in parentheses) are summarized as follows and in **Table 3-4** and **Figures 3-4** (Overburden) and **3-5** (Bedrock):

- TCE (5 µg/L) – Detections in samples from eight locations ranged from 1.2 J to 1,100 µg/L; TCE was detected above criteria at four locations and two duplicates: MW-11S, MW-12S with duplicate, MW-7D with duplicate, and MW-13D.
- Cis-1,2-DCE (5 µg/L) – Detections in samples from all eleven locations ranged from 0.17 J to 5,700 µg/L. Cis-1,2-DCE was detected above criteria at ten locations and two duplicates: MW-11S, MW-12S with duplicate, MW-7D with duplicate, MW-11D, MW-13D, MW-15D, MW-17D, MW-19D, MW-20D and MW-21D.
- Trans-1,2-DCE (5 µg/L) – Detections in samples from ten locations ranged from 0.17 J to 50 µg/L. Trans-1,2-DCE was detected above criteria at two locations and two duplicates: MW-12S with duplicate and MW-7D with duplicate.
- VC (2 µg/L) – Detections in samples from ten locations ranged from 0.66 J to 3,100 µg/L. VC was detected above criteria at nine locations and two duplicates: MW-11S, MW-12S with duplicate, MW-7D with duplicate, MW-11D, MW-13D, MW-15D, MW-17D, MW-20D and MW-21D.
- 1,1,1-TCA (5 µg/L) – Detections in samples from six locations ranged from 15 J to 150 µg/L. 1,1,1-TCA was detected above criteria at all six locations where it was detected and one duplicate: MW-7D with duplicate, MW-11D, MW-15D, MW-17D, MW-20D and MW-21D.
- 1,1-DCA (5 µg/L) – Detections in samples from nine locations ranged from 1.9 J to 320 ug/L. 1,1-DCA was detected above criteria at eight locations and two duplicates: MW-11S, MW-12S with duplicate, MW-7D with duplicate, MW-11D, MW-13D, MW-15D, MW-17D, MW-20D and MW-21D.

VOCs Summary

Generally, VOCs in the overburden and bedrock detected and in exceedance of the relevant groundwater criteria are consistent with historical studies and monitoring at the Site. **Figures 3-6**

through 3-13 present isoconcentration maps for the 2020 RI showing the overburden and bedrock plumes for the main CVOCs of concern (TCE, cis-1,2-DCE, VC, and total Ekonol Site-Specific list of CVOCs). **Figure 3-14** presents an isoconcentration map for 1,1,1-TCA in bedrock; there is no accompanying overburden figure for 1,1,1-TCA as there were no detections of 1,1,1-TCA in the overburden. Benzene and xylene were also detected in slight exceedance of the relevant criteria in Site overburden groundwater (four and two locations, respectively). These chemicals are noted in historical data from the VCP.

Analysis of isoconcentration maps over time reveals little change in overburden and bedrock plume size and concentrations at individual wells. Individual well trends and historical tables showing concentrations of chloroethenes through September-October 2020 are presented in **Appendix A**. Concentrations for full TCL VOC plus 10 TICs at the 12 selected locations within the BCP Site did not identify any unknown VOCs of concern.

3.2.3.2 SVOC Groundwater Analytical Results

Six SVOCs (phenolic compounds, benzo(b)fluoranthene, and diethylphthalate) were detected at a concentration above their respective TOGS 1.1.1 criteria in at least one sample. The SVOCs found to be in excess of the relevant criteria are summarized as follows and in **Table 3-4** and **Figure 3-3**:

- 1,1-Biphenyl (5 µg/L) – Detections in samples from six locations ranged from 2.2 to 63 µg/L. 1,1-Biphenyl was detected above criteria at five locations and one duplicate: PMW-1S, INJ-8D, PMW-1D, PMW-11D with Duplicate, and RMW-4D.
- 2-Methylphenol (o-cresol) (1 µg/L) – Detections in samples from three locations ranged from 38 to 2,200 µg/L. 2-Methylphenol (o-cresol) was detected above criteria at all three locations where it was detected: INJ-8D, PMW-1D, and RMW-4D.
- 3&4-Methylphenol (1 µg/L) – Detections in samples from three locations ranged from 18 to 91 µg/L. 3&4-Methylphenol was detected above criteria at all three locations where it was detected: INJ-8D, PMW-1D, and RMW-4D.
- Benzo(b)fluoranthene (0.002 µg/L) – Benzo(b)fluoranthene was detected above criteria at one location: PMW-10S at 0.38 µg/L.
- Diethylphthalate (50 µg/L) - Diethylphthalate was detected above criteria at one sample location: RMW-4D at 62 µg/L.
- Phenol (1 µg/L) – Detections in samples from four locations ranged from 1.3 to 6,000 µg/L. Phenol was detected above criteria at all four locations where it was detected and one duplicate: INJ-8D, PMW-1D, PMW-11D with Duplicate, and RMW-4D.

Select other SVOCs were detected at one or more locations but were not in excess of the TOGS 1.1.1 criteria, including: acetophenone, benzo(g,h,i)perylene, fluoranthene, fluorene, phenanthrene, and pyrene.

3.2.3.3 PCB Groundwater Analytical Results

One PCB (Aroclor 1254) was detected at an estimated concentration above criteria (0.09 µg/L) at one sample location (INJ-8D) at 0.46 J µg/L.

3.2.3.4 Pesticide Groundwater Analytical Results

One pesticide (Endosulfan I) was detected at one location (PMW-1S [0.1 µg/L]). There is no Class GA groundwater standard for Endosulfan I listed in TOGS 1.1.1.

3.2.3.5 Metals Groundwater Analytical Results

TAL metals (both total and dissolved) were collected at the 12 BCP Site Monitoring locations. Metals at concentrations exceeding the groundwater criteria were detected in samples from all 12 BCP Site Monitoring locations. Metals exceeding the groundwater criteria included antimony, iron, magnesium, manganese, and sodium. The metals found to be in excess of the relevant criteria are summarized in **Table 3-4** and **Figure 3-3**:

From 2008 through 2012, substrate, additives, and buffers were injected into the bedrock. Some elevated metals concentrations may be attributed to these injections as injectate included calcium carbonate, sodium bicarbonate (pH buffer), sodium lactate (ingredient of the emulsified vegetable oil), and sodium bromide (increase conductivity). Additionally, as part of the trench construction sand was installed as an iron source.

3.2.3.6 1,4-Dioxane Groundwater Analytical Results

Samples for the emerging contaminant 1,4-dioxane were collected at the 12 BCP Site Monitoring locations. Detections in samples from nine locations ranged from 0.54 to 31 µg/L. 1,4-dioxane was detected above criteria at seven locations: MW-3S, MW-4S, MW-13S PMW-10S, INJ-8D, PMW-1D, and RMW-4D. The 1,4-dioxane results are summarized in **Table 3-5** and on **Figures 3-15** (Overburden) and **3-16** (Bedrock).

3.2.3.7 PFAS Groundwater Analytical Results

Samples for emerging contaminants PFAS analysis were collected at the 12 BCP Site Groundwater Monitoring locations. At least one of eight different PFAS was detected in all 12 locations, the field duplicate, and a sample collected from the municipal water source used by the drill crew (drill water sample). None of the detections were over the relevant PFAS SCGs for water samples. The PFAS results are summarized in **Table 3-5**.

Perfluorooctanesulfonic acid (PFOS) and perfluorooctanoic acid (PFOA) have water criteria of 10 nanograms per liter (ng/L). Detections of PFOS at eight sample locations and the drill water ranged from 0.9 to 6.9 J ng/L. Detections of PFOA at seven sample locations and the drill water ranged from 1.1 J to 8.5 J ng/L.

Other PFAS detected at one or more locations but not in excess of emergent contaminant criteria, included: perfluorobutanoic acid (PFBA), perfluorohexanoic acid (PFHxA), perfluoropentanoic acid (PPPeA), perfluoroheptanoic acid (PFHpA), 1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2 FTS), and perfluorohexanesulfonic acid (PFHxS).

3.2.3.8 Natural Attenuation Analytical Results

Samples from the 43 plume status monitoring locations (12 BCP wells + 20 other plume onsite wells + 11 offsite wells) were analyzed for natural attenuation parameters according to the schedule in **Table 3-6**. Natural attenuation parameters that were analyzed by the laboratory included: MEE, dissolved iron and potassium, TOC, sulfate, and sulfide. Microbial CENSUS analyses (DHC and DHC functional genes) were collected from 12 locations that have historically

received the same analyses. The laboratory results are presented in **Table 3-6**, the historical tables in **Appendix A**, and briefly discussed below.

- MEE – Methane, ethane, and ethene concentrations were generally within historical norms for most locations. Some locations exhibited high MEE relative to historical results (i.e., MW-3S, MW-4S, MW-15D, MW-17D, MW-20D).
- Dissolved iron– Detected dissolved iron ranged from 0.056 J to 3.6 milligrams per liter (mg/L). One sample was non-detect. All concentrations were within the historical range since well installation. Several “onsite” locations (i.e., OR-4SM, OR-6SM, OR-10SM, OR-14SM, PMW-3S, PMW-4S, PMW-6S) exhibited generally higher iron results immediately following 2011-2012 IRM activities with generally decreasing iron results since completion of IRM injections.
- Dissolved potassium – Dissolved potassium ranged from 2.3 to 21 mg/L. One sample was non detect. All concentrations were within the historical range.
- TOC concentrations ranged from 1.6 mg/l (MW-22D) to 270 mg/l (RMW-2D). In general, TOC values were within the historical range since well installation. The bedrock has more wells with TOC >20 mg/L (14 locations) than the overburden (3 locations), which is more desirable as an indicator for reductive dechlorination in the anaerobic treatment zone. The same well locations that exhibited decreasing iron since the 2011-2012 IRM activities also exhibited generally decreasing TOC results since completion of IRM injections.
- Sulfate – Sulfate levels ranged from non-detect to 3,300 mg/L Only one location (PMW-17D) had sulfate concentrations less than 20 mg/L. Low sulfate is desirable but not required for anaerobic reductive dechlorination processes. All concentrations were within the historical range.
- Sulfide –Sulfide levels ranged from non-detect to 340 mg/L. Fourteen locations had sulfide concentrations greater than 20 mg/L. Higher levels of sulfide may indicate biodegradation is progressing. All concentrations were within the historical range.
- DHC and DHC functional genes – DHC was detected in all sample locations and ranged from 5.4 to 618,000 cells/mL. DHBt concentrations were detected in 6 out of 12 samples and ranged from 671 to 32,200 cells/ml when detected. The functional gene BVC was detected in the sampled locations except for well PMW-10S and ranged from 6.6 to 74,800 cells/milliliter (ml) when detected. TCE reductase (TCER) was non-detect in PMW-10S and ranged from 2.7 to 10,300 cells/ml when detected. Vinyl chloride reductase (VCr) was detected in all sample locations and ranged from 3.4 to 76,000 cells/ml. All microbial analyses were within historical ranges.

3.2.3.9 Field Measurements

Field parameter measurements of pH, temperature, specific conductivity, DO, and ORP were recorded during well purging and groundwater sample collection. The measurements recorded for the 43 wells sampled during the September-October 2020 sampling are presented in **Table 3-7** and briefly discussed below.

Well Head Analyses

- Temperatures in wells ranged from 12.86 to 21.80 degrees Celsius. Temperatures vary due to timing of flow-through and could be biased high for lower producing wells.
- Specific conductivity values ranged from 1.060 to 11.351 millSiemens per centimeter (mS/cm).
- Dissolved oxygen (DO) – Four wells went dry during purging and during sampling, DO was recorded between 2.57 and 6.08 mg/L. DO levels in other locations ranged from 0.18 to 2.11 mg/L and were similar for overburden and bedrock and for wells within and outside of the BCP boundary.
- Final pH values were generally neutral, ranging from 6.39 to 8.58. Following completion of the fieldwork, field and daily calibration sheets were reviewed and it was determined that pH readings at 15 locations, all sampled using the same water quality meter, were anomalous and/or had a pH > 9. These locations are: INJ-13D, OR-10SM, MW-3S, MW-4S, MW-12S, MW-7D, PMW-2D, PMW-3S, PMW-4S, PMW-10D, PMW-16D, PMW-17D, and RMW-4D. The field results were rejected due to possible water quality pH meter malfunction, incorrect field calibration, or calibration solution failure. At 13 of these locations there was sample volume at the laboratory to run pH as a laboratory analysis. MW-12S pH was re-collected in the field using an in-situ water quality meter on September 28, 2020. MW-20D did not have enough sample to run a laboratory pH and was rejected. The laboratory verified result for these locations are in-line with historical norms for pH at these locations. The laboratory results for pH are included in the Groundwater Sampling Field Parameter Results, **Table 3-7**.
- ORP values ranged from -369.3 to 107.4 millivolts (mV). ORP values in 39 of the 43 wells were less than zero. Low ORP values are desirable for anaerobic reductive dechlorination processes.
- Turbidity values ranged from 0.34 to >1000 nephelometric turbidity units (NTUs).

Mobile Lab Analyses (HACH® kits)

MNA parameters analyzed in the field using HACH® kits included: alkalinity, carbon dioxide, hydrogen sulfide, and ferrous iron.

- Alkalinity – Alkalinities ranged from <385 to 1925 mg/L.
- Carbon Dioxide - Carbon dioxide concentrations ranged from 20 mg/L to 290 mg/L. Carbon dioxide is a by-product of both aerobic and anaerobic degradation. Elevated levels of carbon dioxide indicate microbial activity has been stimulated. During the 2020 RI sampling event between September 10, 2020, and September 13, 2020, the field staff were unable to get carbon dioxide results at most locations due to problems getting readable results with the titration solution for the carbon dioxide HACH kit (Model CA-23). New solution was obtained and used from September 14, 2020 through October 2, 2020. Locations with results were obtained prior to September 14, 2020 may be biased and were assigned a J value.
- Hydrogen Sulfide – Hydrogen sulfide results ranged from 0 to > 5 mg/L. Approximately half the wells sampled for plume monitoring exhibited hydrogen sulfide > 5 mg/L.
- Ferrous Iron – The ferrous iron range was 0.00 – 2.33 mg/L with nine of 43 locations having ferrous iron greater than 1 mg/L. Of these locations with higher ferrous iron six were

overburden well locations and three were bedrock well locations. All but one location was within the BCP Site boundary.

3.2.4 Vapor Intrusion Analytical Results

Historical sample results are discussed in **Section 3.1.9** and presented on **Figure 3-17**.

During this RI, one indoor air (with duplicate) and one outdoor air sample were collected on April 21, 2021 for VOCs using EPA Method TO-15. Detections above the reporting limit are presented on **Table 3-8** and **Figure 3-18** for the sampling event. Indoor air sample ID-1 results on this figure present the higher detected value of ID-1 and the ID-1 duplicate sample.

The April 2021 indoor air monitoring program is intended to monitor VOC concentrations in indoor air and to evaluate SSD system effectiveness. The results are compared to Air Guideline Values Derived by NYSDOH (NYSDOH, October 2006, Updated September 2013, and August 2015).

As presented on **Table 3-8** and **Figure 3-18**, several VOCs were detected above detection limits. None of the detected VOCs are listed on the Table 3.1 Air Guideline Values derived by NYSDOH except for TCE which was detected at 0.21 µg/m³, below the guideline value of 2 µg/m³ (August 2015 NYSDOH guideline update).

3.3 Potential Exposure Pathways

An exposure pathway is a manner by which a potential receptor may come in contact with a contaminant. The elements of a completed exposure pathway include: the contaminated environmental media (e.g., soil, soil vapor/air, and groundwater); the receptor (e.g., construction worker, industrial worker, visitors) exposed to the contamination; and the routes of exposure or how the contaminant enters the body (e.g., inhalation, ingestion, and/or dermal contact).

The BCP Site itself is covered with asphalt and paved parking areas. The Ekonol Polyester Resins building to the north typically has 1 to 3 staff occupying the building on workdays. The Saint-Gobain Ceramics and Plastics facility is located west-southwest of the Site and has employees onsite daily. Future use of the Site would be in conjunction with its current zoning for industrial use. Under current or future conditions, human contact with contaminants of potential concern (CPCs) can be expected to occur primarily by three types of receptors: vendors, visitors, or trespassers who may enter the property; construction/utility workers who may be involved in construction/repairs to existing buildings or systems or future buildings or systems; and industrial workers.

The subsections below present the exposure pathways assessed for the Site under current and future land use scenarios, respectively. There are no exposure pathways from surface soil under current conditions as the VOC and metal contaminants in soils are currently covered. However, there is potential for future construction/utility workers to have contact with soils during excavation work. There are potential exposure pathways from soil vapor through the inhalation of VOCs to construction workers, industrial workers, and the visitors under both the current and future use scenarios. Exposure pathways are not complete for the public under current conditions for soil, outdoor air, or for any receptors for groundwater.

The following subsections discuss the rationale for identifying completed exposure pathways.

3.3.1 Soil and Ground Surface Materials

As discussed in Section 3.2.2 above, the Site is covered with asphalt and concrete pavement therefore there is no surface soil/ground surface material pathway. The only potential completed exposure pathway is for subsurface soil for construction/utility workers who could come into contact with contaminated soil during intrusive activities both under current and future conditions. Potential exposure to these materials by current or future vendors, visitors, or industrial workers is unlikely.

3.3.2 Outdoor Air

Three outdoor air samples were collected in March 2009 during VCP Site investigations. No VOCs were detected in the samples at the laboratory reporting limits. The levels are not considered a concern.

3.3.3 Indoor Air and Sub-Slab Vapor

A January 2016 letter to NYSDEC detailed additional sampling of the SSD system conducted in late 2015 with the system running (August) and off (October) for 24-hours with all sampled VOCs being non-detect. April 2021 air sampling results were all below the Air Guideline Values derived by NYSDOH (NYSDOH, October 2006, Updated September 2013 and August 2015).

Based on the SSD system being in place since November 2010 and operating without interruption (except for fan replacement in 2015) in the Saint-Gobain offices, and 2015 and 2021 indoor air data being below guidelines, there is no completed indoor air pathway under current conditions. However, a completed exposure pathway to employees may occur in the future.

3.3.4 Groundwater

Under the current use scenario, groundwater is not known to be used as a potable water supply or for any other known industrial purposes in the vicinity of the Site. Drinking water is supplied by the Town of Wheatfield. Therefore, it is not a completed exposure pathway under the current use scenario. It is not anticipated that in the future that on-site groundwater would be used for potable purposes. Construction workers at the Site could be exposed to groundwater contaminants during current or future intrusive activities through dermal contact, ingestion, and/or inhalation.

3.3.5 Surface Water/Sediment

There is no surface water or sediment present on the Site, therefore, an exposure pathway does not exist.

3.3.6 Routes of Exposure

VOCs present the greatest exposure potential through inhalation. VOCs, phenol, and 1,4-dioxane can also provide exposure through dermal contact and ingestion if encountered in subsurface soil or groundwater.

3.3.7 Summary

Under some current and future use conditions, there are completed exposure pathways from indoor air, soil, and groundwater, but only for the construction worker. For future use conditions,

additional completed exposure pathways from soil, groundwater, or outdoor air may be present under intrusive soil/excavation conditions.

3.4 Fate and Transport in the Unsaturated Zone

3.4.1 Migration

The propagation of contaminants in the unsaturated zone is dominated by three processes: migration of the dissolved phase contaminants with infiltrating precipitation; migration of the volatilized contaminants in the soil vapor; and migration of the sorbed contamination with fugitive dust emissions or surface runoff. The soil at the Site is located under a relatively impervious cover (either pavement or concrete). Infiltration from precipitation across the Site area is limited to the cracks and joints of the pavement and concrete surfaces. Therefore, the extent of the infiltration-induced migration is likely to be limited. The flow is mostly gravity-driven and directed downwards. Such downward migration through the unsaturated zone may constitute a source of contamination of the saturated zone below. Infiltration-induced migration is expected to be higher for the contaminants with higher solubility, such as the VOCs and 1,4-dioxane, and lower for polynuclear aromatic hydrocarbons (PAHs) because of their lower solubility in water.

For metals, the degree of solubility is determined primarily by the type of metal and the pH of the environment with a general decrease in metals solubility with increasing pH. According to the purge logs for monitoring wells and piezometers sampled during site investigations, the pH at the Site ranges from 6.39 to 8.58, which suggests limited solubility.

Contaminants can enter the soil vapor through the process of volatilization. There are elevated levels of VOCs present at the Site and the Site and vicinity is almost entirely paved. As a result, the migration of contaminants through the soil vapor could be significant. Separated from direct contact with the atmosphere, the soil vapor will tend to migrate laterally, possibly at great distances, and seek discharge points at discrete locations, such as basements or underground sewers.

The immediate Site area contains little unvegetated and unpaved areas. The Site is covered with asphalt and concrete. There is no exposed soil at the Site to generate fugitive dust emissions. Likewise, the erosion and transport of surface soils by runoff is not present onsite. Contamination adsorbed into soils is unlikely to migrate via the pathways of dust emissions or runoff transport.

3.4.2 Degradation

Generally, the occurrence and rates of unsaturated zone degradation have to be determined by means of field studies, such as respiration tests. However, unsaturated zone biodegradation is limited by the amount of moisture present in the soil and transport processes between bacteria and contaminants. Sufficient moisture for active biological growth may not be present at all locations where contamination is elevated. Also, without a continuous aqueous phase, mass transfer between the bacteria and contaminants will be low, especially for low mobility compounds such as PAHs, PCBs, and metals. These conditions tend to limit the amount of natural biodegradation of some compounds that will occur in the unsaturated zone.

Because the Site area is mostly paved or covered by buildings and the unsaturated zone is not exposed to the action of sunlight and high temperature in the summer, rates of abiotic degradation are likely to be very low, even in the top-most layers. In general, rates of contaminant degradation in the unsaturated zone are expected to be relatively low.

3.5 Fate and Transport in the Saturated Zone

3.5.1 Migration

Contaminant migration in the saturated zone takes place predominantly by means of the transport of the dissolved-phase contamination in groundwater. The dominant factors are the direction of groundwater flow within the aquifer, the hydraulic gradient, the hydraulic conductivity of the aquifer material (both the average value and spatial distribution) and the chemical composition of the soil matrix. VOCs may also migrate from the groundwater/soil to soil vapor in the unsaturated zone.

Unconfined groundwater occurs at the Site and is found within the natural unconsolidated deposits overlying bedrock. Bedrock groundwater is semi-confined. The depth to groundwater ranges from about 2.5 to 8 ft bgs in the overburden and 4.5 to 12 ft bgs in the bedrock across the Site.

VOCs (primarily chlorinated), select SVOCs, one PCB, metals, and the emergent contaminant 1,4-dioxane were detected above SCGs in groundwater samples.

Figures 3-6 through 3-14 present groundwater isoconcentration contours for TCE, cis-1,2-DCE, VC, 1,1,1-TCA, and total site-specific chlorinated VOCs based on the 2020 RI analytical results. The general pattern of VOC concentrations in groundwater suggests that the source area is the former underground tank area with downgradient migration in both overburden and bedrock. The former tank area has been remediated though past IRMs; however, residual contamination exists.

It is known from previous investigations at the Site that the VOC plume in bedrock extends beyond the 1.006-acre BCP Site boundary to the parking lot to the south and east of the Site boundary and to the southern property line for 6600 Walmore Road.

Vertical gradients are generally downward in the vicinity of the Site. Historical transmissivity in select bedrock wells at the Site was calculated at 5.6×10^1 feet squared per day (ft^2/day) to $1.17 \times 10^3 \text{ ft}^2/\text{day}$ during pulse interference testing in the RAR investigations (Parsons, 2003; 2004a, 2004b, 2007).

3.5.2 Degradation

In groundwater, the rate of degradation of chlorinated VOCs is greater in anaerobic environments than in aerobic environments. The predominant mechanism for the degradation of these compounds is reductive dechlorination. The likelihood of the occurrence of this pathway can be assessed using the following indicators (after the *Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Ground Water*, USEPA 1998). This data includes both laboratory analytical results and field measured results for the chlorinated VOC and MNA parameters.

The ORP measurements recorded for wells sampled in September-October 2020 indicated 39 of 43 wells had negative ORP values, which suggests an anaerobic environment. DHC bacteria were present at sufficient populations to indicate conditions for biodegradation are favorable. The presence of TCE daughter products cis-1,2-DCE and VC suggests that degradation of TCE is occurring.

3.6 Site Contaminants of Concern

CPCs at the Site are chlorinated VOCs (PCE, TCE, 1,2-DCE, VC, 1,1,1-TCA, 1,1-DCA), phenol, and 1,4-dioxane. The presence of these compounds in soil and groundwater are likely associated with past manufacturing activities.

VOCs can enter the soil vapor through the process of volatilization. Investigation information has demonstrated that migration of VOCs has occurred historically in the main Saint-Gobain building down gradient of the Site. PCE concentrations detected within historical sub-slab samples required mitigation according to the NYSDOH decision matrices. An SSD system was installed in the Saint-Gobain office building in November 2010 and continues to operate and is currently inspected quarterly. A January 2016 letter to NYSDEC detailed additional sampling of the SSD system conducted in 2015 with the system running (August) and off (October) for 24-hours with all sampled VOCs being non-detect. In addition, April 2021 air sampling results with the SSD system running were all below the Air Guideline Values derived by NYSDOH (NYSDOH, October 2006, Updated September 2013 and August 2015).

Infiltration-induced migration is expected to be high for the VOC contaminants due to their higher solubility. VOCs migrate in the saturated zone predominantly by means of the transport of the dissolved-phase contamination in groundwater. The extent of bedrock groundwater VOC impact has been determined with concentrations highest near the former underground concrete tank and progressively decreasing to non-detect values downgradient (south) of the former tank.

Contaminant travel in the bedrock is likely along preferential pathways (i.e., interconnected fractures within the rock). Phenol impacts in the groundwater are localized to the area south-southwest of the former tank. 1,4-Dioxane was detected at low levels throughout the BCP Site in the overburden and downgradient (south-southwest) of the former tank in the bedrock following the general direction of groundwater flow.

4.0 Remedial Action Objectives and Goals

4.1 Potential Standards, Criteria, and Guidance

Applicable or relevant and appropriate SCGs are used to develop remedial action objectives (RAOs) and to scope and formulate remedial action technologies and alternatives. SCGs are categorized as:

- chemical-specific requirements that define acceptable exposure levels and may, therefore, be used in establishing preliminary remediation goals;
- location-specific requirements that may serve to protect characteristics, resources, and specific environmental features, such as flood plains or wetlands; and/or
- action-specific requirements that may set controls or restrictions for particular treatment and disposal activities related to the management of hazardous wastes.

Applicable SCGs should consider the current, intended, and reasonably anticipated future use of the Site and its surroundings. Potential SCGs are described in the following subsections.

4.1.1 Chemical-Specific SCGs

The SCGs used to evaluate the soil and groundwater analytical results in Section 3 are considered chemical-specific SCGs. SCGs incorporates both the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) concept of “applicable or relevant and appropriate requirements” (ARARs) and the USEPA’s “to be considered” category of non-enforceable criteria or guidance. The SCGs are summarized as follows:

- NYSDEC TOGS water quality standards and guidance values
- 6 NYCRR 703.5 water quality standards
- 6 NYCRR 375-6.8 SCOs
- CP-51 soil cleanup guidance
- NYSDOH Guidance for Evaluating Soil Vapor Intrusion and indoor air guidelines for PCE and TCE

4.1.2 Action-Specific SCGs

Action-specific SCGs are determined by the particular remedial activities that are selected for the Site cleanup. Action-specific requirements establish controls or restrictions on the design, implementation, and performance of remedial activities. Following the development of remedial alternatives, action-specific SCGs that specify performance levels, actions, technologies, or specific levels for discharge of residual chemicals provide a means for assessing the feasibility and effectiveness of the remedial activities.

4.1.3 Location-Specific SCGs

Location-specific SCGs are requirements that set restrictions on activities depending on the physical and environmental characteristics of the Site or its immediate surroundings. The RI included completing the DER-10 Appendix 3C Fish and Wildlife Resources Impact Analysis (FWIA) Decision Key. The analysis concluded that there are no identified surface water bodies or freshwater wetlands within a 0.5-mile radius of the Site. Therefore, location-specific SCGs associated with FWIA are not

applicable. Also, the Protection of Ecological Resource SCOs are not applicable to the determination of whether surface soils need to be covered under the proposed Track 4 cleanup or what is or is not suitable cover material. Potential location-specific SCGs that may be applicable to potential Site remedial technologies are the Town of Wheatfield zoning ordinances and building codes.

4.2 Remedial Action Goals and Objectives

4.2.1 Remedial Action Goals

Remedial Action Goals (RAGs) are general, non-site-specific standards, established by the State, which are used to help develop site-specific RAOs. RAGs have been established for remedial actions implemented under NYSDEC's Inactive Hazardous Waste Disposal Site Remedial Program and include the following:

- at a minimum, to eliminate or mitigate all potential threats to human health and the environment presented by contaminants at the Site, to the extent feasible.
- to restore the Site, to the extent feasible.

4.2.2 Remedial Action Objectives

RAOs established for the protection of human health and the environment should specify:

- the contaminants and media of concern;
- the exposure routes and receptors; and
- an acceptable contaminant level or range of levels for each exposure route.

Remedial actions evaluated for the Site address the presence of CVOCs in soil and groundwater. The following RAOs have been established for Site media:

4.2.2.1 Soil

RAOs for Public Health Protection

- Prevent ingestion/direct contact with contaminated soil.
- Prevent inhalation exposure to contaminants volatilizing from soil.

RAOs for Environmental Protection

- Prevent impacts to biota from ingestion/direct contact with soil causing toxicity or impacts from bioaccumulation through the terrestrial food chain.

4.2.2.2 Groundwater

RAOs for Public Health Protection

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.
- Prevent contact with, or inhalation of volatiles, from contaminated groundwater.
- RAOs for Environmental Protection
- Restore ground water aquifer to pre-disposal/pre-release conditions, to the extent practicable.
- Prevent the discharge of contaminants to surface water and sediment.
- Remove the source of ground or surface water contamination.

4.2.2.3 Soil Vapor

RAOs for Public Health Protection

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

4.3 Summary of Extent of Contamination to be Addressed

The estimated extent of CVOC impacts to soil is considered to be the entire extent of the BCP Site. This area is irregularly shaped and contains approximately 45,500 square feet (~1.05 acres). Assuming a depth to bedrock of approximately 12 feet, the estimated volume of CVOC impacted soil is approximately 20,000 cubic yards (see **Figure 2-1**).

The exceedances of NYSDEC TOGS 1.1.1 Class GA standards for overburden and bedrock groundwater within the BCP during the 2020 RI are presented on **Figure 3-3**. Exceedances of the Class GA standards for both onsite and offsite areas in overburden and bedrock during the 2020 RI are represented on **Figures 3-4** and **3-5**, respectively. The estimated on-site and off-site extent of CVOC impacts in overburden and bedrock groundwater are shown in **Figures 3-9** and **3-13**, respectively. The limit of groundwater impacts shown is considered to be the 100 µg/L total VOC contour line, with an area of approximately 25,000 square feet (~0.6 acres) in the overburden and 50,000 square feet (~1.15 acres) in the bedrock. The remedies evaluated include treatment within the BCP Site, near the plume sources, that are expected to result in concentration decreases in downgradient areas over time.

5.0 General Response Action and Identification of Remedial Technologies

General response actions (GRA) are remedial approaches encompassing those actions that will satisfy the RAOs. GRAs may include treatment, containment, removal, disposal, engineering controls (EGs), institutional controls (ICs), or a combination of these, if required, to address varied Site environmental problems and to be effective in meeting all the RAOs. **Tables 5-1 and 5-2** identify and present a preliminary screening of GRAs and potentially applicable remedial technologies for soil and groundwater, respectively.

The following GRA descriptions have been generated in accordance with the guidelines in NYSDEC DER-10. Brief descriptions of specific technologies for each media are provided in **Tables 5-1 and 5-2**.

Limited Action involves ICs that restrict access to contaminated areas through physical and/or administrative measures. Limited Action also includes long-term monitoring. The IC response is not intended to reduce the toxicity, mobility, or volume of hazardous constituents, but to reduce the potential for exposure to the constituents.

Containment actions include control, isolation, and encapsulation technologies that involve little or no treatment, but reduce the mobility of contaminants and/or eliminate exposure pathways. Since these technologies consist primarily of physical barriers to control migration, contaminant toxicity and volume are not reduced significantly within the contained area.

Treatment/destruction actions include technologies that reduce the volume, toxicity, and/or mobility of contaminants. These technologies include in-situ treatment, ex-situ treatment, and destruction. Treatment methods reduce contaminant volume, toxicity, and/or mobility by treating contamination to acceptable cleanup levels. Destruction technologies permanently and irreversibly destroy or detoxify contaminants to acceptable cleanup levels, thereby reducing contaminant volume, toxicity, and mobility.

Removal/disposal actions include both on-site and off-site technologies, including reuse/recycling, and/or landfill disposal.

No remedial activities would be implemented under a “No Action” GRA; however, it is considered throughout the AAR process as a baseline against which other GRAs and technologies can be compared.

The GRAs and associated technologies identified for each medium include one or a combination of the following:

Subsurface Soil

- No Action
- Limited Action (ICs)
- In-situ Treatment (SVE or In-situ Soil Mixing)

Overburden Groundwater

- No Action
- Limited Action (ICs, maintain bioreactor trenches, MNA)
- In-Situ Treatment (biological treatment (e.g., biostimulation and/or bioaugmentation), chemical oxidation, chemical reduction)

Bedrock Groundwater

- No Action
- Limited Action (ICs, MNA)
- In-Situ Treatment (biological treatment (e.g., biostimulation and/or bioaugmentation), chemical oxidation, chemical reduction)

6.0 Evolution of Technologies and Process Options

In this section, the GRAs have undergone an evaluation to eliminate those remedial technologies that may not be effective based on anticipated site conditions and/or that cannot be implemented technically at the Site.

Each technology and process option is evaluated in terms of effectiveness in providing protection to human health and in reducing toxicity, mobility, or volume of the waste; implementability; and relative cost. The evaluation process was guided by DER-10 and USEPA Guidance for Conducting RI/FS Studies under CERCLA (USEPA, 1988). **Table 6-1** presents the evaluation of each specific technology and process option.

Technologies retained from this evaluation process are grouped into potential remedial alternatives for discussion in Section 7.0. Based upon this evaluation, the retained technologies have been utilized to develop a set potential remedial alternatives for detailed analysis:

Alternative 1 – No Action, SMP with ICs (SMP/ICs).

Alternative 2 – Maintenance of Site Cover, Maintain Bioreactor Trenches, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs.

Alternative 3 – Maintenance of Site Cover, Maintain Bioreactor Trenches, Enhanced In-situ Treatment of Bedrock Groundwater, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs.

7.0 Detailed Analysis of Retained Remedial Alternatives

The technologies and process options retained from the evaluation process were combined to develop a set of potential remedial alternatives to undergo detailed analysis. A range of alternatives was developed that would satisfy the site-specific remedial goals and RAOs. A detailed analysis of each alternative also provides 1) conceptual design, 2) preliminary primary capital and operating costs, and 3) approximate remediation time to attain remedial goals. A summary of the considered alternatives with respect to the evaluation criteria is presented as **Table 7-1**.

7.1 Evaluation Criteria

Each of the remedial alternatives was evaluated using the guidance and criteria set forth in NYSDEC DER-10, Section 4.2 and USEPA Guidance for Conducting RI/FS Studies under CERCLA (USEPA, 1988). The first two criteria (Sections 7.1.1 and 7.1.2) are considered as threshold criteria and must be satisfied for an alternative to be considered for selection. The following seven criteria (Section 7.1.3 through 7.1.9) are considered as primary balancing criteria which are used to compare the positive and negative aspects of each of the alternatives, providing the alternatives satisfy the initial threshold criteria.

7.1.1 Overall Protection of Human Health and the Environment

This criterion is an evaluation of the remedy's ability to protect human health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through the removal, treatment, containment, ECs or ICs. The remedy's ability to achieve each RAO is evaluated.

7.1.2 Compliance with Standards, Criteria, and Guidance

This criterion is an evaluation of the remedy's ability to meet applicable or relevant and appropriate environmental laws, regulations, standards, and guidance.

7.1.3 Long-Term Effectiveness and Permanence

This criterion is an evaluation of the long-term effectiveness and performance of the remedy after implementation. If contamination will remain on-site after the remedial has been implemented, the evaluation assesses the impact of the remaining contamination on applicable potential receptors (i.e., human exposure, ecological receptors, or impacts to the environment). The evaluation also considers engineering and/or institutional controls.

7.1.4 Reduction of Toxicity, Mobility or Volume

This criterion is an evaluation of the remedy's ability to reduce the toxicity, mobility, or volume of the materials. Preference is given to remedies that permanently or significantly reduce toxicity, mobility, or volume of contamination at the Site.

7.1.5 Short-term Effectiveness

This criterion evaluates the potential short-term adverse impact(s) and human exposures during construction and/or implementation of the remedy to the community, workers, and the environment.

7.1.6 Implementability

This criterion is an evaluation of the feasibility of technical and administrative implementation.

7.1.7 Cost

Capital, operation, maintenance, and monitoring costs are estimated for the remedy and presented on a present worth basis. These costs represent 2024 cost dollars. The costs are highly variable, are based on then current market rates, and are intended for comparative purposes only.

7.1.8 Land Use

This criterion is an evaluation of the current, intended and reasonably anticipated future use of the Site and its surroundings, as it relates to an alternative or remedy, when unrestricted use levels would not be achieved.

7.1.9 Community Acceptance

Community acceptance is evaluated following a public comment period, after a remedy has been proposed.

7.2 Other Criteria Considered

7.2.1 Green Remediation

This criterion is an evaluation of the extent to which green and sustainable practices and technologies are incorporated into the remedy during its implementation. NYSDEC DER-31 (NYSDEC 2010b) establishes a preference for remediating sites in the most sustainable manner while still meeting legal, regulatory, and program requirements.

7.3 Cost Evaluation Approach

As part of the detailed evaluation, planning level costs were developed for each alternative. These costs were based on general assumptions and elements likely to become part of each alternative (conceptual planning). The planning level costs presented are intended to provide a measure of total estimated resource costs over time. The expected accuracy of these estimates is between -30 and +50 percent (USEPA/USACE, 2000). In addition, net present value costs were estimated for future costs for each alternative. A summary of planning level costs for remedial alternative is presented in **Appendix B**. Detailed cost backup calculations are provided in **Appendix C**.

7.4 Potential Remedial Action Alternatives

7.4.1 Alternative 1: No Action

Alternative 1 (No Action) is developed as a baseline to which other alternatives can be compared, in accordance with USEPA Remedial Investigation / Feasibility Study (RI/FS) Guidance (USEPA, 1988). Under this alternative, no remedial action would be taken and only naturally occurring processes would be working to achieve RAOs. There would be no administrative actions (e.g., ICs) that would limit site use. No costs are presented as no actions would be performed. The detailed analysis of Alternative 1 compared to the evaluation criteria is presented in **Table 7-1**.

7.4.2 Alternative 2: Maintenance of Site Cover, Maintain Bioreactor Trenches, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs

This alternative essentially maintains the current remedial alternative that was implemented at the Site as part of VCP activities and will be carried forward into the BCP. Since being implemented this alternative has been monitored for treatment efficacy as part of a performance monitoring program.

Under this alternative the existing cover material at the Site (i.e., concrete and asphalt) will continue to be maintained to mitigate the infiltration of surface water/precipitation to the underlying groundwater in the overburden and bedrock zones. As part of the overall performance monitoring program for the Site, inspections of the cover material and the SSDS will be completed in association with the groundwater monitoring events and the inspection results will be incorporated in the performance monitoring reporting. If inspections indicated that the cover material has degraded then measures will be taken to restore the cover materials (i.e., patching, re-paving, or new concrete).

The existing bioreactor trenches will continue to operate as a former source area mitigation measure for overburden groundwater. Monitoring of the bioreactor trench efficacy will be continued to determine if additional measures are warranted.

The continued implementation of MNA with respect to the dissolved-phase groundwater impacts in the Overburden and Bedrock zones will require the continued groundwater monitoring of VOCs, target analyte list (TAL) metals, and MNA parameters in groundwater to evaluate the efficacy of the ongoing natural attenuation. The MNA parameters will include the following:

- Dissolved oxygen
- Oxidation-reduction potential
- pH
- Sulfate
- Nitrate
- Total organic carbon
- Methane
- Iron (Ferrous (Fe^{+2}) and Ferric (Fe^{+3}))
- Chloride
- Alkalinity

For this AAR, it is assumed that the MNA performance monitoring groundwater samples will be collected from thirty (30) on-site monitoring well locations on a semi-annual basis for a period of 30 years.

ICs, including an Environmental Easement (EE) and SMP, would be implemented to minimize the potential for human exposure by restricting resource usage, potentially including water use restrictions. ICs would remain in place until contaminant concentrations are reduced to levels allowing unrestricted use of the Site.

A detailed analysis of Alternative 2 compared with the evaluation criteria is presented in **Table 7-1**.

The estimated cost to implement Alternative 2 is:

Capital Cost: \$ 34,000 (rounded)
O&M Cost: \$ 498,000 (rounded)
Total Cost: \$ 532,000 (rounded)

There are no major capital costs for this alternative. O&M costs would include groundwater monitoring to evaluate reductions in concentrations and the success of natural attenuation processes. For cost estimating purposes, O&M is assumed to occur over a 30-year period. A summary of the costs estimated for Alternative 2 is presented in **Table C1** in **Appendix C**.

7.4.3 Alternative 3: Maintenance of Site Cover, Maintain Bioreactor Trenches, Enhanced In-situ Treatment of Bedrock Groundwater, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs

This alternative is similar to Alternative 2 in that it maintains the current remedial alternative that was implemented at the Site as part of VCP activities (i.e., site cover, bioreactor trenches and MNA). Since being implemented this alternative has been monitored for treatment efficacy as part of a performance monitoring program.

As part of Alternative 3, the existing cover material at the Site (i.e., concrete and asphalt) will continue to be maintained to mitigate the infiltration of surface water/precipitation to the underlying groundwater in the overburden and bedrock zones. As part of the overall performance monitoring program for the Site, inspections of the cover material and the SSDS will be completed in association with the groundwater monitoring events and the inspection results will be incorporated in the performance monitoring reporting. If inspections indicated that the cover material has degraded then measures will be taken to restore the cover materials (i.e., patching, re-paving, or new concrete).

Additionally, the existing bioreactor trenches will continue to operate as a former source area mitigation measure for overburden groundwater. Monitoring of the bioreactor trench efficacy will be continued.

Alternative 3 also includes the addition of enhanced in-situ treatment related to the observed dissolved phase groundwater impacts in the Bedrock zone. Baseline sampling of bedrock groundwater will be conducted to determine the contaminant distribution and bioremediation needs. Following preparation of a remedial design, the appropriate bioremediation amendment will be injected into selected bedrock injection wells. The cost estimate assumes installation of four additional bedrock injection wells. The bioremediation amendment will be injected into the four new bedrock injection wells, as well as eight existing wells (INJ-1, INK-2, INJ-3, INJ-4, INJ-5, INJ-9D, INJ-10D and INJ-12D). No follow-up injections are assumed.

As with Alternative 2, implementing MNA would include monitoring VOCs, TAL metals, and the following MNA parameters (e.g., DO, nitrate, iron, sulfate, alkalinity, ORP, pH, chloride, TOC) in groundwater to evaluate attenuation reactions.

For this AAR, it is assumed that the MNA performance monitoring groundwater samples will be collected from thirty (30) on-site monitoring well locations on a semi-annual basis. Since Alternative 3 will address both overburden and bedrock groundwater, it is assumed that the post-injection

groundwater monitoring will be performed for a period of 20 years, instead of the 30 years assumed for Alternative 2.

ICs, including an EE and SMP, would be implemented to minimize the potential for human exposure by restricting resource usage, potentially including water use restrictions. ICs would remain in place until contaminant concentrations are reduced to levels allowing unrestricted use of the Site.

A detailed analysis of Alternative 3 compared with the evaluation criteria is presented in **Table 7-1**.

The estimated cost to implement Alternative 3 is:

Capital Cost: \$ 235,000 (rounded)

O&M Cost: \$ 237,000 (rounded)

Total Cost: \$ 472,000 (rounded)

The costs for this alternative include groundwater monitoring to evaluate reductions in concentrations and the success of MNA.

The primary capital costs for this alternative include installation of one bedrock injection well. It is estimated that well installation and amendment injection would be completed in approximately one month. O&M costs would include groundwater monitoring to evaluate reductions in concentrations and the success of natural attenuation processes. For cost estimating purposes, O&M is assumed to occur over a 20-year period. A summary of the costs estimated for Alternative 3 is presented in **Table C2 in Appendix C**.

8.0 Comparative Analysis of Remedial Alternatives

After individual evaluation of each alternative based on the criteria defined in Section 7, comparative analyses were conducted to evaluate the relative performance of each alternative. The purpose of the analyses was to identify the advantages and disadvantages of each alternative relative to the others so that key tradeoffs could be identified and balanced. Overall protection of human health and the environment and compliance with SCGs must be met by any selected alternative. Tradeoffs among the alternatives are related to five criteria: long-term effectiveness and permanence; reduction of toxicity, mobility, and volume; short-term effectiveness; implementability; and cost. The remediation timeframes for each alternative are important to consider when comparing short-term effectiveness, compliance with SCGs, protection of human health and environment, and land use. State and community acceptance would be addressed following regulatory review and a public comment period after a remedy has been recommended. **Table 7-1** summarizes the comparative analysis of the alternatives and ranks each alternative for each of the criteria.

8.1 Overall Protection of Human Health and the Environment

All alternatives, with the exception of Alternative 1, would be protective of human health and the environment by eliminating potential exposure pathways. For Alternatives 2 and 3, ICs including an EE would be in place until the remedial action achieves compliance with Unrestricted Use SCGs.

8.2 Compliance with SCGs

All alternatives except for Alternative 1 would meet the SCGs for groundwater over time. They would achieve overall protection of human health and the environment by the remedial actions and/or the implementation of MNA. However, alternatives would meet SCGs in varying periods of time based on the degree of active remediation proposed. Alternative 3 is expected to meet the SCGs in the shortest period of time.

All alternatives would be implemented such that action-specific and location-specific SCGs would be met.

8.3 Long-Term Effectiveness and Permanence

All alternatives except for Alternative 1 would result in the continuing and permanent reduction of impacted media. Alternative 1 would not result in a permanent reduction of impacted media, because it involves no removal, immobilization, or containment of impacted materials. Alternative 2 would provide a program to implement and inspect ECs and to monitor the continued reduction in groundwater contaminant concentrations. Alternative 2 would require a period of 30 years to provide for the reduction of impacted media since it relies solely on MNA. Alternative 3 would further expedite the permanent reduction of impacted media due to the enhanced in-situ treatment of the Bedrock zone. However, due to the fact that there would still be contaminants exceeding SCGs away from the former source area, reduction of those contaminants to below SCG concentrations will rely on MNA. Comparatively, Alternative 3 would achieve remediation goals in the shortest period of time (20 years versus 30 years for Alternative 2).

8.4 Reduction of Toxicity, Mobility, and Volume

All alternatives would result in reduction in toxicity of contamination but at differing timeframes (i.e., Alternative 1 (longest timeframe) >> Alternative 2 > Alternative 3 (shortest time frame)).

8.5 Short-Term Effectiveness

Alternative 1 would have the most significant short-term effectiveness since it does not require any additional implementation and therefore no potential adverse impacts. For Alternatives 2 and 3, the short-term effectiveness is comparable with respect to the application of possible additional amendments, other associated materials, dust, and volatilized organic vapors.

8.6 Implementability

Each of the presented alternatives could be implemented, although the degree of difficulty varies between the alternatives. Alternative 1 requires no additional implementation. Alternative 2 essentially maintains the currently implemented alternative and would require no additional implementation effort. The enhanced in-situ treatment in the Bedrock zone for Alternative 3, while more involved than Alternative 2, can be implemented with widely available equipment and remediation amendments. However, the ability to distribute the selected in-situ amendment throughout the Bedrock zone in order to contact the impacted dissolved phase groundwater will be crucial for the success of this remedial alternative.

8.7 Land Use

Each alternative includes some degree of ICs until SCGs are attained. While all alternatives are expected to achieve Commercial Use SCGs, contaminant concentrations would continue to decrease over time, eventually achieving Unrestricted Use SCGs. Alternative 3 is anticipated to meet Unrestricted Use SCGs in the shortest period of time.

8.8 Green Remediation

All remediation activities pose an environmental impact from vehicle usage, chemical and materials manufacture, sampling activities, and laboratory analysis perspectives. Alternative 2 would generally be expected to be slightly more sustainable since it does not require a significant carbon footprint related to implementation. Alternative 3 is estimated to be less sustainable than Alternative 2 since it includes the installation of a bedrock injection well and addition of an in-situ amendment into the Bedrock zone. However, it is noted that in general, in-situ remediation technologies can be completed more sustainably than other removal processes. The MNA component of Alternatives 2 and 3 relies on natural processes, which are viewed favorably by DER-31. In addition, environmental impacts from the well installation and injections could be offset by the reduced number of trips to the Site resulting from the reduced number of groundwater monitoring events and expedited timeframe to remedy.

8.9 Cost

The cost estimate for each alternative is included in **Table 7-2**. Once again, it is noted that no costs have been provided for Alternative 1. The highest cost alternative is Alternative 2. Although Alternative 2 does not require in-situ treatment, it includes an additional 10 years of groundwater monitoring, compared to Alternative 3. Alternative 3 is a lower cost alternative, compared to Alternative 2, since costs related the enhanced in-situ treatment will be more than offset by the reduced monitoring costs.

8.10 Community Acceptance

Community acceptance is typically evaluated following a public comment period, after a remedy has been proposed. For the evaluated alternatives, short-term community impacts, long-term land use, and overall protection of human health and the environment are anticipated to be the most important aspects to consider for local area stakeholders.

9.0 Recommended Remedial Alternative

Based on the information presented herein, Alternative 3 – Maintain Bioreactor Trenches, Enhanced In-situ Treatment of Bedrock Groundwater, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs is the recommended alternative based on the detailed evaluation and comparative analysis.

Elevated CVOC concentrations at the Site originates in an area associated with the former concrete underground wash water tank south of the Ekonol Polyester Resins building. The presence of degradation products of TCE demonstrates that reductive dechlorination is supported and natural attenuation is occurring. This process is enhanced in the overburden by the bioreactor trenches. Enhanced bioremediation in the Bedrock zone would further expedite the natural attenuation processes there as well. Potential exposure to impacted groundwater and soil is considered minimal because groundwater is not used as a water source, the impacts are minor and occur at depth, all of the impacted area is covered by buildings and pavement. The groundwater CVOC plume has migrated beyond the boundary of the BCP Site.

Establishing ICs, including actively monitoring in accordance with an SMP, would protect public exposure from the distal CVOC concentrations as natural attenuation progresses. A contingency for SVI evaluation and mitigation, if necessary, is included with this alternative, should site conditions change to include building construction and occupancy over areas with potential SVI exposure.

While Alternative 2 does not require the enhanced in-situ injects included in Alternative 3, Alternative 2 will require a longer time frame to achieve cleanup and an additional 10 years of groundwater monitoring. Alternative 3 offers a more accelerated path to achieving the overall remedial objective at the Site at a lower cost.

9.1 Elements of Remediation

The recommended alternative (Alternative 3) includes the enhanced in-situ treatment of dissolved phase groundwater impacts within the Bedrock zone. This will be accomplished through the injection of an appropriate in-situ amendment (e.g., PlumeStop®, zero-valent iron (ZVI), Hydrogen Release Compound (HRC™), biostimulant/bioaugmentation, CAT-100® (carbon-based) or other possible amendments) into the bedrock to enhance ongoing biological processes to convert the observed COC impacts to less harmful degradation end-products. The amendment(s) will be selected following evaluation of baseline groundwater sampling data.

The existing cover material at the Site is already in place and will not require any additional field work to implement, only future inspections will be part of the recommended alternative. Likewise, the existing bioreactor trenches are also already in place and have been demonstrated to be functioning effectively. The bioreactor trenches, the proposed bedrock injection area and other components of the remedy are presented on **Figure 9-1**.

A pre-design investigation will be performed in the source area to determine if and where any additional amendment injection points may be needed. It is noted that injection points/wells already exist for injecting enhanced bioremediation amendments into the bedrock. Bench-scale studies may be recommended for completion to evaluate the various potential in-situ amendments for their respective efficacy on addressing the observed COCs under site-specific conditions. The in-situ amendment notwithstanding, the injection system for the enhanced in-situ

treatment amendment is expected to consist of potential new injection well installations, chemical tanks, mixers, pumps, piping, and fittings. The anticipated lifetime of the injected amendments is at least 3-5 years. For this AAR, no follow-up additional future amendment injections have been assumed.

Lastly, ICs in the form of an EE and SMP, will be implemented to minimize the potential for human exposure by restricting resource usage, potentially including water use restrictions. Essentially these elements are already in-place and will not require any significant effort to implement as part of the overall alternative implementation. The respective EE and SMP will remain in place until COC concentrations are reduced to levels allowing unrestricted use of the Site.

9.2 Remedial Design

A remedial design program will be implemented to provide the details necessary for the construction, operation, optimization, maintenance, and monitoring of the recommended remedial alternative. Green remediation principals and techniques will be implemented to the extent feasible in the design, implementation, and the site management of the remedy as per DER-31. The major green remediation components are as follows:

- Considering the environmental impacts of treatment technologies and remedy stewardship over the long term;
- Reducing direct and indirect greenhouse gas and other emissions;
- Increasing energy efficiency and minimizing use of non-renewable energy;
- Conserving and efficiently managing resources and materials;
- Reducing waste, increasing recycling, and increasing reuse of materials which would otherwise be considered a waste;
- Integrating the remedy with the end use where possible and encouraging green and sustainable re-development; and

9.3 Cover System

A site cover currently exists in areas not occupied by buildings and will be maintained to allow for commercial or industrial use of the Site. Any Site redevelopment will maintain the existing site cover. The site cover may include paved surface parking areas, sidewalks, or soil where the upper one foot of exposed surface soil meets the applicable Commercial Use SCOs. Any fill material brought to the Site will meet the requirements for the identified site use as set forth in 6 NYCRR part 375-6.7(d).

9.4 Groundwater Remedy

Monitoring for VOCs will be conducted within the treatment zone and downgradient. To evaluate the enhanced bioremediation remedy, monitoring wells in the treatment zone will also be monitored for the following:

- DO
- ORP
- pH
- Sulfate
- Nitrate
- TOC

- MEE
- Iron (Ferrous (Fe^{+2}) and Ferric (Fe^{+3}))
- Chloride
- Alkalinity

Before the components of Alternative 3 have been implemented, an initial or baseline groundwater monitoring program will be implemented to provide groundwater quality data to evaluate against subsequent performance monitoring events.

9.5 Enhanced Bioremediation

In-situ enhanced biodegradation will be employed to treat chlorinated VOCs in overburden and bedrock groundwater in the BCP Site. The biological breakdown of contaminants through anaerobic reductive dechlorination will be enhanced by the placement of bacteria and nutrients into the subsurface to promote microbe growth. The bacteria and nutrients will be placed into the subsurface via existing injection points in the overburden bioreactor trenches and bedrock. In the event that appropriate aquifer pH (6-8) and TOC concentration (greater than 50 mg/l) cannot be simultaneously maintained, the injection solution will be buffered with sodium bicarbonate to counteract the organic acids generated from biological activity.

9.6 Engineering and Institutional Controls

Imposition of an IC in the form of a Declaration of Environmental Covenants and Restrictions, was executed on April 14, 2014 for the VCP Site.

Imposition of an institutional control in the form of an EE will be required for the BCP Site which:

- requires the remedial party or Site owner to complete and submit to the NYSDEC a periodic certification of institutional and engineering controls in accordance with Part 375-1.8 (h)(3);
- allows the use and development of the controlled property for commercial or industrial use as defined by Part 375-1.8(g), although land use is subject to local zoning laws;
- restricts the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County Department of Health; and
- requires compliance with the NYSDEC approved SMP.

9.7 Site Management Plan

An SMP for the Ekonol Polyester Resin site was submitted to NYSDEC on July 21, 2015 (Parsons, 2015). The SMP includes the following:

- 1) **Institutional and Engineering Control Plan** - This plan identifies all use restrictions and engineering controls for the Site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:
- 2) **Institutional Controls** – In the form of the EE discussed above.
- 3) **Engineering Controls** - The soil cover is discussed above. This plan includes, but may not be limited to:
 - i. Excavation Plan which details the provisions for management of future excavations in areas of remaining contamination;

- ii. descriptions of the provisions of the EE including any land use, and/or groundwater use restrictions;
 - iii. a provision for the evaluation of the potential for soil vapor intrusion for any future buildings occupied or constructed on the site or over the off-site groundwater contaminant plume, including provision for implementing actions recommended to address exposures related to soil vapor intrusion;
 - iv. a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described above will be placed in any areas where the upper one foot of exposed surface soil exceeds the applicable SCOs;
 - v. provisions for the management and inspection of the identified engineering controls;
 - vi. maintaining site access controls and Department notification; and
 - vii. the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.
- 4) **Monitoring Plan** – This plan is intended to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:
- i. Monitoring of groundwater and soil vapor intrusion to assess the performance and effectiveness of the remedy;
 - ii. A schedule of monitoring and frequency of submittals to the Department; and,
 - iii. Monitoring for vapor intrusion for any future buildings occupied or constructed on the site or over the off-site groundwater contaminant plume, as may be required by the Institutional and Engineering Control Plan discussed above.

Following implementation of the remedial activities, the SMP will be updated as necessary.

9.8 Cost

The preliminary estimated cost to implement recommended Alternative 3 includes both capital and O&M costs. The preliminary cost estimate is summarized below as follows:

Capital Cost:	\$235,000 (rounded)
O&M Cost:	\$237,000 (rounded)
Total Cost:	\$472,000 (rounded)

10.0 References

- AECOM, 2020a. Remedial Investigation Work Plan, Ekonol Polyester Resins Site, 6600 Walmore Road, Wheatfield, NY NYSDEC BCP Site No. C932173 BCP. August 11, 2018.
- AECOM, 2021a. Remedial Investigation – Soil Vapor Intrusion Assessment Letter Report, Ekonol Polyester Resins Site, 6600 Walmore Road, Wheatfield, NY NYSDEC BCP Site No. C932173 BCP. August 6, 2021.
- AECOM, 2021c. Remedial Investigation Report for the Ekonol Polyester Resins Site, 6600 Walmore Road, Wheatfield, NY NYSDEC BCP Site No. C932173 BCP. December 2021.
- AECOM, 2021b. Preliminary Remedial Alternatives Analysis, Ekonol Polyester Resins Site, 6600 Walmore Road, Wheatfield, NY NYSDEC BCP Site No. C932173 BCP. December 21, 2021.
- GZA, 2009. Soil Vapor Intrusion Air Sampling. Prepared for NYSDEC on behalf of Patriot Equities. Letter Report. June 29, 2009.
- New York Environmental Conservation Law, Article 27, Title 14 – Brownfield Cleanup Program. 2014.
- New York State Department of Environmental Conservation (NYSDEC) 1994. Fish and Wildlife Impact Analysis for Inactive Hazardous Waste Sites (FWIA). October.
- NYSDEC 1998. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, Division of Water Technical and Operational Guidance Series (1.1.1), October, and addenda dated January 1999, April 2000, and June 2004.
- NYSDEC 2006. Rules and Regulations, 6 NYCRR Subpart 375-6, Remedial Program Soil Cleanup Objectives. December.
- NYSDEC, 2010a. DER-10 Technical Guidance for Site Investigation and Remediation. Issued May 3, 2010.
- NYSDEC 2010b. DER-31/Green Remediation. Issued August 11, 2010.
- NYSDEC, 2010c. Proposed Decision Document Ekonol Polyester Resins Voluntary Cleanup Program, Wheatfield, Niagara County Site No. V00653. October 2010.
- NYSDEC, 2010d. CP-51 Soil Cleanup Guidance. Issued October 21, 2010.
- NYSDEC, 2023, Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substance (PFAS) Under NYSDEC's Part 375 Remedial Programs. April 2023.
- New York State Department of Health (NYSDOH) 2006; Revised February 2024. NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York,
https://www.health.ny.gov/environmental/investigations/soil_gas/svi_guidance/
- NYSDOH 2013. Tetrachloroethene in Indoor and Outdoor Air - Fact Sheet. September.

NYSDOH 2015. Trichloroethene in Indoor and Outdoor Air - Fact Sheet. August.

New York State Museum and Science Survey, Geologic Map of New York. 1970.

Parsons Engineering Science, Inc (Parsons), 2001. Site Characterization Report Ekonol Facility, Wheatfield NY. Prepared for BP Amoco Corporation. February 2001.

Parsons, 2003. Phase II Site Characterization at Ekonol Polyester Resins, Wheatfield, New York. Prepared for Group Environmental Management Company. March 2003.

Parsons, 2004a. Phase III Site Characterization at Ekonol Polyester Resins, Wheatfield, New York NYSDEC # V00653-9. Prepared for Group Environmental Management Company. January 2004.

Parsons, 2004b. Supplemental Phase III Site Characterization at Ekonol Polyester Resins, Wheatfield, New York NYSDEC # V00653-9. Prepared for Group Environmental Management Company. September 2004.

Parsons, 2007. Remedial Alternatives Report. Prepared for NYSDEC on behalf of Atlantic Richfield Company, including amendments through June 2007.

Parsons, 2009a. Pilot Test Report for in situ Treatment Using Enhanced Bioremediation. Prepared for NYSDEC on behalf of Atlantic Richfield Company. April 2009.

Parsons, 2009b. 2009 Site wide Groundwater Sampling and Pilot Test Update. Letter Report. Prepared for NYSDEC on behalf of Atlantic Richfield Company. August 2009.

Parsons, 2009c. 2009 October Site wide Groundwater Sampling and Pilot Test Update. Letter Report. Prepared for NYSDEC on behalf of Atlantic Richfield Company. December 22, 2009.

Parsons, 2010. 2010 Site wide Groundwater Sampling and Pilot Test Update. Letter Report. Prepared for NYSDEC on behalf of Atlantic Richfield Company. December 7, 2010.

Parsons, 2011. Sub-Slab Depressurization System Operation Maintenance, and Management Plan. Prepared for Atlantic Richfield Company. December 2011.

Parsons, 2012. Construction Completion and initial Performance Assessment Report for in situ Treatment Using Enhanced Bioremediation. Prepared for NYSDEC on behalf of Group Environmental Management Company. August 2012.

Parsons, 2015. Site Management Plan. Prepared for NYSDEC on behalf of Atlantic Richfield Company. July 2015.

United States Geological Survey 2006. Groundwater Quality in Western New York, 2006. Open File Report 2008-1140. Eckhardt, D.A.V., Reddy, J.E., and Tamulonis, K.L, available only online at <http://pubs.usgs.gov/ofr/2008/1140>.

United States Environmental Protection Agency (USEPA) 1988. Guidance for Conducting RI/FS Studies under CERCLA, EPA 540-G-89-004. October.

USEPA / United States Army Corps of Engineers 2000. A Guide to Developing and Documenting Estimates during the Feasibility Study, EPA 540-R-00-002. July.

Tables

Table 2-1

Water Level Measurements - September 8, 2020
 2020 Remedial Investigation
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

Well ID	Elevation Top of Casing	Easting	Northing	9/8/2020 ⁽¹⁾	
				Depth to Water (ft btoc)	Groundwater Elevation
INJ-01	585.70	1056172.53	1132217.92	8.41	577.29
INJ-02	585.54	1056179.53	1132230.81	8.42	577.12
INJ-03	585.35	1056164.47	1132230.97	7.60	577.75
INJ-04	585.58	1056185.83	1132211.60	7.88	577.70
INJ-05	585.60	1056159.24	1132212.19	7.22	578.38
INJ-06D	585.67	1056256.92	1132295.04	8.21	577.46
INJ-07D	585.89	1056227.95	1132328.21	8.42	577.47
INJ-08D	585.85	1056283.56	1132319.81	8.55	577.30
INJ-09D	585.74	1056236.21	1132260.58	7.99	577.75
INJ-10D	585.24	1056280.55	1132262.71	7.84	577.40
INJ-11D	585.76	1056185.26	1132328.88	8.52	577.24
INJ-12D	585.59	1056193.71	1132261.54	8.42	577.17
INJ-13D	585.78	1056199.78	1132296.96	8.53	577.25
MW-1S	585.06	1056192.71	1132468.53	6.34	578.72
MW-2S	585.11	1056254.14	1132311.92	2.50	582.61
MW-3S	584.83	1056317.60	1132228.17	6.25	578.58
MW-4S	585.79	1056183.51	1132220.46	7.19	578.60
MW-5S	585.66	1056429.00	1132454.91	8.06	577.60
MW-6S	585.64	1056266.92	1132123.45	7.12	578.52
MW-7S	586.46	1056161.35	1132148.61	7.02	579.44
MW-7D	585.87	1056173.63	1132156.49	9.08	576.79
MW-8S	586.19	1056062.61	1132192.87	5.85	580.34
MW-9S	586.10	1056094.38	1132273.82	6.68	579.42
MW-10S	585.77	1056442.61	1132303.24	7.19	578.58
MW-10D	585.47	1055990.20	1132241.44	8.42	577.05
MW-11S	586.00	1056372.98	1132005.83	8.18	577.82
MW-11D	588.42	1056434.68	1132119.94	11.31	577.11
MW-12S	586.11	1056235.49	1132057.93	8.77	577.34
MW-12D	585.85	1055849.97	1132286.53	8.92	576.93
MW-13S	585.81	1056167.71	1132298.53	8.87	576.94
MW-13D	587.89	1056401.65	1131373.46	11.78	576.11
MW-14D	587.70	1056477.88	1132399.34	10.41	577.29
MW-15D	585.76	1055873.33	1131333.59	9.70	576.06
MW-16D	586.96	1056393.84	1131176.05	12.68	574.28
MW-17D	587.31	1056444.40	1131980.99	10.30	577.01
MW-18D	587.07	1056621.36	1132083.84	9.87	577.20
MW-19D	585.44	1055674.08	1131339.31	8.80	576.64
MW-20D	586.17	1056045.44	1131530.44	9.25	576.92
MW-21D	585.90	1055862.75	1131532.09	9.33	576.57
MW-22D	585.63	1056422.68	1132272.68	8.53	577.10
OR-1SI	585.80	1056211.28	1132307.96	2.80	583.00
OR-2SI	585.61	1056221.00	1132286.30	5.03	580.58
OR-3SM	585.81	1056238.75	1132303.07	3.12	582.69
OR-4SM	585.70	1056237.61	1132286.58	5.04	580.66
OR-5SM	585.73	1056264.58	1132305.39	2.89	582.84
OR-6SM	585.74	1056264.08	1132285.79	8.31	577.43
OR-7SI	585.76	1056281.74	1132304.69	2.82	582.94
OR-8SI	585.70	1056281.88	1132285.61	8.32	577.38
OR-9SM	585.69	1056317.88	1132305.78	8.13	577.56
OR-10SM	585.57	1056322.03	1132285.34	8.11	577.46
OR-11SI	585.91	1056339.81	1132305.64	8.23	577.68
OR-12SI	585.63	1056340.88	1132285.72	8.16	577.47

Table 2-1

Water Level Measurements - September 8, 2020
 2020 Remedial Investigation
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

	Elevation Top of			9/8/2020 ⁽¹⁾	
				Depth to Water	Groundwater
OR-13SM	585.80	1056357.56	1132303.89	8.22	577.58
OR-14SM	585.68	1056359.10	1132284.59	8.33	577.35
OR-15SM	585.85	1056405.58	1132304.29	7.22	578.63
OR-16SI	585.74	1056408.53	1132289.87	7.55	578.19
OR-17SI	585.74	1056407.40	1132314.38	7.29	578.45
OR-18SM	585.51	1056425.90	1132308.77	7.20	578.31
PMW-1S	586.01	1056275.66	1132313.81	2.85	583.16
PMW-1D	585.66	1056173.74	1132291.16	8.27	577.39
PMW-2S	585.75	1056264.68	1132299.07	3.93	581.82
PMW-2D	585.85	1056180.62	1132220.74	8.78	577.07
PMW-3S	585.67	1056264.01	1132279.87	8.20	577.47
PMW-3D	585.98	1056172.04	1132210.57	8.72	577.26
PMW-4S	585.48	1056260.67	1132263.59	6.95	578.53
PMW-4D	585.73	1056156.77	1132199.23	8.61	577.12
PMW-5S	585.84	1056236.26	1132295.37	3.47	582.37
PMW-5D	585.73	1056200.45	1132209.88	8.74	576.99
PMW-6S	585.57	1056236.48	1132279.64	7.71	577.86
PMW-6D	585.86	1056187.65	1132197.91	8.90	576.96
PMW-7S	585.62	1056318.31	1132297.88	8.08	577.54
PMW-7D	585.82	1056171.23	1132181.82	8.95	576.87
PMW-8S	585.64	1056319.11	1132277.98	8.29	577.35
PMW-8D	585.46	1056158.56	1132222.87	4.61	580.85
PMW-9S	585.76	1056358.19	1132295.53	8.38	577.38
PMW-9D	585.92	1056208.44	1132275.49	8.20	577.72
PMW-10S	585.53	1056359.62	1132277.02	7.73	577.80
PMW-10D	585.68	1056257.10	1132275.14	8.15	577.53
PMW-11S	585.71	1056413.36	1132305.16	7.29	578.42
PMW-11D	585.76	1056311.43	1132273.20	8.61	577.15
PMW-12D	585.87	1056205.69	1132244.92	8.72	577.15
PMW-13D	585.68	1056235.09	1132247.22	8.01	577.67
PMW-14D	585.79	1056257.22	1132247.18	8.32	577.47
PMW-15D	585.63	1056279.65	1132246.82	8.59	577.04
PMW-16D	585.49	1056232.42	1132218.93	8.42	577.07
PMW-17D	585.77	1056255.43	1132226.60	8.62	577.15
RMW-1D	585.93	1056171.00	1132461.00	8.39	577.54
RMW-2D	586.14	1056235.00	1132291.00	7.88	578.26
RMW-3D	586.01	1056302.00	1132214.00	8.98	577.03
RMW-4D	585.76	1056171.69	1132203.28	8.88	576.88
TP-1	NA	NA	NA	6.48	NA
TP-2	NA	NA	NA	6.64	NA

Notes:

(1) MW-13S and MW-22D were installed on September 23, 2020 and September 24, 2020 respectively. The listed water levels and elevations were collected on October 2, 2020, prior to groundwater sampling.

ft btoc - feet below top of casing

NA - not applicable

Table 3-1

Existing Monitoring Well Completion Details
2020 Remedial Investigation
Ekonol Polyester Resins BCP Site
Wheatfield, NY

Well ID	Date Installation Complete	Top of Rock (ft bgs)	Bottom of Boring (ft bgs)	Top of Riser Elevation (ft AMSL)	Riser Material	Well Diameter (Inches)	Depth to Groundwater (ft from TOC) (09-08-2020) ⁽³⁾	Groundwater Elevation (ft AMSL) ⁽³⁾	4 in. Steel Casing (ft bgs)	Grout Interval (ft bgs)	Bentonite Seal Interval (ft bgs)	Sand Interval (ft bgs)	Well Screen Interval (ft bgs) ⁽⁴⁾	Screen Length (ft) ⁽⁴⁾	Sump Interval (ft bgs)	Sump Length (ft)	Surface Completion
INJ- 1	12/13/2007	12.5	25.8	585.70	open borehole	4	8.41	577.29	0-14.5	0-14.5	-	-	14.5-25.8	11.2	-	-	Flushmount
INJ- 2	12/11/2007	13	25.6	585.54	open borehole	4	8.42	577.12	0-15	0-15	-	-	15-25.6	10.6	-	-	Flushmount
INJ- 3	11/28/2007	11	24.9	585.35	open borehole	4	7.60	577.75	0-13	0-14	-	-	13-24.9	11.9	-	-	Flushmount
INJ- 4	11/27/2007	12.5	25.6	585.58	open borehole	4	7.88	577.70	0-14.5	0-14.5	-	-	14.5-25.6	11.1	-	-	Flushmount
INJ- 5	12/6/2007	12.5	25.3	585.60	open borehole	4	7.22	578.38	0-14.5	0-14.5	-	-	14.5-25.3	10.8	-	-	Flushmount
INJ- 6D	5/27/2011	12	24.5	585.67	open borehole	4	8.21	577.46	0-14	0-14	-	-	14-24.5	10.6	-	-	Flushmount
INJ- 7D	1/19/2011	13	25	585.89	open borehole	4	8.42	577.47	0-15	0-15	-	-	15-25	10	-	-	Flushmount
INJ- 8D	1/19/2011	12	24	585.85	open borehole	4	8.55	577.30	0-15	0-15	-	-	14-24	10	-	-	Flushmount
INJ- 9D	1/18/2011	12	25	585.74	open borehole	4	7.99	577.75	0-15	0-15	-	-	14-25	11	-	-	Flushmount
INJ-10D	1/18/2011	12	24	585.24	open borehole	4	7.84	577.40	0-15	0-15	-	-	14-24	10	-	-	Flushmount
INJ-11D	1/19/2011	13	24	585.76	open borehole	4	8.52	577.24	0-15.2	0-15.2	-	-	15-24	9	-	-	Flushmount
INJ-12D	1/18/2011	12	25	585.59	open borehole	4	8.42	577.17	0-15	0-15	-	-	14-25	11	-	-	Flushmount
INJ-13D	5/26/2011	13	24	585.78	open borehole	4	8.53	577.25	0-15	0-15	-	-	15-24	9	-	-	Flushmount
MW- 1S	10/22/2001	15.7	15.7	585.06	PVC	2	6.34	578.72	-	0-1	1-4	4-15.7	5.7-15.7	20	-	-	Flushmount
MW- 2S	10/23/2001	12.5	12.5	585.11	PVC	2	2.50	582.61	-	0-1	1-4	4-12.5	7.5-12.5	10	-	-	Flushmount
MW- 3S	10/23/2001	12.6	12.6	584.83	PVC	2	6.25	578.58	-	0-1	1-4	4-12.6	7.6-12.6	10.1	-	-	Flushmount
MW- 4S	10/24/2001	13.2	13.2	585.79	PVC	2	7.19	578.60	-	0-1	1-4	4-13.2	8.2-13.2	10	-	-	Flushmount
MW- 5S	6/10/2002	15.1	15.1	585.66	Steel	2	8.06	577.60	-	0-4	4-8	8-15.1	10.1-15.1	10	-	-	Flushmount
MW- 6S	6/14/2002	14.8	14.8	585.64	Steel	2	7.12	578.52	-	0-3	3-8	8-14.8	9.8-14.8	10	-	-	Flushmount
MW- 7D	10/3/2006	13.4	30.4	585.87	open borehole	4	9.08	577.08	0-15.4	0-15.4	-	-	15.4-30.4	15	-	-	Flushmount
MW- 7S	6/17/2002	13	13	586.46	Steel	2	7.02	579.44	-	0-3	3-7	7-13	8-13	5	-	-	Flushmount
MW- 8S	6/19/2002	14.2	14.2	586.19	Steel	2	5.85	580.34	-	0-2	2-7	7-14.2	9.2-14.2	5	-	-	Flushmount
MW- 9S	6/14/2002	14.2	14.2	586.10	Steel	2	6.68	579.42	-	0-5	5-8	8-14.2	9.2-14.2	5	-	-	Flushmount
MW-10D	7/2/2002	14.8	31.5	585.47	Steel	2	8.42	577.05	0-18	0-13	13-19	19-31.5	19.5-29.5	10	29.5-31.5	2	Flushmount
MW-10S	9/9/2005	12.5	12.5	585.77	Steel	2	7.19	578.58	-	0-3.5	3.5-5.5	5.5-12.5	7.5-12.5	5	-	-	Flushmount
MW-11D	7/3/2002	12.3	29.4	588.42	Steel	2	11.31	577.11	0-15	0-11	11-16	16-29.4	17.4-27.4	10	27.4-29.4	2	Stickup
MW-11S	9/8/2005	14.5	14.5	586.00	Steel	2	8.18	577.82	-	0-5	5-7	7-14.5	9.5-14.5	5	-	-	Flushmount
MW-12D	9/24/2002	18.7	35	585.85	Steel	2	8.92	576.93	0-20	0-15	15-20	20-35	20.4-30.4	10	30.4-32.40	2	Flushmount
MW-12S	9/9/2005	13.5	13.5	586.11	Steel	2	8.77	577.34	-	0-4.5	4.5-6.5	6.5-13.5	8.5-13.5	5	-	-	Flushmount
MW-13D	9/25/2002	12.7	29.9	587.89	Steel	2	11.78	576.11	0-15	0-11	11-16	16-29.9	17.9-27.9	10	27.9-29.9	2	Stickup
MW-13S ⁽¹⁾	9/23/2020	14	14	585.81	PVC	2	8.87	576.94	-	-	0-6.5	6.5-14	8.8-13.8	5	-	-	Flushmount
MW-14D	9/11/2003	13.5	31.25	587.70	Steel	2	10.41	577.29	0-15.5	0-13	13-17	17-31.25	19.25-29.25	10	29.25-31.25	2	Stickup
MW-15D	9/16/2003	14	30.5	585.76	Steel	2	9.70	576.06	0-15.5	0-13	13-17	17-30.5	18.5-28.5	10	28.5-30.5	2	Flushmount
MW-16D	9/15/2003	13.5	29.97	586.96	Steel	2	12.68	574.28	0-15.5	0-13	13-17	17-29.97	17.97-27.97	10	27.97-29.97	2	Stickup
MW-17D	9/12/2003	13.5	30.98	587.31	Steel	2	10.30	577.01	0-15.5	0-13	13-17	17-30.98	18.98-28.98	10	28.98-30.98	2	Stickup
MW-18D	5/11/2004	10	26	587.07	Steel	2	9.87	577.20	0-11	0-10	10-12	12-26	14-24	10	-	-	Stickup
MW-19D	5/26/2004	13	29	585.44	Steel	2	8.80	576.64	0-14	0-13	13-15	15-29	14-24	10	-	-	Flushmount
MW-20D	9/12/2005	12	30	586.17	Steel	2	9.25	576.92	0-14	0-14	14-16	16-30	18-28	10	28-30	2	Flushmount
MW-21D	10/3/2006	14.8	29.2	585.90	open borehole	4	9.33	576.57	0-16.8	0-16.8	-	-	16.8-29.2	12.4	-	-	Flushmount
MW-22D ⁽¹⁾	9/24/2020	13.2	24.5	585.63	open borehole	4	8.53	577.10	0-15.5	0-15.5	-	-	15.5-24.5	9	-	-	Flushmount
OR- 1SI	5/19/2011	12.8	12.8	585.80	PVC	2	2.80	583.00	-	0-5	5-7	7-12.8	7.66-12.66	5	-	-	Flushmount
OR- 2SI	5/19/2011	12.2	12.2	585.61	PVC	2	5.03	580.58	-	0-5	5-7	7-12.16	7.16-12.16	5	-	-	Flushmount
OR- 3SM	5/19/2011	13	13	585.81	PVC	2	3.12	582.69	-	0-5	5-7	7-13	8-13	5	-	-	Flushmount

Table 3-1

Existing Monitoring Well Completion Details
2020 Remedial Investigation
Ekonol Polyester Resins BCP Site
Wheatfield, NY

Well ID	Date Installation Complete	Top of Rock (ft bgs)	Bottom of Boring (ft bgs)	Top of Riser Elevation (ft AMSL)	Riser Material	Well Diameter (Inches)	Depth to Groundwater (ft from TOC) (09-08-2020) ⁽³⁾	Groundwater Elevation (ft AMSL) ⁽³⁾	4 in. Steel Casing (ft bgs)	Grout Interval (ft bgs)	Bentonite Seal Interval (ft bgs)	Sand Interval	Well Screen Interval (ft bgs) ⁽⁴⁾	Screen Length (ft) ⁽⁴⁾	Sump Interval (ft bgs)	Sump Length (ft)	Surface Completion
OR-17SI	5/12/2011	12.66	12.66	585.74	PVC	2	7.29	578.45	-	0-5	5-7	7-12.66	7.66-12.66	5	-	-	Flushmount
OR-18SM	5/12/2018	12.66	12.66	585.51	PVC	2	7.20	578.31	-	0-5	5-7	7-12.66	7.66-12.66	5	-	-	Flushmount
PMW- 1D	12/7/2007	14.5	23.5	585.66	Steel	4	8.27	577.39	0-16.5	0-8.5	8.5-11.5	11.5-23.5	13.5-23.5	10	-	-	Flushmount
PMW- 1S	5/31/2011	12.5	12.5	586.01	PVC	2	2.85	583.16	-	0-2.5	2.5-5.5	5.5-12.5	7.5-12.5	5	-	-	Flushmount
PMW- 2D	12/4/2007	12.5	25.4	585.85	Steel	2	8.78	577.07	0-14.5	0-10.4	10.4-13.4	13.4-25.4	15.4-25.4	10	-	-	Flushmount
PMW- 2S	5/20/2011	12	12	585.75	PVC	2	3.93	581.82	-	0-2	2-5	5-12	7-12	5	-	-	Flushmount
PMW- 3D	12/11/2007	13	25.8	585.98	Steel	2	8.72	577.26	0-14.5	0-10.8	10.8-13.8	13.8-25.8	15.8-25.8	10	-	-	Flushmount
PMW- 3S	5/23/2011	12.25	12.25	585.67	PVC	2	8.2	577.47	-	0-2	2-5	5-12.25	7.25-12.25	5	-	-	Flushmount
PMW- 4D	11/26/2007	12.5	26.5	585.73	Steel	2	8.61	577.12	0-14.5	0-11	11-13.5	13.5-26	15.5-25.5	10	-	-	Flushmount
PMW- 4S	12/30/2010	12	12	585.48	PVC	2	6.95	578.53	-	0-3	3-5	5-12	7-12	5	-	-	Flushmount
PMW- 5D	12/3/2007	13	25.7	585.73	Steel	2	8.74	576.99	0-15	0-10.7	10.7-13.7	13.7-25.7	15.4-25.4	10	-	-	Flushmount
PMW- 5S	5/20/2011	12	12	585.84	PVC	2	3.47	582.37	-	0-2	2-5	5-12	7-12	5	-	-	Flushmount
PMW- 6D	12/4/2007	12.5	25.9	585.86	Steel	2	8.9	576.96	0-15	0-11	11-14	14-25.9	15.9-25.9	10	-	-	Flushmount
PMW- 6S	5/31/2011	12.25	12.25	585.57	PVC	2	7.71	577.86	-	0-2	2-5	5-12.25	7.25-12.25	5	-	-	Flushmount
PMW- 7D	11/30/2007	12.2	25.5	585.82	Steel	2	8.95	576.87	0-14	0-10.5	10.5-13.5	13.5-25.5	15.5-25.5	10	-	-	Flushmount
PMW- 7S	5/23/2011	11.83	11.83	585.62	PVC	2	8.08	577.54	-	0-2	2-5	5-11.83	6.83-11.83	5	-	-	Flushmount
PMW- 8D	11/27/2007	12.3	25.6	585.46	Steel	2	4.61	580.85	0-14.5	0-10.3	10.3-13.3	13.3-25.6	15.6-25.6	10	-	-	Flushmount
PMW- 8S	5/23/2011	12	12	585.64	PVC	2	8.29	577.35	-	0-2	2-5	5-12	7-12	5	-	-	Flushmount
PMW- 9D	5/26/2011	12	24	585.92	open borehole	4	8.2	577.72	0-14	0-14	-	-	14-24	10	-	-	Flushmount
PMW- 9S	5/31/2011	12.66	12.66	585.76	PVC	2	8.38	577.38	-	0-3	3-6	6-12.66	7.66-12.66	5	-	-	Flushmount
PMW-10D	6/1/2011	12	23.5	585.68	open borehole	4	8.15	577.53	0-14	0-14	-	-	14-23.5	9.5	-	-	Flushmount
PMW-10S	6/1/2011	12.25	12.25	585.53	PVC	2	7.73	577.80	-	0-2	2-5	5-12.25	7.25-12.25	5	-	-	Flushmount
PMW-11D	6/1/2011	12	24	585.76	open borehole	4	8.61	577.15	0-14	0-14	-	-	14-24	10	-	-	Flushmount
PMW-11S	5/23/2011	12.25	12.25	585.71	PVC	2	7.29	578.42	-	0-2	2-5	5-12.25	7.25-12.25	5	-	-	Flushmount
PMW-12D	1/18/2011	13	25	585.87	open borehole	4	8.72	577.15	0-15.2	0-15.2	-	-	15-25	10	-	-	Flushmount
PMW-13D	1/18/2011	12	24	585.68	open borehole	4	8.01	577.67	0-15	0-15	-	-	14-24	10	-	-	Flushmount
PMW-14D	1/18/2011	12	25	585.79	open borehole	4	8.32	577.47	0-15	0-15	-	-	14-25	11	-	-	Flushmount
PMW-15D	1/19/2011	11.5	24	585.63	open borehole	4	8.59	577.04	0-15	0-15	-	-	13.5-24	10.5	-	-	Flushmount
PMW-16D	1/17/2011	12	25	585.49	open borehole	4	8.42	577.07	0-15	0-15	-	-	14-25	11	-	-	Flushmount
PMW-17D	1/17/2011	12	24	585.77	open borehole	4	8.62	577.15	0-15	0-15	-	-	14-24	10	-	-	Flushmount
RMW- 1D	10/24/2003	15	30	585.93	Steel	2	8.39	577.54	0-17	0-15	15-17	17-30	18-28	10	28-30	2	Flushmount
RMW- 2D ⁽²⁾	10/27/2003	13	32.5	586.14	Steel	2	7.88	578.26	0-15	0-13	13-15	15-32.5	17-27	10	27-29	2	Flushmount
RMW- 3D	10/24/2003	13.5	30	586.01	Steel	2	8.98	577.03	0-15.5	0-13	13-16	16-30	17.5-27.5	10	27.5-29.5	2	Flushmount
RMW- 4D	10/24/2003	12.5	30	585.76	Steel	2	8.88	576.88	0-14.5	0-14.5	14.5-15.5	15.5-30	16.5-26.5	10	26.5-30	3.5	Flushmount
TP- 1	-	-	-	-	PVC	3	6.48	-	-	-	-	-	-	-	-	-	Stickup
TP- 2	-	-	-	-	PVC	3	6.64	-	-	-	-	-	-	-	-	-	Stickup

Notes:

- (1) MW-13S and MW-22D are new wells installed as part of the 2020 Remedial Investigation.
- (2) Well not set at total depth of boring due to difficulty in drilling.
- (3) MW-13S and MW-22D depth to groundwater measurements and groundwater elevations from 10/2/2020.
- (4) Open borehole information listed instead of screen length where applicable.

AMSL - Above Mean Sea Level

ft bgs - feet below ground surface

- No Data

Table 3-2

BCP Subsurface Soil Analytical Results Summary
2020 Remedial Investigation
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Unrestricted Use Criteria ¹	Protection of Groundwater Criteria ¹	Industrial Use Criteria ¹	SB2020-01 (5'-6')	SB2020-02 (9'-9.5')	SB2020-03 (3'-5')	SB2020-03 (10'-11')	SB2020-03 (10'-11', DUP)	SB2020-04 (7'-9')	SB2020-05 (5'-6')	SB2020-05 (10'-11')	SB2020-06 (5'-6')	SB2020-07 (5'-6')	SB2020-07 (11.2'-12.2')	SB2020-08 (7'-8')	SB2020-08 (11.8'-12.8')	SB2020-09 (5'-6')
Volatile Organic Compounds																	
Tetrachloroethene (µg/kg)	1300	1300	300000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Trichloroethene (µg/kg)	470	470	400000	4.3 U	25000	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,2-Dichloroethene (cis) (µg/kg)	250	250	1000000	4.3 U	6600	1200	240000	290000	3700	4800	1300	26	4.3 U	28	1700	330	1.2 J
1,2-Dichloroethene (trans) (µg/kg)	190	190	100000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	210 J	210 U	2.7 J	4.3 U	0.68 J	150 J	200 U	5.0 U
1,1-Dichloroethene (µg/kg)	330	330	1000000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Vinyl chloride (µg/kg)	20	20	27000	4.3 U	1000 U	280 U	6500 U	11000 U	1600	280 U	210 U	10	4.3 U	3.0 J	290 U	200 U	5.0 U
1,1,1-Trichloroethane (µg/kg)	680	680	1000000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,1-Dichloroethane (µg/kg)	270	270	480000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Chloroethane (µg/kg)	1900	1900	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Benzene (µg/kg)	60	60	89000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Ethylbenzene (µg/kg)	1000	1000	780000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.4 U	4.4 U	290 U	200 U	5.0 U
Toluene (µg/kg)	700	700	1000000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Xylene (total) (µg/kg)	260	1600	1000000	8.5 U	2000 U	570 U	13000 U	22000 U	570 U	560 U	430 U	9.3 U	8.6 U	8.8 U	580 U	410 U	9.9 U
1,1,2,2-Tetrachloroethane (µg/kg)	600	600	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,1,2-Trichloro-1,2,2-trifluoroethane (µg/kg)	6000	6000	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,1,2-Trichloroethane (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,2,4-Trichlorobenzene (µg/kg)	3400	3400	--	4.3 U	1000 U	280 U	6500 U	11000 U	180 J	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,2-Dibromo-3-chloropropane (µg/kg)	--	--	--	8.5 U	2000 U	570 U	13000 U	22000 U	570 U	560 U	430 U	9.3 U	8.6 U	8.8 U	580 U	410 U	9.9 U
1,2-Dibromoethane (Ethylene dibromide) (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,2-Dichlorobenzene (µg/kg)	1100	1100	1000000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,2-Dichloroethane (µg/kg)	20	20	60000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,2-Dichloropropane (µg/kg)	700000	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,3-Dichlorobenzene (µg/kg)	2400	2400	560000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,3-Dichloropropene (cis) (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,3-Dichloropropene (trans) (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
1,4-Dichlorobenzene (µg/kg)	1800	1800	250000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
2-Hexanone (µg/kg)	--	--	--	17 U	4000 U	1100 U	26000 U	44000 U	1100 U	1100 U	850 U	19 U	17 U	18 U	1200 U	820 U	20 U
4-Methyl-2-pentanone (µg/kg)	1000	1000	--	17 U	4000 U	1100 U	26000 U	44000 U	1100 U	1100 U	850 U	19 U	17 U	18 U	1200 U	820 U	20 U
Acetone (µg/kg)	50	50	1000000	39	4000 U	1100 U	26000 U	44000 U	1100 U	1100 U	850 U	45	22 U	50	1200 U	820 U	27
Bromodichloromethane (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Bromoform (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Bromomethane (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 UJ	4.3 U	4.4 U	290 U	200 U	5.0 U
Carbon disulfide (µg/kg)	2700	2700	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Carbon tetrachloride (µg/kg)	760	760	44000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Chlorobenzene (µg/kg)	1100	1100	1000000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Chloroform (µg/kg)	370	370	700000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Chloromethane (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Cyclohexane (µg/kg)	--	--	--	8.5 U	2000 U	570 U	13000 U	22000 U	570 U	560 U	430 U	1.6 J	8.6 U	8.8 U	580 U	410 U	9.9 U
Dibromochloromethane (µg/kg)	10000	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Dichlorodifluoromethane (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 UJ	4.3 U	4.4 U	290 U	200 U	5.0 U
Isopropylbenzene (Cumene) (µg/kg)	2300	2300	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Methyl acetate (µg/kg)	--	--	--	21 U	5100 U	1400 U	32000 U	55000 U	1400 U	1400 U	1100 U	23 U	22 U	22 U	1400 U	1000 U	25 U
Methyl ethyl ketone (2-Butanone) (µg/kg)	120	120	1000000	17 U	4000 U	280 J	26000 U	44000 U	260 J	190 J	210 J	19 U	17 U	18 U	200 J	170 J	20 U
Methyl tert-butyl ether (µg/kg)	930	930	1000000	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Methylcyclohexane (µg/kg)	--	--	--	8.5 U	2000 U	570 U	13000 U	22000 U	570 U	560 U	430 U	1.1 J	8.6 U	8.8 U	580 U	410 U	9.9 U
Methylene chloride (µg/kg)	50	50	1000000	21 U	2000 U	570 U	13000 U	22000 U	570 U	560 U	430 U	23 U	22 U	22 U	580 U	410 U	25 U
Styrene (µg/kg)	300000	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U
Trichlorofluoromethane (µg/kg)	--	--	--	4.3 U	1000 U	280 U	6500 U	11000 U	280 U	280 U	210 U	4.7 U	4.3 U	4.4 U	290 U	200 U	5.0 U

Table 3-2

BCP Subsurface Soil Analytical Results Summary
2020 Remedial Investigation
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Unrestricted Use Criteria ¹	Protection of Groundwater Criteria ¹	Industrial Use Criteria ¹	SB2020-01 (5'-6')	SB2020-02 (9'-9.5')	SB2020-03 (3'-5')	SB2020-03 (10'-11')	SB2020-03 (10'-11', DUP)	SB2020-04 (7'-9')	SB2020-05 (5'-6')	SB2020-05 (10'-11')	SB2020-06 (5'-6')	SB2020-07 (5'-6')	SB2020-07 (11.2'-12.2')	SB2020-08 (7'-8')	SB2020-08 (11.8'-12.8')	SB2020-09 (5'-6')
Semi-Volatile Organic Compounds																	
1,1-Biphenyl (µg/kg)	60000	--	--	61 U	62 U	30 J	1600	1800	200 J	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
2,2-oxybis(1-Chloropropane) (µg/kg)	--	--	--	120 U	120 U	120 U	270 U	500 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U	
2,4,5-Trichlorophenol (µg/kg)	100	100	--	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	NA	180 U
2,4,6-Trichlorophenol (µg/kg)	10000	--	--	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	NA	180 U
2,4-Dichlorophenol (µg/kg)	400	400	--	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	NA	180 U
2,4-Dimethylphenol (µg/kg)	--	--	--	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	NA	180 U
2,4-Dinitrophenol (µg/kg)	200	200	--	400 U	410 U	400 U	440 U	880 U	R	400 U	NA	400 U	400 U	NA	410 U	NA	400 U
2,4-Dinitrotoluene (µg/kg)	--	--	--	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
2,6-Dinitrotoluene (µg/kg)	170	170	--	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
2-Chloronaphthalene (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
2-Chlorophenol (µg/kg)	800	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
2-Methylnaphthalene (µg/kg)	410	36400	--	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
2-Methylphenol (o-cresol) (µg/kg)	330	330	1000	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
2-Nitroaniline (µg/kg)	400	400	--	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
2-Nitrophenol (µg/kg)	300	300	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
3&4-Methylenephenol (µg/kg)	--	--	--	490 U	490 U	490 U	530 U	1100 U	2000 U	480 U	NA	480 U	490 U	NA	490 U	NA	490 U
3,3-Dichlorobenzidine (µg/kg)	--	--	--	120 U	120 U	120 U	130 U	270 U	500 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U
3-Nitroaniline (µg/kg)	500	500	--	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
4,6-Dinitro-2-methylphenol (µg/kg)	--	--	--	400 U	410 U	400 U	440 U	880 U	1700 U	400 U	NA	400 U	400 U	NA	410 U	NA	400 U
4-Bromophenyl-phenylether (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
4-Chloro-3-methylphenol (µg/kg)	--	--	--	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	NA	180 U
4-Chloroaniline (µg/kg)	220	220	--	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	NA	180 U
4-Chlorophenyl-phenylether (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
4-Nitroaniline (µg/kg)	--	--	--	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
4-Nitrophenol (µg/kg)	100	100	--	400 U	410 U	400 U	440 U	880 U	1700 U	400 U	NA	400 U	400 U	NA	410 U	NA	400 U
Acenaphthene (µg/kg)	20000	98000	1000	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Acenaphthylene (µg/kg)	100000	107000	1000	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Acetophenone (µg/kg)	--	--	--	120 U	120 U	120 U	31 J	44 J	500 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U
Anthracene (µg/kg)	100000	100000	1000	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Atrazine (µg/kg)	--	--	--	250 U	250 U	240 U	260 U	530 U	1000 U	240 U	NA	240 U	240 U	NA	250 U	NA	240 U
Benzaldehyde (µg/kg)	--	--	--	120 U	120 U	120 U	130 U	270 U	500 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U
Benz(a)anthracene (µg/kg)	1000	1000	11	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Benz(a)pyrene (µg/kg)	1000	22000	1,1	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Benzo(b)fluoranthene (µg/kg)	1000	1700	11	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Benzo(g,h,i)perylene (µg/kg)	100000	100000	1000	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Benzo(k)fluoranthene (µg/kg)	800	1700	110	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
bis(2-Chloroethoxy)methane (µg/kg)	--	--	--	120 U	120 U	120 U	130 U	270 U	500 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U
bis(2-Chloroethyl)ether (µg/kg)	--	--	--	120 U	120 U	120 U	130 U	270 U	500 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U
bis(2-Ethylhexyl)phthalate (µg/kg)	50000	435000	--	86 U	86 U	86 U	92 U	190 U	350 U	84 U	NA	84 U	86 U	NA	86 U	NA	85 U
Butylbenzylphthalate (µg/kg)	100000	122000	--	86 U	86 U	86 U	92 U	190 U	350 U	84 U	NA	84 U	86 U	NA	86 U	NA	85 U
Caprolactam (µg/kg)	--	--	--	400 U	410 U	400 U	440 U	880 U	1700 U	400 U	NA	400 U	400 U	NA	410 U	NA	400 U
Carbazole (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
Chrysene (µg/kg)	1000	1000	110	5.8 J	14 J	4.6 J	20 U	40 U	76 U	6.1 J	NA	18 U	18 U	NA	18 U	NA	9.2 J
Dibenz(a,h)anthracene (µg/kg)	330	1000000	1,1	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U
Dibenzofuran (µg/kg)	7000	210000	1000	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	NA	61 U
Diethylphthalate (µg/kg)	7100	7100	--	86 U	86 U	86 U	92 U	190 U	350 U	84 U	NA	84 U	86 U	NA	86 U	NA	85 U
Dimethylphthalate (µg/kg)	27000	27000	--	86 U	86 U	86 U	92 U	190 U	350 U	84 U	NA	84 U	86 U	NA	86 U	NA	85 U
Di-n-butylphthalate (µg/kg)	14	8100	--	86 U	86 U	86 U	92 U	190 U	350 U	84 U	NA	84 U	86 U	NA	86 U	NA	85 U
Di-n-octylphthalate (µg/kg)	100000	120000	--	86 U	86 U	86 U	92 U	190 U	350 U	84 U	NA	84 U	86 U	NA	86 U	NA	85 U

Table 3-2

BCP Subsurface Soil Analytical Results Summary
2020 Remedial Investigation
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Unrestricted Use Criteria ¹	Protection of Groundwater Criteria ¹	Industrial Use Criteria ¹	SB2020-01 (5'-6')	SB2020-02 (9'-9.5')	SB2020-03 (3'-5')	SB2020-03 (10'-11')	SB2020-03 (10'-11', DUP)	SB2020-04 (7'-9')	SB2020-05 (5'-6')	SB2020-05 (10'-11')	SB2020-06 (5'-6')	SB2020-07 (5'-6')	SB2020-07 (11.2'-12.2')	SB2020-08 (7'-8')	SB2020-08 (11.8'-12.8')	SB2020-09 (5'-6')
Fluoranthene (µg/kg)	100000	1000000	1000	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U	
Fluorene (µg/kg)	30000	386000	1000	18 U	18 U	20 U	40 U	25 J	18 U	NA	18 U	18 U	NA	18 U	NA	18 U	
Hexachlorobenzene (µg/kg)	330	3200	12	18 U	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	18 U	
Hexachlorobutadiene (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	61 U	
Hexachlorocyclopentadiene (µg/kg)	10000	--	--	400 U	410 U	400 U	440 U	880 U	R	400 UJ	NA	400 UJ	400 UJ	NA	410 UJ	400 UJ	
Hexachloroethane (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	61 U	
Indeno(1,2,3-cd)pyrene (µg/kg)	500	8200	11	18 U	18 U	20 U	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	NA	18 U	
Isophorone (µg/kg)	4400	4400	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	61 U	
Naphthalene (µg/kg)	12000	12000	1000	18 U	18 U	18 U	12 J	13 J	76 U	18 U	NA	18 U	18 U	NA	18 U	18 U	
Nitrobenzene (µg/kg)	170	170	140	120 U	120 U	120 U	130 U	270 U	500 U	120 U	NA	120 U	120 U	NA	120 U	120 U	
N-Nitroso-di-n-propylamine (µg/kg)	--	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	61 U	
N-Nitrosodiphenylamine (µg/kg)	20000	--	--	61 U	62 U	61 U	66 U	130 U	250 U	60 U	NA	60 U	61 U	NA	61 U	61 U	
Pentachlorophenol (µg/kg)	800	800	55	180 U	180 U	180 U	200 U	400 U	760 U	180 U	NA	180 U	180 U	NA	180 U	180 U	
Phenanthrene (µg/kg)	100000	1000000	1000	18 U	9.5 J	18 U	7.6 J	40 U	76 U	18 U	NA	18 U	18 U	NA	18 U	18 U	
Phenol (µg/kg)	330	330	1000	61 U	62 U	61 U	78	120 J	40 J	60 U	NA	60 U	61 U	NA	61 U	61 U	
Pyrene (µg/kg)	100000	1000000	1000	18 U	9.3 J	18 U	7.3 J	11 J	76 U	18 U	NA	18 U	18 U	NA	18 U	4.1 J	
Metals																	
Aluminum, Total (mg/kg)	10000	--	--	12000	17000	17000	15000	15000	14000	16000	NA	13000	18000	NA	14000	NA	14000
Antimony, Total (mg/kg)	12	--	--	2.1 U	2.0 U	2.3 U	2.0 U	2.3 UJ	2.4 U	NA	1.8 U	2.2 U	NA	1.9 U	NA	1.8 U	
Arsenic, Total (mg/kg)	13	16	16	2.3	3.5	5.2	4.5	4.5	3.9	4.9	NA	4.6	2.0	NA	5.1	NA	3.6
Barium, Total (mg/kg)	350	820	10000	87	210	260	130	100	110	96	NA	97	130	NA	91	NA	110
Beryllium, Total (mg/kg)	7.2	47	2700	0.69	0.83	0.96	0.78	0.79	0.75	0.82	NA	0.67	0.88	NA	0.70	NA	0.70
Cadmium, Total (mg/kg)	2.5	7.5	60	0.53 U	0.22 J	0.26 J	0.26 J	0.24 J	0.24 J	0.61 U	NA	0.45 U	0.56 U	NA	0.47 U	NA	0.45 U
Calcium, Total (mg/kg)	10000	--	--	64000	45000	73000	44000	36000	44000 J	49000	NA	39000	39000	NA	43000	NA	50000
Chromium, Total (mg/kg)	30	--	6800	18	24	24	22	23	20 J	23	NA	19	25	NA	20	NA	20
Cobalt, Total (mg/kg)	20	--	--	9.1	16	17	14	15	16	13	NA	10	13	NA	13	NA	15
Copper, Total (mg/kg)	50	1720	10000	17	19	21	22	22	20 J	20	NA	17	17	NA	17	NA	18
Iron, Total (mg/kg)	2000	--	--	20000	25000	28000	25000	26000	23000 J	27000	NA	21000	26000	NA	23000	NA	22000
Lead, Total (mg/kg)	63	450	3900	5.4	7.8	8.4	9.3	9.5	8.4 J	7.6	NA	6.5	7.6	NA	6.9	NA	7.1
Magnesium, Total (mg/kg)	--	--	--	11000	11000	11000	13000	12000	13000 J	12000	NA	11000	13000	NA	11000	NA	10000
Manganese, Total (mg/kg)	1600	2000	10000	420	540	610	500	470	490 J	490	NA	390	460	NA	470	NA	480
Mercury, Total (mg/kg)	0.180	0.73	5.7	0.13 U	0.13 U	0.14 U	0.14 U	0.13 U	0.11 U	0.12 U	NA	0.11 U	0.12 U	NA	0.12 U	NA	0.13 U
Nickel, Total (mg/kg)	30	130	10000	26	35	37	34	36	34	34	NA	29	36	NA	32	NA	32
Potassium, Total (mg/kg)	--	--	--	2500	3500	2500	3100	3000	2800	3500	NA	2700	3700	NA	3000	NA	2800
Selenium, Total (mg/kg)	3.9	4	6800	2.1 U	2.0 U	2.3 U	2.3 U	2.0 U	2.3 U	2.4 U	NA	1.8 U	2.2 U	NA	1.9 U	NA	1.8 U
Silver, Total (mg/kg)	2	8.3	6800	1.1 U	1.0 U	1.2 U	1.1 U	1.0 U	1.1 U	1.2 U	NA	0.89 U	1.1 U	NA	0.93 U	NA	0.89 U
Sodium, Total (mg/kg)	--	--	--	230 J	280 J	440 J	430 J	420 J	430 J	230 J	NA	160 J	250 J	NA	640	NA	200 J
Thallium, Total (mg/kg)	5	--	--	2.1 U	0.59 J	2.3 U	0.72 J	0.76 J	2.3 U	2.4 U	NA	1.8 U	2.2 U	NA	1.9 U	NA	1.8 U
Vanadium, Total (mg/kg)	39	--	--	24	30	31	30	30	28	33	NA	26	31	NA	27	NA	28
Zinc, Total (mg/kg)	109	2480	10000	58	74	69	72	78	74	69	NA	63	77	NA	70	NA	62
PCBs																	
Aroclor 1016 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1221 (µg/kg)	--	--	--	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1232 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1242 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1248 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1254 (µg/kg)	100	3200	25000	65 U	64 U	43 J	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1260 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1262 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U
Aroclor 1268 (µg/kg)	100	3200	25000	65 U	64 U	58 U	66 U	64 U	65 U	63 U	NA	58 U	61 U	NA	60 U	NA	60 U

Table 3-2

BCP Subsurface Soil Analytical Results Summary
2020 Remedial Investigation
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Unrestricted Use Criteria ¹	Protection of Groundwater Criteria ¹	Industrial Use Criteria ¹	SB2020-01 (5'-6')	SB2020-02 (9'-9.5')	SB2020-03 (3'-5')	SB2020-03 (10'-11')	SB2020-03 (10'-11', DUP)	SB2020-04 (7'-9')	SB2020-05 (5'-6')	SB2020-05 (10'-11')	SB2020-06 (5'-6')	SB2020-07 (5'-6')	SB2020-07 (11.2'-12.2')	SB2020-08 (7'-8')	SB2020-08 (11.8'-12.8')	SB2020-09 (5'-6')
Pesticides																	
4,4'-DDD (µg/kg)	3.3	14000	180000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
4,4'-DDE (µg/kg)	3.3	17000	120000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
4,4'-DDT (µg/kg)	3.3	136000	94000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Aldrin (µg/kg)	5	190	1400	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
alpha-BHC (µg/kg)	20	20	6800	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
alpha-Chlordane (µg/kg)	94	2900	47000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
beta-BHC (µg/kg)	36	90	14000	6.2 U	6.8 NJ	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	10 NJ	NA	5.9 U	NA	5.9 U
delta-BHC (µg/kg)	40	250	1000000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Dieldrin (µg/kg)	5	100	2800	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Endosulfan I (µg/kg)	2400	102000	920000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Endosulfan II (µg/kg)	2400	102000	920000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Endosulfan sulfate (µg/kg)	2400	1000000	920000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Endrin (µg/kg)	14	60	410000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Endrin aldehyde (µg/kg)	--	--	--	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Endrin ketone (µg/kg)	--	--	--	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
gamma-BHC (Lindane) (µg/kg)	100	100	23000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
gamma-Chlordane (µg/kg)	540	14000	--	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Heptachlor (µg/kg)	42	380	29000	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Heptachlor epoxide (µg/kg)	20	20	--	6.2 U	6.0 U	29 U	6.7 U	6.3 U	31 U	5.9 U	NA	6.0 U	6.2 U	NA	5.9 U	NA	5.9 U
Methoxychlor (µg/kg)	1200	900000	--	12 U	12 U	58 U	13 U	13 U	61 U	12 U	NA	12 U	12 U	NA	12 U	NA	12 U
Toxaphene (µg/kg)	--	--	--	120 U	120 U	580 U	130 U	610 U	120 U	NA	120 U	120 U	NA	120 U	NA	120 U	

Notes:

1. 6 NYCR Part 375.6, Remedial Program Soil Cleanup Objectives, Effective 12/14/06. Unrestricted Use, Protection of Groundwater, Industrial Use, plus CP-51 Table 1 10/21/10.

2. See Table 5-2 emergent contaminant sampling analyses for 1,4-Dioxane and PFAS soil results.

3. Detection Limits shown are PQL

BOLD = Exceeds Unrestricted Use Criteria

= Exceeds Protection of Groundwater Criteria

= Exceeds Industrial Use Criteria

= Ekonol-Specific Groundwater Plume Monitoring List

J - The reported concentration is an estimated value.

U - Not detected above the method detection limit.

UJ - Not detected. The reporting limit is an estimated value.

R - Value is Rejected

D - Result reported from a secondary dilution analysis

NJ - tentative identification

Table 3-3

Subsurface Soil Emerging Contaminants Analytical Result Summary
Emerging Contaminant Sampling Analyses - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Analyte	Units	CAS No.	Unrestricted Use Criteria ¹	Protection of Groundwater Criteria ²	Industrial Use Criteria ¹	Location Name	SB2020-01	SB2020-02	SB2020-03	SB2020-03	SB2020-03	SB2020-04
						Sample Name	SB2020-01-5-6	SB2020-02-9-9.5	SB2020-03-3-5	SB2020-03-10-11	FD-092120	SB2020-04-7-9
						Sample Date	9/24/2020	9/21/2020	9/21/2020	9/21/2020	9/21/2020	9/21/2020
						Parent Sample						SB2020-03-10-11
SW846-8270D SIM												
1,4-Dioxane	µg/kg	123-91-1	100	100	250000		1.0 J	3.8	2.5	5.3	4.0	5.4
PFAS - EPA 537 Modified												
N-ethylperfluoroctanesulfonamidoacetic acid (NETFOSAA)	ng/g	2991-50-6	NE	NE	NE		2.4 U	2.3 U	2.3 U	2.5 U	2.6 U	2.3 U
N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA)	ng/g	2355-31-9	NE	NE	NE		2.4 U	2.3 U	2.3 U	2.5 U	2.6 U	2.3 U
Perfluorobutanesulfonic acid (PFBS)	ng/g	375-73-5	NE	NE	NE		2.4 U	2.3 U	2.3 U	2.5 U	2.6 U	2.3 U
Perfluorobutanoic acid (PFBA)	ng/g	375-22-4	NE	NE	NE		2.4 U	2.3 U	2.3 U	2.5 U	2.6 U	2.3 U
Perfluorodecanesulfonic acid (PFDS)	ng/g	335-77-3	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorodecanoic acid (PFDA)	ng/g	335-76-2	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorododecanoic acid (PFDoA)	ng/g	307-55-1	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluoroheptanesulfonic Acid (PFHps)	ng/g	375-92-8	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorohexanoic acid (PFHxA)	ng/g	307-24-4	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluoroctanesulfonamide (PFOSA)	ng/g	754-91-6	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluoropentanoic acid (PFPeA)	ng/g	2706-90-3	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorotetradecanoic acid (PFTeA)	ng/g	376-06-7	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluoroheptanoic acid (PFHpA)	ng/g	375-85-9	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorotridecanoic acid (PFTriA)	ng/g	72629-94-8	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluoroundecanoic acid (PFUnA)	ng/g	2058-94-8	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
1H,1H,2H-perfluorodecanesulfonic acid (8:2)	ng/g	39108-34-4	NE	NE	NE		3.7 U	3.5 U	3.4 U	3.8 U	3.8 U	3.4 U
1H,1H,2H-perfluoroctanesulfonic acid (6:2)	ng/g	27619-97-2	NE	NE	NE		2.4 U	2.3 U	2.3 U	2.5 U	2.6 U	2.3 U
Perfluorhexanesulfonic acid (PFHxS)	ng/g	355-46-4	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorononanoic acid (PFNA)	ng/g	375-95-1	NE	NE	NE		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorooctanesulfonic acid (PFOS)	ng/g	1763-23-1	0.88	3.7	440		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Perfluorooctanoic acid (PFOA)	ng/g	335-67-1	0.66	1.1	600		0.73 U	0.7 U	0.68 U	0.75 U	0.77 U	0.69 U
Total NYSDEC Target PFAS List	ng/g	NA	NE	NE	NE		U	U	U	U	U	U
Total PFOS and PFOA	ng/g	NA	NE	NE	NE		U	U	U	U	U	U

See Page 2 of 2 for notes.

Table 3-3

Subsurface Soil Emerging Contaminants Analytical Result Summary
Emerging Contaminant Sampling Analyses - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Analyte	Units	CAS No.	Unrestricted Use Criteria ¹	Protection of Groundwater Criteria ²	Industrial Use Criteria ¹	Location Name	SB2020-05	SB2020-06	SB2020-07	SB2020-08	SB2020-09
						Sample Name	SB2020-05-5-6	SB2020-06-5-6	SB2020-07-5-6	SB2020-08-7-8	SB2020-09-5-6
						Sample Date	9/21/2020	9/22/2020	9/22/2020	9/22/2020	9/22/2020
						Parent Sample					
SW846-8270D SIM											
1,4-Dioxane	µg/kg	123-91-1	100	100	250000		4.9	4.4	3.8	2.9	3.0
PFAS - EPA 537 Modified											
N-ethylperfluoroctanesulfonamidoacetic acid (NETFOSAA)	ng/g	2991-50-6	NE	NE	NE		2.3 U	2.4 U	2.4 U	2.4 U	2.2 U
N-methylperfluoroctanesulfonamidoacetic acid (NMeFOSAA)	ng/g	2355-31-9	NE	NE	NE		2.3 U	2.4 U	2.4 U	2.4 U	2.2 U
Perfluorobutanesulfonic acid (PFBS)	ng/g	375-73-5	NE	NE	NE		2.3 U	2.4 U	2.4 U	2.4 U	2.2 U
Perfluorobutanoic acid (PFBA)	ng/g	375-22-4	NE	NE	NE		2.3 U	2.4 U	2.4 U	2.4 U	2.2 U
Perfluorodecanesulfonic acid (PFDS)	ng/g	335-77-3	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorodecanoic acid (PFDA)	ng/g	335-76-2	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorododecanoic acid (PFDoA)	ng/g	307-55-1	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluoroheptanesulfonic Acid (PFHPS)	ng/g	375-92-8	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorohexanoic acid (PFHxA)	ng/g	307-24-4	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorooctanesulfonamide (PFOSA)	ng/g	754-91-6	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluoropentanoic acid (PFPeA)	ng/g	2706-90-3	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorotetradecanoic acid (PFTeA)	ng/g	376-06-7	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluoroheptanoic acid (PFHpA)	ng/g	375-85-9	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorotridecanoic acid (PFTriA)	ng/g	72629-94-8	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluoroundecanoic acid (PFUnA)	ng/g	2058-94-8	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ng/g	39108-34-4	NE	NE	NE		3.5 U	3.6 U	3.6 U	3.6 U	3.3 U
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ng/g	27619-97-2	NE	NE	NE		2.3 U	2.4 U	2.4 U	2.4 U	2.2 U
Perfluorhexanesulfonic acid (PFHxS)	ng/g	355-46-4	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorononanoic acid (PFNA)	ng/g	375-95-1	NE	NE	NE		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorooctanesulfonic acid (PFOS)	ng/g	1763-23-1	0.88	3.7	440		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Perfluorooctanoic acid (PFOA)	ng/g	335-67-1	0.66	1.1	600		0.7 U	0.72 U	0.71 U	0.71 U	0.67 U
Total NYSDEC Target PFAS List	ng/g	NA	NE	NE	NE		U	U	U	U	U
Total PFOS and PFOA	ng/g	NA	NE	NE	NE		U	U	U	U	U

Notes:

Detected values are shown in bold.

Detection Limits shown are PQL.

bolded box = Exceedance of listed criteria.

µg/kg - micrograms per kilogram

ng/g - nanograms per gram

J - Result is less than the reporting limit (RL) but greater than or equal to the Method Detection Limit (MDL) and the concentration is an approximate value

U - Not detected above the method detection limit.

NA - Not applicable

NS - No Sample

DW - Drinking Water

GW - Groundwater

MCL - Maximum Contaminant Level

NE - Not Established

Reference:

1. SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) Under NYSDEC's Part 375 Remedial Programs. NYSDEC, January, 2021.

Table 3-4

BCP Groundwater Analytical Result Summary - 2020 RI
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

Parameter	Criteria ¹	INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	PMW-11D (DUP)	RMW- 3D	RMW- 4D
Volatile Organic Compounds														
PCE ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	0.65 J	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
TCE ($\mu\text{g/L}$)	5	15 J	0.13 J	28	1.2 J	100 U	0.68 J	7300	1.7 J	0.13 J	48 J	49 J	100 U	500 U
Cis-1,2-DCE ($\mu\text{g/L}$)	5	2000	1.0 U	930	97	3200	2.0	180000	330	1.0 U	870	860	440	10000
Trans-1,2-DCE ($\mu\text{g/L}$)	5	28 J	1.0 U	13 J	4.0 U	22 J	1.0 U	5000 U	8.7 J	1.0 U	200 U	200 U	100 U	500 U
1,1-DCE ($\mu\text{g/L}$)	5	67 J	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	66 J	71 J	72 J	500 U
Vinyl Chloride ($\mu\text{g/L}$)	2	2400	1.0 U	1200	32	820	0.20 J	12000	160	26	120 J	140 J	130	3200
1,1,1-Trichloroethane ($\mu\text{g/L}$)	5	1000	1.0 U	25 U	4.0 U	100 U	4.8	5000 U	13 U	1.0 U	3700	3800	2200	500 U
1,1-Dichloroethane ($\mu\text{g/L}$)	5	600	1.0 U	25 U	4.0 U	100 U	1.4	5000 U	13 U	1.0 U	160 J	170 J	120	500 U
Chloroethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Benzene ($\mu\text{g/L}$)	1	100 U	0.21 J	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Ethylbenzene ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Toluene ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Xylene (total) ($\mu\text{g/L}$)	5	200 U	2.0 U	50 U	8.0 U	200 U	2.0 U	10000 U	1.9 J	2.0 U	400 U	400 U	200 U	1000 U
1,1,2,2-Tetrachloroethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,1,2-Trichloro-1,2,2-trifluoroethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,1,2-Trichloroethane ($\mu\text{g/L}$)	1	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,2,4-Trichlorobenzene ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,2-Dibromo-3-chloropropane ($\mu\text{g/L}$)	0.04	200 U	2.0 U	50 U	8.0 U	200 U	2.0 U	10000 U	25 U	2.0 U	400 U	400 U	200 U	1000 U
1,2-Dibromoethane (Ethylene dibromide) ($\mu\text{g/L}$)	0.006	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,2-Dichlorobenzene ($\mu\text{g/L}$)	3	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,2-Dichloroethane ($\mu\text{g/L}$)	0.6	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,2-Dichloropropane ($\mu\text{g/L}$)	1	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,3-Dichlorobenzene ($\mu\text{g/L}$)	3	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	2.2 J	1.0 U	200 U	200 U	100 U	500 U
1,3-Dichloropropene (cis) ($\mu\text{g/L}$)	0.4	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,3-Dichloropropene (trans) ($\mu\text{g/L}$)	0.4	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
1,4-Dichlorobenzene ($\mu\text{g/L}$)	3	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
2-Hexanone ($\mu\text{g/L}$)	50	1000 U	10 U	250 U	40 U	1000 U	10 U	50000 U	130 U	10 U	2000 U	2000 U	1000 U	5000 U
4-Methyl-2-pentanone ($\mu\text{g/L}$)	--	1000 U	10 U	250 U	40 U	1000 U	10 U	50000 U	130 U	10 U	2000 U	2000 U	1000 U	5000 U
Acetone ($\mu\text{g/L}$)	50	1000 U	10 U	250 U	40 U	1000 U	10 U	50000 U	130 U	10 U	2000 U	2000 U	1000 U	5000 U
Bromodichloromethane ($\mu\text{g/L}$)	50	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Bromoform ($\mu\text{g/L}$)	50	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Bromomethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Carbon disulfide ($\mu\text{g/L}$)	60	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Carbon tetrachloride ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Chlorobenzene ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	0.15 J	200 U	200 U	100 U	500 U
Chloroform ($\mu\text{g/L}$)	7	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Chloromethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Cyclohexane ($\mu\text{g/L}$)	--	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Dibromochloromethane ($\mu\text{g/L}$)	50	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Dichlorodifluoromethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Isopropylbenzene (Cumene) ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	1.3 J	1.0 U	200 U	200 U	100 U	500 U
Methyl acetate ($\mu\text{g/L}$)	--	1000 U	10 U	250 U	40 U	1000 U	10 U	50000 U	130 U	10 U	2000 U	2000 U	1000 U	5000 U
Methyl ethyl ketone (2-Butanone) ($\mu\text{g/L}$)	50	1000 U	10 U	32 J	40 U	1000 U	10 U	50000 U	130 U	10 U	2000 U	2000 U	1000 U	5000 U
Methyl tert-butyl ether ($\mu\text{g/L}$)	10	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Methylcyclohexane ($\mu\text{g/L}$)	--	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Methylene chloride ($\mu\text{g/L}$)	5	500 U	5.0 U	130 U	20 U	500 U	5.0 U	25000 U	63 U	5.0 U	1000 U	1000 U	500 U	2500 U
Styrene ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U
Trichlorofluoromethane ($\mu\text{g/L}$)	5	100 U	1.0 U	25 U	4.0 U	100 U	1.0 U	5000 U	13 U	1.0 U	200 U	200 U	100 U	500 U

Table 3-4

BCP Groundwater Analytical Result Summary - 2020 RI
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

Parameter	Criteria ¹	INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	PMW-11D (DUP)	RMW- 3D	RMW- 4D
Semi Volatile Organic Compounds														
1,1-Biphenyl ($\mu\text{g/L}$)	5	32	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	63	4.4	1.0 U	12	11	2.2	37
2,2-oxybis(1-Chloropropane) ($\mu\text{g/L}$)	5	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
2,4,5-Trichlorophenol ($\mu\text{g/L}$)	1	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
2,4,6-Trichlorophenol ($\mu\text{g/L}$)	1	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
2,4-Dichlorophenol ($\mu\text{g/L}$)	5	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
2,4-Dimethylphenol ($\mu\text{g/L}$)	50	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
2,4-Dinitrophenol ($\mu\text{g/L}$)	10	38 U	10 U	12 U	10 U	10 U	10 U	190 U	10 U	10 U	9.6 U	9.6 U	10 U	100 U
2,4-Dinitrotoluene ($\mu\text{g/L}$)	5	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
2,6-Dinitrotoluene ($\mu\text{g/L}$)	5	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
2-Chloronaphthalene ($\mu\text{g/L}$)	10	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
2-Chlorophenol ($\mu\text{g/L}$)	1	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
2-Methylnaphthalene ($\mu\text{g/L}$)	--	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
2-Methylphenol (o-cresol) ($\mu\text{g/L}$)	1	38	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	2200 D	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	240
2-Nitroaniline ($\mu\text{g/L}$)	5	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
2-Nitrophenol ($\mu\text{g/L}$)	1	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
3&4-Methylphenol ($\mu\text{g/L}$)	1	18	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	91	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	49
3,3-Dichlorobenzidine ($\mu\text{g/L}$)	5	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
3-Nitroaniline ($\mu\text{g/L}$)	5	7.7 UJ	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
4,6-Dinitro-2-methylphenol ($\mu\text{g/L}$)	1	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
4-Bromophenyl-phenylether ($\mu\text{g/L}$)	50	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
4-Chloro-3-methylphenol ($\mu\text{g/L}$)	1	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
4-Chloroaniline ($\mu\text{g/L}$)	5	7.7 U	2.1 U	2.4 U	2.1 U	R	R	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
4-Chlorophenyl-phenylether ($\mu\text{g/L}$)	50	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
4-Nitroaniline ($\mu\text{g/L}$)	5	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 UJ	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
4-Nitrophenol ($\mu\text{g/L}$)	1	38 U	10 U	12 U	10 U	10 U	10 U	190 U	10 U	10 U	9.6 U	9.6 U	10 U	100 U
Acenaphthene ($\mu\text{g/L}$)	20	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Acenaphthylene ($\mu\text{g/L}$)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Acetophenone ($\mu\text{g/L}$)	--	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	36	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Anthracene ($\mu\text{g/L}$)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Atrazine ($\mu\text{g/L}$)	7.5	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
Benzaldehyde ($\mu\text{g/L}$)	--	7.7 UJ	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
Benzo(a)anthracene ($\mu\text{g/L}$)	0.002	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Benzo(a)pyrene ($\mu\text{g/L}$)	0	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Benzo(b)fluoranthene ($\mu\text{g/L}$)	0.002	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.38	0.19 U	0.19 U	0.21 U	2.0 U
Benzo(g,h,i)perylene ($\mu\text{g/L}$)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.26	0.19 U	0.19 U	0.21 U	2.0 U
Benzo(k)fluoranthene ($\mu\text{g/L}$)	0.002	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
bis(2-Chloroethoxy)methane ($\mu\text{g/L}$)	5	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
bis(2-Chloroethyl)ether ($\mu\text{g/L}$)	1.0	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
bis(2-Ethylhexyl)phthalate ($\mu\text{g/L}$)	5	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
Butylbenzylphthalate ($\mu\text{g/L}$)	50	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
Caprolactam ($\mu\text{g/L}$)	--	19 U	5.2 U	6.0 U	5.2 U	R	R	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
Carbazole ($\mu\text{g/L}$)	50	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Chrysene ($\mu\text{g/L}$)	0.002	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Dibenzo(a,h)anthracene ($\mu\text{g/L}$)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Dibenzofuran ($\mu\text{g/L}$)	50	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Diethylphthalate ($\mu\text{g/L}$)	50	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	62
Dimethylphthalate ($\mu\text{g/L}$)	50	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U
Di-n-butylphthalate ($\mu\text{g/L}$)	50	19 U	5.2 U	6.0 U	5.2 U	5.2 U	5.0 U	96 U	5.2 U	5.2 U	4.8 U	4.8 U	5.2 U	50 U
Di-n-octylphthalate ($\mu\text{g/L}$)	50	7.7 U	2.1 U	2.4 U	2.1 U	2.1 U	2.0 U	38 U	2.1 U	2.1 U	1.9 U	1.9 U	2.1 U	20 U

Table 3-4

BCP Groundwater Analytical Result Summary - 2020 RI
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

Parameter	Criteria ¹	INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	PMW-11D (DUP)	RMW- 3D	RMW- 4D
Fluoranthene (µg/L)	50	0.77 U	0.21 U	0.24 U	0.26	0.21 U	0.20 U	3.8 U	0.21 U	0.56	0.19 U	0.19 U	0.21 U	2.0 U
Fluorene (µg/L)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.25	2.0 U
Hexachlorobenzene (µg/L)	0.04	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Hexachlorobutadiene (µg/L)	0.5	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Hexachlorocyclopentadiene (µg/L)	5	38 U	10 U	12 U	10 U	10 U	10 U	190 U	10 U	10 U	9.6 U	9.6 U	10 U	100 U
Hexachloroethane (µg/L)	5	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Indeno(1,2,3-cd)pyrene (µg/L)	0.002	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Isophorone (µg/L)	50	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Naphthalene (µg/L)	10	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.19 U	0.19 U	0.21 U	2.0 U
Nitrobenzene (µg/L)	0.4	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
N-Nitroso-di-n-propylamine (µg/L)	50	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
N-Nitrosodiphenylamine (µg/L)	50	3.8 U	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	19 U	1.0 U	1.0 U	0.96 U	0.96 U	1.0 U	10 U
Pentachlorophenol (µg/L)	1	38 U	10 U	12 U	10 U	10 U	10 U	190 U	10 U	10 U	9.6 U	9.6 U	10 U	100 U
Phenanthrene (µg/L)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.21 U	0.28	0.28	0.28	2.0 U
Phenol (µg/L)	1	20	1.0 U	1.2 U	1.0 U	1.0 U	1.0 U	6000 D	1.0 U	1.0 U	2.0	1.3	1.0 U	40
Pyrene (µg/L)	50	0.77 U	0.21 U	0.24 U	0.21 U	0.21 U	0.20 U	3.8 U	0.21 U	0.39	0.19 U	0.19 U	0.21 U	2.0 U
Dissolved Metals														
Aluminum, Dissolved (µg/L)	--	50 U	50 U	50 U	50 U	50 U	50 U	50 U	39 J	50 U	50 U	50 U	50 U	50 U
Antimony, Dissolved (µg/L)	3	2 U	1.4 J	2 U	2 U	2 U	2 U	2 U	2 U	2.8	2 U	2 U	2 U	2 U
Arsenic, Dissolved (µg/L)	25	0.84 J	2.7 J	3.7 J	5 U	1.4 J	0.78 J	1.6 J	5 U	1.7 J	5 U	5 U	5 U	1.1 J
Barium, Dissolved (µg/L)	1000	370	41	10	5.1	48	29	170	530	13	33	33	40	430
Beryllium, Dissolved (µg/L)	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cadmium, Dissolved (µg/L)	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Calcium, Dissolved (µg/L)	--	250000	210000	450000	290000	410000	230000	370000	230000	480000	210000	220000	220000	420000
Chromium, Dissolved (µg/L)	50	2 U	2 U	2 U	2 U	1 J	9.1	2 U	2.2	2 U	2 U	2 U	2 U	2 U
Cobalt, Dissolved (µg/L)	--	1 U	1.5	0.35 J	0.69 J	0.57 J	0.25 J	0.33 J	1	1.1	1 U	1 U	1 U	0.38 J
Copper, Dissolved (µg/L)	200	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2.9	2 U	2 U	2 U	2 U
Iron, Dissolved (µg/L)	300	110	1500	86 J	1900	1300	560	58 J	3700	100 U	1800	1700	110	100 U
Lead, Dissolved (µg/L)	25	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.7	1 U	1 U	1 U	1 U
Magnesium, Dissolved (µg/L)	35000	84000	180000	700000	120000	540000	95000	110000	42000	550000	68000	66000	66000	220000
Manganese, Dissolved (µg/L)	300	230	530	680	1300	470	190	360	460	130	160	160	130	280
Mercury, Dissolved (µg/L)	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel, Dissolved (µg/L)	100	2 U	6.5	2 U	1.7 J	2 U	1.7 J	2 U	2.1	3.8	2 U	2 U	2 U	1.5 J
Potassium, Dissolved (µg/L)	--	4900	13000	6500	2300	6500	3100	8100	10000	4700	2800	2800	2800	100 U
Selenium, Dissolved (µg/L)	10	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Silver, Dissolved (µg/L)	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Sodium, Dissolved (µg/L)	20000	360000	2000000	300000	61000	280000	72000	640000	1200000	1200000	71000	70000	64000	720000
Thallium, Dissolved (µg/L)	0.5	1 U	0.27 J	1 U	0.24 J	1 U	1 U	1 U	0.26 J	1 U	1 U	1 U	1 U	1 U
Vanadium, Dissolved (µg/L)	--	5 U	1.3 J	5 U	5 U	1.6 J	5 U	5 U	1.9 J	17	5 U	5 U	5 U	5 U
Zinc, Dissolved (µg/L)	2000	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	30	20 U	20 U	20 U	20 U
Metals														
Aluminum, Total (µg/L)	--	86	71	190	50 U	50 U	50 U	36 J	48 J	1700	50 U	50 U	50 U	280
Antimony, Total (µg/L)	3	2.0 U	1.3 J	2.0 U	2.0 U	3.4	2.0 U	2.0 U	2.0 U	2.0 U				
Arsenic, Total (µg/L)	25	0.93 J	3.0 J	4.9 J	0.76 J	2.0 J	5.0 U	1.8 J	5.0 U	2.5 J	5.0 U	5.0 U	5.0 U	1.3 J
Barium, Total (µg/L)	1000	380	38	12	5.0	51	30	160	500	19	33	30	37	440
Beryllium, Total (µg/L)	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
Cadmium, Total (µg/L)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Calcium, Total (µg/L)	--	250000	210000	430000	290000	430000	230000	340000	210000	490000	200000	200000	210000	410000
Chromium, Total (µg/L)	50	2.0 U	2.0 U	1.0 J	2.0 U	2.0 U	2.0 U	1.0 J	1.8 J	1.6 J	2.0 U	2.0 U	1.8 J	15

Table 3-4

BCP Groundwater Analytical Result Summary - 2020 RI
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

Parameter	Criteria ¹	INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	PMW-11D (DUP)	RMW- 3D	RMW- 4D
Cobalt, Total (µg/L)	--	0.23 J	1.8	0.67 J	0.72 J	0.74 J	0.23 J	0.38 J	1.1	1.2	0.19 J	1.0 U	0.21 J	0.73 J
Copper, Total (µg/L)	200	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	4.4	2.0 U	2.0 U	2.0 U	2.0 U
Iron, Total (µg/L)	300	1800	1500	310	1900	1500	670	1100	3800	450	8700	7500	180	550
Lead, Total (µg/L)	25	0.82 J	1.0 U	1.1	1.0 U	4.7	1.0 U	1.0 U	1.0 U	0.63 J				
Magnesium, Total (µg/L)	35000	84000	170000	640000	130000	550000	94000	99000	39000	550000	68000	65000	63000	220000
Manganese, Total (µg/L)	300	230	560	640	1400	490	190	330	440	120	170	160	120	290
Mercury, Total (µg/L)	0.7	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U	0.20 U
Nickel, Total (µg/L)	100	2.0 U	8.4	6.4	1.8 J	1.8 J	2.0 U	2.0 U	2.3	5.3	2.0 U	2.0 U	2.1	16
Potassium, Total (µg/L)	--	4900	13000	7000	2200	6700	3000	7600	9500	4900	3300	3200	2700	6700
Selenium, Total (µg/L)	10	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Silver, Total (µg/L)	50	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Sodium, Total (µg/L)	20000	370000	2000000	340000	62000	280000	71000	590000	1100000	120000	100000	100000	61000	720000
Thallium, Total (µg/L)	0.5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.22 J	1.0 U	1.0 U	1.0 U
Vanadium, Total (µg/L)	--	5.0 U	1.4 J	1.4 J	5.0 U	1.9 J	5.0 U	5.0 U	2.0 J	20	5.0 U	5.0 U	5.0 U	1.2 J
Zinc, Total (µg/L)	2000	76	20 U	20 U	20 U	17 J	20 U	20 U	20 U	63	130	110	20 U	20 U
PCBs														
Aroclor 1016 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1221 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1232 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1242 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1248 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1254 (µg/L)	0.09	0.46 J	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1260 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1262 (µg/L)	0.09	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Aroclor 1268 (µg/L)	--	0.99 U	0.11 U	0.11 U	0.10 U	0.099 U	0.10 U	0.11 U	0.10 U	0.10 U	0.096 U	0.096 U	0.095 U	0.10 U
Pesticides														
4,4'-DDD (µg/L)	0.3	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
4,4'-DDE (µg/L)	0.2	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
4,4'-DDT (µg/L)	0.2	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
Aldrin (µg/L)	0	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
alpha-BHC (µg/L)	0.01	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
alpha-Chlordane (µg/L)	0.05	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
beta-BHC (µg/L)	0.04	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
delta-BHC (µg/L)	0.04	5.0 U	0.052 U	4.9 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
Dieldrin (µg/L)	0.004	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
Endosulfan I (µg/L)	--	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.1	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
Endosulfan II (µg/L)	--	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
Endosulfan sulfate (µg/L)	--	5.0 U	0.052 U	4.9 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
Endrin (µg/L)	0	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
Endrin aldehyde (µg/L)	5	5.0 U	0.052 U	4.9 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
Endrin ketone (µg/L)	5	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
gamma-BHC (Lindane) (µg/L)	0.05	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	5.0 U	0.051 U	4.8 U	4.8 U	5.0 U	5.0 U
gamma-Chlordane (µg/L)	0.05	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
Heptachlor (µg/L)	0.04	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
Heptachlor epoxide (µg/L)	0.03	0.25 U	0.052 U	0.24 U	0.052 U	5.0 U	0.052 U	9.7 U	0.050 U	0.051 U	0.048 U	0.048 U	5.0 U	5.0 U
Methoxychlor (µg/L)	35	0.50 U	0.10 U	0.49 U	0.10 U	9.9 U	0.10 U	19 U	10 U	0.10 U	9.6 U	9.6 U	9.9 U	10 U
Toxaphene (µg/L)	0.06	9.9 U	2.1 U	9.7 U	2.1 U	200 U	2.1 U	390 U	200 U	2.0 U	190 U	200 U	200 U	200 U

Table 3-4

BCP Groundwater Analytical Result Summary - 2020 RI
 Ekonol Polyester Resins BCP Site
 Wheatfield, New York

Parameter	Criteria ¹	INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	PMW-11D (DUP)	RMW- 3D	RMW- 4D
Dissolved Gases														
Ethane (µg/L)	--	35	6.4	22	4.9	13	0.89 J	46	35	4.3	4.9 J	13 J	4.6	22
Ethene (µg/L)	--	1500 D	1.0 U	290	10	350	1.0 U	1500	45	0.64 J	22	35	9.9	2600
Methane (µg/L)	--	7200	690	5300	1300	8400 D	8.9	2100	16000	210	210 J	410 J	130	9500 D
Miscellaneous Parameters														
TOC (mg/L)	--	150	2.3	13	NA	6.4	1.6	230	15	3.5	7.2	12	2.3	180
Sulfate (mg/L)	250	370	1400	3300	NA	2900	740	190	41	2700	530	510	540	820
Sulfide (mg/L)	0.05	76	1.0 U	7.0	NA	7.0	1.0 U	80	2.9	1.0 U	4.1	4.1	10	210
pH (s.u.)	--	6.99	7.4	7.0	6.53	7.14	7.35	6.57	6.39	6.84	8.51	NA	7.2	7.0
CENSUS														
BVC (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	9.7E+00	0.50 U	4.95E+03	NA	NA	NA
DHBt (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	6.6 U	4.9 U	9.31E+02	NA	NA	NA
DHC (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	6.6E+02	5.4E+00	1.92E+04	NA	NA	NA
TCEr (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	5.1E+01	0.50 U	5.08E+03	NA	NA	NA
VCR (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	6.2E+02	3.4E+00	1.17E+03	NA	NA	NA

Notes:

1. NYSDEC TOGS (1,1,1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, April 2000, Glass GA.

2. Detection Limits shown are PQL

BOLD = Exceeds Criteria

PQL - practical quantitation limit

R - Value is Rejected

µg/L - micrograms per liter

D - Result reported from a secondary dilution analysis

mg/L - milligrams per liter

J - The reported concentration is an estimated value.

cells/ml - cells per milliliter

U - Not detected above the method detection limit.

s.u. - standard units

UU - Not detected. The reporting limit is an estimated value.

NA - Not Analyzed

= Ekonol-Specific Groundwater Plume Monitoring List

-- no criteria

Table 3-5

Groundwater Emerging Contaminants Analytical Result Summary - 2020 RI
Emerging Contaminant Sampling Analyses
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Analyte	Units	CAS No.	NYSDOH MCL ¹	NYSDEC Screening Level ²	Location Name														
					INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	PMW-11D	RMW- 3D	RMW- 4D	FIELDQC	
					Sample Name	INJ- 8D	MW- 3S	MW- 4S	MW-10S	MW-13S	MW-22D	PMW- 1D	PMW- 1S	PMW-10S	PMW-11D	FD-GW-090920	RMW- 3D	RMW- 4D	DRILL WATER
					Sample Date	9/16/2020	9/15/2020	9/16/2020	9/14/2020	10/2/2020	10/2/2020	9/15/2020	9/9/2020	9/10/2020	9/9/2020	9/9/2020	9/15/2020	9/15/2020	9/21/2020
					Parent Sample														
SW846-8270D SIM																			
1,4-Dioxane	ug/L	123-91-1	1	--	6.5	1.2	3.6	0.8	4.5	0.3 U	7.1	0.92 U	31	1.3 U	1.1 U	0.54	1.6	NA	
PFAS - EPA 537 Modified																			
N-ethylperfluorooctanesulfonamidoacetic acid (NETFOSAA)	ng/L	2991-50-6	--	100	30 U	30 U	2.9 U	2.7 U	2.7 U	2.6 U	30 U	30 U	2.8 U	2.7 U	2.7 U	2.9 U	30 U	3 U	
N-methylperfluorooctanesulfonamidoacetic acid (NMMeFOSAA)	ng/L	2355-31-9	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluorobutanesulfonic acid (PFBS)	ng/L	375-73-5	--	100	20 U	20 U	2.0 U	1.1 J	0.53 J	0.76 J	20 U	20 U	1.9 U	0.48 J	0.58 J	0.5 J	20 U	2 U	
Perfluorobutanoic acid (PFBA)	ng/L	375-22-4	--	100	49 U	50 U	4.9 UJ	6.6	11 J	4.6	25 J	22 J	3.5 J	5.5	5.6	4.4 J	49 U	2.2 J	
Perfluorodecanoic acid (PFDS)	ng/L	335-77-3	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluorodecanoic acid (PFDA)	ng/L	335-76-2	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluorododecanoic acid(PFDoA)	ng/L	307-55-1	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	375-92-8	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluoroheptanoic acid (PFHxA)	ng/L	307-24-4	--	100	27	7.9 J	2.6	8.9	4.4 U	4.0 U	21	30	1.3 J	5.1	6.3	4.9	20 U	1.8 J	
Perfluoroctanesulfonamide (PFOSA)	ng/L	754-91-6	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluoropentanoic acid (PFPeA)	ng/L	2706-90-3	--	100	40	5.3 J	1.8 J	14	19 J	8.4	62	54	2.8	9.6	10	9.0	9.5 J	1.4 J	
Perfluorotetradecanoic acid (PFTeA)	ng/L	376-06-7	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluoroheptanoic acid (PFHpA)	ng/L	375-85-9	--	100	20 U	20 U	2.0 U	2.5	1.0 J	1.2 J	6.8 J	13 J	0.56 J	1.1 J	1.4 J	1.2 J	20 U	0.96 J	
Perfluorotridecanoic acid (PFTriA)	ng/L	72629-94-8	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluoroundecanoic acid (PFUnA)	ng/L	2058-94-8	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
1H,1H,2H,2H-perfluorodecanesulfonic acid (8:2)	ng/L	39108-34-4	--	100	30 U	30 U	2.9 U	2.7 U	2.7 U	2.6 U	30 U	30 U	2.8 U	2.7 U	2.7 U	2.9 U	30 U	3 U	
1H,1H,2H,2H-perfluorooctanesulfonic acid (6:2)	ng/L	27619-97-2	--	100	49 U	20 J	4.9 U	4.3 J	5.7	4.3 U	50 U	23 J	4.7 U	4.0 J	4.4 J	2.3 J	49 U	5 U	
Perfluorohexanesulfonic acid (PFHxS)	ng/L	355-46-4	--	100	20 U	20 U	2.0 U	5.4	0.61 J	4.0	20 U	20 U	1.9 U	5.4	5.3	5.1	20 U	0.7 J	
Perfluorononanoic acid (PFNA)	ng/L	375-95-1	--	100	20 U	20 U	2.0 U	1.8 U	1.8 U	1.7 U	20 U	20 U	1.9 U	1.8 U	1.8 U	1.9 U	20 U	2 U	
Perfluorooctanesulfonic acid (PFOS)	ng/L	1763-23-1	--	10	20 U	20 U	2.0 U	4.1	0.9 J	1.5 J	6.9 J	6.7 J	1.9 U	1.3 J	1.5 J	1.4 J	5.1 J	2.1	
Perfluorooctanoic acid (PFOA)	ng/L	335-67-1	--	10	20 U	20 U	2.0 U	4.3	1.1 J	1.7	5 J	8.5 J	1.9 U	2.2	2.1	1.6 J	20 U	1.5 J	
Total NYSDEC Target PFAS List	ng/L	NA	--	500	73.5	34.4	8.0	52.0	44.3	22.2	126.7	157.2	39.2	36.0	38.3	30.9	16.2	8.9	

Notes:

Detected values are shown in bold.

Detection Limits shown are PQL.

bolded box = Exceedance of listed criteria.

ug/L - micrograms per liter (parts per billion)

ng/L - nanograms per liter (parts per trillion)

J - Result is less than the reporting limit (RL) but greater than or equal to the Method Detection Limit (MDL) and the concentration is an approximate value.

U - not detected above the method detection limit.

NA - Not applicable.

NS - No Sample

References:

1. NYSDOH, Center for Environmental Health, 9/2020. *Public Water Systems and NYS Drinking Water Standards for PFOA, PFOS, and 1,4-Dioxane*. Accessed at https://www.health.ny.gov/environmental/water/drinking/docs/water_supplier_fact_sheet_new_mcls.pdf
2. SAMPLING, ANALYSIS, AND ASSESSMENT OF PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) Under NYSDEC's Part 375 Remedial Programs. NYSDEC, January, 2021

Table 3-6

VOC Plume Status Groundwater Analytical Result Summary - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Criteria ¹	INJ- 7D	INJ- 8D	INJ-11D	INJ-13D	MW- 2S	MW- 3S	MW- 4S	MW- 7D	MW- 7D (DUP)	MW- 9S	MW-10S	MW-11D
Volatile Organic Compounds													
PCE ($\mu\text{g/L}$)	5	1000 U	100 U	200 U	1000 U	5000 U	1.0 U	25 U	200 U	200 U	1.0 U	4.0 U	1.0 U
TCE ($\mu\text{g/L}$)	5	3900	15 J	53 J	6300	5000 U	0.13 J	28	45 J	48 J	1.0 U	1.2 J	1.4
Cis-1,2-DCE ($\mu\text{g/L}$)	5	190000 D	2000	5000	93000	160000	1.0 U	930	5700	5200	0.17 J	97	12
Trans-1,2-DCE ($\mu\text{g/L}$)	5	200 J	28 J	200 U	1000 U	1200 J	1.0 U	13 J	46 J	49 J	0.17 J	4.0 U	0.74 J
1,1-DCE ($\mu\text{g/L}$)	5	420 J	67 J	200 U	1000 U	5000 U	1.0 U	25 U	200 U	200 U	1.0 U	4.0 U	0.71 J
Vinyl Chloride ($\mu\text{g/L}$)	2	21000	2400	1800	16000	14000	1.0 U	1200	2500	3100	1.0 U	32	34
1,1,1-Trichloroethane ($\mu\text{g/L}$)	5	1000 U	1000	200 U	1000 U	5000 U	1.0 U	25 U	110 J	100 J	1.0 U	4.0 U	57
1,1-Dichloroethane ($\mu\text{g/L}$)	5	1000 U	600	200 U	1000 U	5000 U	1.0 U	25 U	320	280	1.0 U	4.0 U	29
Chloroethane ($\mu\text{g/L}$)	5	1000 U	100 U	200 U	1000 U	5000 U	1.0 U	25 U	200 U	200 U	1.0 U	4.0 U	1.4
Benzene ($\mu\text{g/L}$)	1	1000 U	100 U	200 U	1000 U	5000 U	0.21 J	25 U	200 U	200 U	1.0 U	4.0 U	1.0 U
Ethylbenzene ($\mu\text{g/L}$)	5	1000 U	100 U	200 U	1000 U	5000 U	1.0 U	25 U	200 U	200 U	1.0 U	4.0 U	1.0 U
Naphthalene ($\mu\text{g/L}$)	10	1000 U	0.77 U	200 U	1000 U	5000 U	0.21 U	0.24 U	200 U	200 U	1.0 U	0.21 U	1.0 U
Toluene ($\mu\text{g/L}$)	5	1000 U	100 U	200 U	1000 U	5000 U	1.0 U	25 U	200 U	200 U	1.0 U	4.0 U	1.0 U
Xylenes, Total ($\mu\text{g/L}$)	5	2000 U	200 U	400 U	2000 U	10000 U	2.0 U	50 U	400 U	400 U	2.0 U	8.0 U	2.0 U
Dissolved Metals													
Iron, Dissolved (mg/L)	--	4.3	0.11	0.43	0.84	3.6	1.5	0.086 J	0.057 J	0.056 J	0.39	1.9	NA
Potassium, Dissolved (mg/L)	--	6.8	4.9	12	9.1	3.2 J	13	6.5	9.8	9.5	5	2.3	NA
Dissolved Gases													
Ethane ($\mu\text{g/L}$)	--	48	35	170	230	62	6.4	22	27 J	36 J	1.0 U	4.9	3.2
Ethene ($\mu\text{g/L}$)	--	5000	1500	1100	7100	230	1.0 U	290	1800 J	1900 J	1.0 U	10	30
Methane ($\mu\text{g/L}$)	--	3300	7200 D	15000	17000	960	690	5300	18000 DJ	6200 DJ	23	1300	410
Miscellaneous Parameters													
TOC (mg/L)	--	100	150	12	160	3.9	2.3	13	210	210	4.9	NA	NA
Sulfate (mg/L)	250	63	370	260	160	1300	1400	3300	580	570	2600	NA	NA
Sulfide (mg/L)	0.05	2.2	76	21	26	1.0 U	1.0 U	7.0	340	330	1.0 U	NA	NA
pH (s.u.)	--	6.93	6.99	7.07	6.8	6.8	7.4	7.0	7.1 J	NA	6.56	6.53	7.94
CENSUS													
BVC (cells/ml)	--	7.48E+04	NA	NA	NA	4.18E+03	NA	NA	NA	NA	NA	NA	NA
DHBt (cells/ml)	--	1.17E+04	NA	NA	NA	3.48E+01	NA	NA	NA	NA	NA	NA	NA
DHC (cells/ml)	--	4.94E+05	NA	NA	NA	5.94E+03	NA	NA	NA	NA	NA	NA	NA
TCEr (cells/ml)	--	1.03E+04	NA	NA	NA	2.70E+00	NA	NA	NA	NA	NA	NA	NA
VCR (cells/ml)	--	7.60E+04	NA	NA	NA	2.37E+01	NA	NA	NA	NA	NA	NA	NA

See Page 4 of 4 for notes.

Table 3-6

VOC Plume Status Groundwater Analytical Result Summary - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Criteria ¹	MW-11S	MW-12S	MW-12S (DUP)	MW-13D	MW-13S	MW-15D	MW-17D	MW-19D	MW-20D	MW-21D	MW-22D	OR-4SM
Volatile Organic Compounds													
PCE (µg/L)	5	4.0 U	50 U	50 U	5.0 U	100 U	4.0 U	1.0 U	1.0 U	5.0 U	20 U	0.65 J	1.0 U
TCE (µg/L)	5	21	1100	950	19	100 U	1.2 J	0.39 J	1.0 U	2.9 J	20 U	0.68 J	1.0 U
Cis-1,2-DCE (µg/L)	5	110	1200	1100	130	3200	150	7.1	5.6	48	410	2.0	0.46 J
Trans-1,2-DCE (µg/L)	5	3.4 J	48 J	50	1.0 J	22 J	2.5 J	0.35 J	0.30 J	2.4 J	20 U	1.0 U	2.1
1,1-DCE (µg/L)	5	4.0 U	50 U	50 U	5.0 U	100 U	1.1 J	0.24 J	1.0 U	1.8 J	20 U	1.0 U	1.0 U
Vinyl Chloride (µg/L)	2	79	580	590	260	820	400	29	0.66 J	330	390	0.20 J	0.55 J
1,1,1-Trichloroethane (µg/L)	5	4.0 U	50 U	50 U	5.0 U	100 U	29	22	1.0 U	150	15 J	4.8	1.0 U
1,1-Dichloroethane (µg/L)	5	1.9 J	15 J	15 J	7.1	100 U	21	14	1.0 U	45	19 J	1.4	0.61 J
Chloroethane (µg/L)	5	4.0 U	50 U	50 U	5.0 U	100 U	4.0 U	1.0 U	1.0 U	5.0 U	20 U	1.0 U	1.0 U
Benzene (µg/L)	1	4.0 U	50 U	50 U	5.0 U	100 U	4.0 U	1.0 U	1.0 U	5.0 U	20 U	1.0 U	2.7
Ethylbenzene (µg/L)	5	4.0 U	50 U	50 U	5.0 U	100 U	4.0 U	1.0 U	1.0 U	5.0 U	20 U	1.0 U	2.1
Naphthalene (µg/L)	10	4.0 U	50 U	50 U	5.0 U	0.21 U	4.0 U	1.0 U	1.0 U	5.0 U	20 U	0.20 U	0.41 J
Toluene (µg/L)	5	4.0 U	50 U	50 U	5.0 U	100 U	4.0 U	1.0 U	1.0 U	5.0 U	20 U	1.0 U	2.2
Xylenes, Total (µg/L)	5	8.0 U	100 U	100 U	10 U	200 U	8.0 U	2.0 U	2.0 U	10 U	40 U	2.0 U	9.6
Dissolved Metals													
Dissolved Iron (mg/L)	--	NA	NA	NA	0.3	1.3	0.37	NA	2.0	NA	NA	0.56	1.5
Dissolved Potassium (mg/L)	--	NA	NA	NA	4.6 J	6.5	4.7 J	NA	5.4	NA	NA	3.1	15
Dissolved Gases													
Ethane (µg/L)	--	14	28 J	29 J	7.0	13	1.5	3.6	0.57 J	6.0	2.7	0.89 J	3.3 J
Ethene (µg/L)	--	21	710	730	110	350	29	21	1.0 U	130	39	1.0 U	0.93 J
Methane (µg/L)	--	590	4600 D	4900 D	1600	8400 D	260	510	25	1000	380	8.9	10000 J
Miscellaneous Parameters													
TOC (mg/L)	--	NA	NA	NA	2.8	6.4	2.9	NA	6.1	NA	NA	1.6	32
Sulfate (mg/L)	250	NA	NA	NA	1200	2900	840	NA	2800 J	NA	NA	740	33
Sulfide (mg/L)	0.05	NA	NA	NA	2.0	7.0	0.93 J	NA	1.0 U	NA	NA	1.0 U	4.1
pH (s.u.)	--	7.06	7.15	NA	6.80	7.14	6.93	7.89	7.68	10.48 R	7.07	7.35	7.97
CENSUS													
BVC (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DHBt (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
DHC (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCEr (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VCR (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Page 4 of 4 for notes.

Table 3-6

VOC Plume Status Groundwater Analytical Result Summary - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Criteria ¹	OR- 6SM	OR-10SM	OR-14SM	OR-18SM	PMW- 1D	PMW- 1S	PMW- 2D	PMW- 3S	PMW- 4S	PMW- 6D	PMW- 6S
Volatile Organic Compounds												
PCE (µg/L)	5	2.0 U	2.0 U	1.0 U	1.0 U	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
TCE (µg/L)	5	2.0 U	2.0 U	0.50 J	1.0 U	7300	1.7 J	410 J	73 J	250 U	120 J	100 U
Cis-1,2-DCE (µg/L)	5	17	1.1 J	40	11	180000	330	36000	4500	9000	26000	3800
Trans-1,2-DCE (µg/L)	5	3.2	1.5 J	0.86 J	2.6	5000 U	8.7 J	1000 U	72 J	200 J	140 J	97 J
1,1-DCE (µg/L)	5	2.0 U	2.0 U	1.0 U	1.0 U	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
Vinyl Chloride (µg/L)	2	4.9	1.7 J	15	20	12000	160	6900	1100	2100	4500	2400
1,1,1-Trichloroethane (µg/L)	5	2.0 U	2.0 U	1.0 U	1.0 U	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
1,1-Dichloroethane (µg/L)	5	1.9 J	0.82 J	0.83 J	0.30 J	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
Chloroethane (µg/L)	5	2.0 U	2.0 U	1.0 U	1.0 U	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
Benzene (µg/L)	1	2.5	1.3 J	1.1	1.0 U	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
Ethylbenzene (µg/L)	5	1.6 J	2.0 U	0.56 J	0.13 J	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
Naphthalene (µg/L)	10	2.0 U	2.0 U	1.0 U	1.0 U	3.8 U	0.21 U	1000 U	200 U	250 U	500 U	100 U
Toluene (µg/L)	5	4.4	0.85 J	1.6	1.0 U	5000 U	13 U	1000 U	200 U	250 U	500 U	100 U
Xylenes, Total (µg/L)	5	12	0.62 J	2.5	0.20 J	10000 U	1.9 J	2000 U	400 U	500 U	1000 U	200 U
Dissolved Metals												
Dissolved Iron (mg/L)	--	0.11 J	13	0.57	0.2 U	0.058 J	3.7	0.52	0.41	4.3	0.2 U	1.7
Dissolved Potassium (mg/L)	--	17	5.7	11	4 J	8.1	10	10	7.6	4.6 J	10	7.7
Dissolved Gases												
Ethane (µg/L)	--	88 J	8.0	14	12	46	35	150	54 J	100	38 J	16
Ethene (µg/L)	--	58 J	25	79	260	1500	45	4300	240 J	230	2400 J	260
Methane (µg/L)	--	7700 J	8100	11000	5000	2100	16000	12000 D	10000 DJ	7200 D	15000 J	7700
Miscellaneous Parameters												
TOC (mg/L)	--	24	120	13	3.2	230	15	180	9.3	2.3	220	18
Sulfate (mg/L)	250	67	28	480	460	190	41	98	570	980	800	460
Sulfide (mg/L)	0.05	26	4.9	85	21	80	2.9	130	2.0	1.0 U	190	1.0 U
pH (s.u.)	--	8.07	6.8	8.58	6.79	6.57	6.39	7.0	6.6	6.7 J	6.63	8.29
CENSUS												
BVC (cells/ml)	--	3.05E+03	NA	6.60E+00	NA	NA	9.70E+00	4.91E+03	2.44E+03	NA	6.89E+03	NA
DHBt (cells/ml)	--	11.1 U	NA	5.4 U	NA	NA	6.6 U	6.71E+02	4.7 U	NA	3.16E+03	NA
DHC (cells/ml)	--	4.73E+04	NA	4.47E+02	NA	NA	6.58E+02	6.18E+05	1.08E+04	NA	2.13E+05	NA
TCEr (cells/ml)	--	1.76E+03	NA	2.94E+01	NA	NA	5.12E+01	8.89E+04	6.70E+01	NA	1.83E+04	NA
VCR (cells/ml)	--	1.84E+04	NA	2.05E+02	NA	NA	6.16E+02	5.02E+04	3.17E+03	NA	4.11E+04	NA

See Page 4 of 4 for notes.

Table 3-6

VOC Plume Status Groundwater Analytical Result Summary - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Criteria ¹	PMW- 8D	PMW- 9D	PMW-10D	PMW-10S	PMW-11D	PMW-11D (DUP)	PMW-16D	PMW-17D	RMW- 2D	RMW- 3D	RMW- 4D
Volatile Organic Compounds												
PCE ($\mu\text{g/L}$)	5	500 U	1000 U	200 U	1.0 U	200 U	200 U	500 U	20 U	2000 U	100 U	500 U
TCE ($\mu\text{g/L}$)	5	6900	460 J	97 J	0.13 J	48 J	49 J	3900	3.2 J	21000	100 U	500 U
Cis-1,2-DCE ($\mu\text{g/L}$)	5	38000	46000	11000	1.0 U	870	860	32000	350	350000 D	440	10000
Trans-1,2-DCE ($\mu\text{g/L}$)	5	170 J	1000 U	72 J	1.0 U	200 U	200 U	200 J	5.4 J	820 J	100 U	500 U
1,1-DCE ($\mu\text{g/L}$)	5	500 U	1000 U	200 U	1.0 U	66 J	71 J	500 U	3.8 J	2000 U	72 J	500 U
Vinyl Chloride ($\mu\text{g/L}$)	2	6300	21000	5200	26	120 J	140 J	32000	1600	4300	130	3200
1,1,1-Trichloroethane ($\mu\text{g/L}$)	5	500 U	1000 U	200 U	1.0 U	3700	3800	1900	380	2000 U	2200	500 U
1,1-Dichloroethane ($\mu\text{g/L}$)	5	500 U	1000 U	100 J	1.0 U	160 J	170 J	440 J	150	2000 U	120	500 U
Chloroethane ($\mu\text{g/L}$)	5	500 U	1000 U	200 U	1.0 U	200 U	200 U	500 U	20 U	2000 U	100 U	500 U
Benzene ($\mu\text{g/L}$)	1	500 U	1000 U	200 U	1.0 U	200 U	200 U	500 U	20 U	2000 U	100 U	500 U
Ethylbenzene ($\mu\text{g/L}$)	5	500 U	1000 U	200 U	1.0 U	200 U	200 U	500 U	20 U	2000 U	100 U	500 U
Naphthalene ($\mu\text{g/L}$)	10	500 U	1000 U	200 U	0.21 U	0.19 U	0.19 U	500 U	20 U	2000 U	0.21 U	2.0 U
Toluene ($\mu\text{g/L}$)	5	500 U	1000 U	200 U	1.0 U	200 U	200 U	500 U	20 U	2000 U	100 U	500 U
Xylenes, Total ($\mu\text{g/L}$)	5	1000 U	2000 U	400 U	2.0 U	400 U	400 U	1000 U	40 U	4000 U	200 U	1000 U
Dissolved Metals												
Iron, Dissolved (mg/L)	--	0.2 U	42	28	0.1 U	1.8	1.7	0.031 J	0.074 J	0.043 J	0.11	0.1 U
Potassium, Dissolved (mg/L)	--	8.5	21	4.7 J	4.7	2.8	2.8	4.9 J	2.9 J	5.4	2.8	0.1 U
Dissolved Gases												
Ethane ($\mu\text{g/L}$)	--	61	470	500	4.3	4.9 J	13 J	95	14	110	4.6	22
Ethene ($\mu\text{g/L}$)	--	2000	6500	5200	0.64 J	22	35	3800	760	980	9.9	2600
Methane ($\mu\text{g/L}$)	--	14000	19000	17000 D	210	210 J	410 J	12000	4700 D	2500	130	9500 D
Miscellaneous Parameters												
TOC (mg/L)	--	150	200	210	3.5	7.2	12	100	34	270	2.3	180
Sulfate (mg/L)	250	1700	40	25 U	2700	530	510	48	18	270	540	820
Sulfide (mg/L)	0.05	240	1.0	6.2	1.0 U	4.1	4.1	100	7.0	160	10	210
pH (s.u.)	--	6.84	7.08	6.4 J	6.84	8.51	NA	7.3	7.9	6.62	7.2	7.0
CENSUS												
BVC (cells/ml)	--	NA	NA	NA	0.50 U	4.95E+03	NA	NA	1.19E+02	5.87E+03	NA	NA
DHBt (cells/ml)	--	NA	NA	NA	4.9 U	9.31E+02	NA	NA	5.0 U	3.22E+04	NA	NA
DHC (cells/ml)	--	NA	NA	NA	5.40E+00	1.92E+04	NA	NA	1.36E+03	8.56E+04	NA	NA
TCEr (cells/ml)	--	NA	NA	NA	0.50 U	5.08E+03	NA	NA	8.50E+02	6.87E+03	NA	NA
VCR (cells/ml)	--	NA	NA	NA	3.40E+00	1.17E+03	NA	NA	2.02E+03	1.26E+04	NA	NA

Notes:

1. NYSDEC TOGS (1,1,1), Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, April 2000, Glass GA.

2. Detection Limits shown are PQL

BOLD = Exceeds Criteria

PQL - practical quantitation limit

R - Value is Rejected

 $\mu\text{g/L}$ - micrograms per liter

D - Result reported from a secondary dilution analysis

mg/L - milligrams per liter

J - The reported concentration is an estimated value.

cells/ml - cells per milliliter

U - Not detected above the method detection limit.

s.u. - standard units

UJ - Not detected. The reporting limit is an estimated value.

NA - Not Analyzed

= 2020 RI BCP Site Monitoring Location - Cross-referenced on Table 5-3

-- no criteria

Table 3-7

Groundwater Sampling Field Parameter Results
Groundwater Sampling Event - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Monitoring Well ID	Sample Date	Temperature (deg C)	Specific Conductivity (mS/cm)	Dissolved Oxygen ⁽¹⁾ (mg/L)	pH (standard units)	ORP (mV)	Turbidity (NTU)	Alkalinity (mg/L) ⁽³⁾	Carbon Dioxide (mg/L) ⁽⁴⁾	Ferrous Iron (mg/L) ⁽⁵⁾	Hydrogen Sulfide (mg/L) ⁽⁶⁾
Overburden Bioreactor Monitoring Wells											
OR-4SM	9/10/2020	16.56	5.230	0.49	7.97	-268.7	8.84	1925	-	0.54	>5.0
OR-6SM	9/10/2020	17.06	8.677	0.68	8.07	-316.9	7.03	1540	-	0.18	>5.0
OR-10SM	9/11/2020	16.26	7.689	1.00	6.8 ⁽²⁾	-240.4	>1000	1925	-	1.46	3.0
OR-14SM	9/10/2020	15.99	4.811	0.78	8.58	-358.7	16.6	1540	430 J	0.11	>5.0
OR-18SM	9/11/2020	16.55	1.455	0.93	6.79	-278.7	5.89	770	-	0.02	0.15
PMW-1S	9/9/2020	19.30	6.246	0.64	6.39	-205.8	3.16	770	-	1.44	0.5
PMW-3S	9/17/2020	16.45	5.120	0.53	6.6 ⁽²⁾	-115.5	19.2	770	80	0.50	>5.0
PMW-4S	9/17/2020	16.63	6.524	1.15	6.7 ⁽²⁾	-39.2	2.94	770	155	1.49	0.0
PMW-6S	9/11/2020	16.31	3.469	0.49	8.29	-83.4	26.3	1155	-	2.33	5.0
PMW-10S	9/11/2020	16.47	4.510	3.36	6.84	97.1	4.27	770	-	0.64	0.1
Bedrock Injection/Withdrawal Wells											
INJ-7D	9/17/2020	16.22	1.609	2.11	6.93	-241.9	13.2	770	125	0.67	>5.0
INJ-8D	9/16/2020	16.05	3.597	0.53	6.99	-331.0	8.93	770	150	0.18	>5.0
INJ-11D	9/18/2020	15.46	4.551	2.11	7.07	-316.6	8.21	385	75	0.12	>5.0
INJ-13D	9/18/2020	13.10	4.889	1.14	6.8 ⁽²⁾	-351.7	7.22	770	175	0.46	>5.0
Bedrock Monitoring Wells											
PMW-9D	9/18/2020	16.04	4.423	5.80	7.08	-106.9	31.8	770	180	0.98	0.1
PMW-10D	9/17/2020	15.21	2.189	0.18	6.4 ⁽²⁾	-285.1	700	770	170	1.83	>5.0
PMW-11D	9/9/2020	13.74	1.668	0.28	8.51	-292.0	3.81	385	90 J	1.50	1.5
PMW-16D	9/18/2020	14.18	3.721	1.35	7.3 ⁽²⁾	-340.9	7.09	770	130	0.02	>5.0
PMW-17D	9/16/2020	16.49	1.060	0.90	7.9 ⁽²⁾	-220.2	10.0	385	20	0.01	2.0
Pilot Test Wells											
PMW-1D	9/15/2020	16.15	4.773	0.71	6.57	-318.3	9.27	770	195	0.00	>5.0
PMW-2D	9/16/2020	14.14	5.808	0.79	7.0 ⁽²⁾	-326.0	5.72	1155	90	0.50	>5.0
PMW-6D	9/9/2020	16.34	8.081	2.57	6.63	-369.3	8.43	1540	270 J	0.09	>5.0
RMW-4D	9/15/2020	13.92	6.063	0.92	7.0 ⁽²⁾	-349.9	5.51	1155	290	0.01	>5.0
PMW-8D	9/18/2020	16.26	5.762	1.81	6.84	-339.8	4.39	1155	210	0.00	>5.0
MW-7D	9/17/2020	14.04	8.144	0.90	7.1 J ⁽²⁾	-364.8	6.43	1155	215	0.03	>5.0

Table 3-7

Groundwater Sampling Field Parameter Results
Groundwater Sampling Event - 2020 RI
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Monitoring Well ID	Sample Date	Temperature (deg C)	Specific Conductivity (mS/cm)	Dissolved Oxygen ⁽¹⁾ (mg/L)	pH (standard units)	ORP (mV)	Turbidity (NTU)	Alkalinity (mg/L) ⁽³⁾	Carbon Dioxide (mg/L) ⁽⁴⁾	Ferrous Iron (mg/L) ⁽⁵⁾	Hydrogen Sulfide (mg/L) ⁽⁶⁾
Site Investigation Wells											
MW-2S	9/16/2020	21.80	4.611	1.14	6.80	-160.4	2.04	770	150	2.02	0.0
MW-3S	9/15/2020	15.24	11.351	6.08	7.4 ⁽²⁾	107.4	3.87	<385	30	0.46	0.0
MW-4S	9/17/2020	16.40	5.944	0.48	7.0 ⁽²⁾	-244.9	26.8	770	65	0.13	>5.0
MW-10S	9/14/2020	16.42	2.319	0.78	6.53	-121.8	2.73	<385	80	1.37	0.0
MW-11S	9/10/2020	13.96	5.083	1.57	7.94	-39.7	7.14	<385	-	0.45	0.2
MW-12S	9/14/2020	16.18	6.538	0.85	7.15 ⁽²⁾	-282.3	5.02	770	130	0.07	5.0
MW-13S	10/2/2020	15.39	1.732	0.25	7.14	-109.1	2.43	770	250	0.49	5.0
RMW-2D	9/17/2020	17.20	2.962	1.73	6.62	-315.6	39.5	770	190	0.08	>5.0
RMW-3D	9/15/2020	13.85	1.550	0.75	7.2 ⁽²⁾	-289.9	5.85	<385	70	0.06	5.0
MW-11D	9/10/2020	13.41	2.492	0.66	7.06	-197.6	0.34	<385	-	0.09	0.5
MW-17D	9/10/2020	13.91	2.342	0.77	7.89	-277.0	0.51	<385	-	0.04	5.0
MW-20D	9/14/2020	14.67	3.035	1.53	R	-192.2	1.21	<385	80	0.06	5.0
MW-21D	9/14/2020	14.47	2.153	0.80	7.07	-128.7	5.88	<385	60	0.75	0.2
MW-22D	10/2/2020	13.64	1.312	0.30	7.35	-32.2	4.40	385	50	0.37	0.0
Investigative Monitoring Wells											
MW-15D	9/11/2020	16.05	2.171	0.65	6.93	-237.0	3.31	770	-	0.31	4.0
MW-19D	9/11/2020	14.00	5.019	0.56	7.68	17.3	7.44	770	-	1.93	0.0
MW-13D	9/14/2020	12.86	3.372	1.04	6.80	-244.9	0.88	<385	70	0.28	0.3
MW-9S	9/11/2020	16.82	5.104	0.79	6.56	42.6	1.85	770	-	0.25	0.0

Notes:

(1) Elevated dissolved oxygen readings in some cases conflict with negative oxidation/reduction potential readings.

(2) A review of the field sheets and daily calibration sheets concluded 15 locations, all sampled using the same water quality meter, were anomalous and/or had a pH > 9. At 13 of these locations there was sample volume at the laboratory to run pH as a laboratory analysis. MW-12S pH was re-collected in the field using an in-situ water quality meter on 9/28/2020. MW-20D did not have enough sample to run a laboratory pH and was rejected. The listed pHs are the laboratory verified result and are in-line with historical norms for pH at these locations. Original field pHs for the following locations have been rejected (INJ-13D, OR-10SM, MW-3S, MW-4S, MW-12S, MW-7D, PMW-2D, PMW-3S, PMW-4S, PMW-10D, PMW-16D, PMW-17D, and RMW-4D. The results were rejected due to possible water quality pH meter malfunction, incorrect field calibration, or calibration solution failure. Please refer to the field sampling logs for the rejected pH values.

(3) HACH Alkalinity Test Kit, Model AL-TA used for field testing.

(4) HACH Carbon Dioxide Test Kit, Model CA-23 used for field testing. Field crew reported problems getting readable results with the titration solution. New solution was obtained and used from September 14, 2020 through October 2, 2020. Locations with results obtained prior to September 14, 2020 may be biased and were assigned a J value.

(5) HACH DR-890 Colorimeter used for field testing.

mS/cm - millisiemen per centimeter

mg/L - milligram per liter

mV - millivolt

J - The reported concentration is an estimated value.

NTU - nephelometric turbidity unit

ORP - oxidation-reduction potential

NM - Not Measured

R - Value is Rejected

Table 3-8

Indoor/Outdoor Air Sample Results (April 22, 2021)
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Units	Criteria ¹	ID-1 IA	ID-1 IA (DUP)	OUTDOOR-1
Volatile Organic Compounds					
1,1,1-Trichloroethane	µg/m ³	--	1.1 U	1.1 U	1.1 U
1,1,2,2-Tetrachloroethane	µg/m ³	--	1.4 U	1.4 U	1.4 U
1,1,2-Trichloro-1,2,2-trifluoroethane	µg/m ³	--	0.50 J	0.57 J	0.51 J
1,1,2-Trichloroethane	µg/m ³	--	1.1 U	1.1 U	1.1 U
1,1-Dichloroethane	µg/m ³	--	0.81 U	0.81 U	0.81 U
1,1-Dichloroethene	µg/m ³	--	0.20 U	0.20 U	0.20 U
1,2,4-Trichlorobenzene	µg/m ³	--	3.7 U	3.7 U	3.7 U
1,2,4-Trimethylbenzene	µg/m ³	--	0.98 U	0.24 J	0.98 U
1,2-Dibromoethane (Ethylene dibromide)	µg/m ³	--	1.5 U	1.5 U	1.5 U
1,2-Dichlorobenzene	µg/m ³	--	1.2 U	1.2 U	1.2 U
1,2-Dichloroethane	µg/m ³	--	0.81 U	0.81 U	0.81 U
1,2-Dichloroethene (cis)	µg/m ³	--	0.20 U	0.20 U	0.20 U
1,2-Dichloroethene (total)	µg/m ³	--	1.6 U	1.6 U	1.6 U
1,2-Dichloroethene (trans)	µg/m ³	--	0.79 U	0.79 U	0.79 U
1,2-Dichloropropane	µg/m ³	--	0.92 U	0.92 U	0.92 U
1,2-Dichlorotetrafluoroethane	µg/m ³	--	1.4 U	1.4 U	1.4 U
1,3,5-Trimethylbenzene (Mesitylene)	µg/m ³	--	0.98 U	0.98 U	0.98 U
1,3-Butadiene	µg/m ³	--	0.44 U	0.44 U	0.44 U
1,3-Dichlorobenzene	µg/m ³	--	1.2 U	1.2 U	1.2 U
1,3-Dichloropropene (cis)	µg/m ³	--	0.91 U	0.91 U	0.91 U
1,3-Dichloropropene (trans)	µg/m ³	--	0.91 U	0.91 U	0.91 U
1,4-Dichlorobenzene	µg/m ³	--	1.2 U	1.2 U	1.2 U
1,4-Dioxane	µg/m ³	--	18 U	18 U	18 U
2,2,4-Trimethylpentane	µg/m ³	--	0.93 U	0.93 U	0.93 U
2-Chlorotoluene	µg/m ³	--	1.0 U	1.0 U	1.0 U
2-Hexanone	µg/m ³	--	2.0 U	2.0 U	2.0 U
3-Chloropropene	µg/m ³	--	1.6 U	1.6 U	1.6 U
4-Ethyltoluene	µg/m ³	--	0.98 U	0.98 U	0.98 U
4-Isopropyltoluene (p-Cymene)	µg/m ³	--	1.1 U	1.1 U	1.1 U
4-Methyl-2-pentanone	µg/m ³	--	2.0 U	2.0 U	2.0 U
Acetone	µg/m ³	--	62	64	7.0 J
Benzene	µg/m ³	--	0.33 J	0.32 J	0.28 J
Benzyl chloride	µg/m ³	--	1.0 U	1.0 U	1.0 U
Bromodichloromethane	µg/m ³	--	1.3 U	1.3 U	1.3 U
Bromoform	µg/m ³	--	2.1 U	2.1 U	2.1 U
Bromomethane	µg/m ³	--	0.78 U	0.78 U	0.78 U
Carbon disulfide	µg/m ³	--	1.6 U	1.6 U	1.6 U
Carbon tetrachloride	µg/m ³	--	0.51	0.48	0.49

See Page 2 of 2 for notes.

Table 3-8

Indoor/Outdoor Air Sample Results (April 22, 2021)
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Parameter	Units	Criteria ¹	ID-1 IA	ID-1 IA (DUP)	OUTDOOR-1
Volatile Organic Compounds					
Chlorobenzene	µg/m ³	--	0.92 U	0.92 U	0.92 U
Chlorodifluoromethane	µg/m ³	--	1.1 J	1.2 J	1.1 J
Chloroethane	µg/m ³	--	1.3 U	1.3 U	1.3 U
Chloroform	µg/m ³	--	0.98 U	0.98 U	0.98 U
Chloromethane	µg/m ³	--	1.6	1.5	1.4
Cyclohexane	µg/m ³	--	0.69 U	0.69 U	0.69 U
Dibromochloromethane	µg/m ³	--	1.7 U	1.7 U	1.7 U
Dichlorodifluoromethane	µg/m ³	--	2.4 J	2.4 J	2.5
Ethylbenzene	µg/m ³	--	0.87 U	0.87 U	0.87 U
Heptane	µg/m ³	--	0.55 J	0.27 J	0.82 U
Hexachlorobutadiene	µg/m ³	--	2.1 U	2.1 U	2.1 U
Hexane	µg/m ³	--	0.70 U	0.70 U	0.70 U
Isopropanol	µg/m ³	--	44	45	12 U
Isopropylbenzene (Cumene)	µg/m ³	--	0.98 U	0.98 U	0.98 U
m&p-Xylene	µg/m ³	--	0.46 J	2.2 U	2.2 U
Methyl ethyl ketone (2-Butanone)	µg/m ³	--	0.85 J	0.97 J	0.92 J
Methyl tert-butyl ether	µg/m ³	--	0.72 U	0.72 U	0.72 U
Methylene chloride	µg/m ³	60	1.7 U	1.7 U	1.7 U
Methylmethacrylate	µg/m ³	--	2.0 U	2.0 U	2.0 U
Naphthalene	µg/m ³	--	1.9 J	2.0 J	2.6 U
n-Butane	µg/m ³	--	110 D	120 D	1.1 J
o-Xylene	µg/m ³	--	0.87 U	0.87 U	0.87 U
Styrene	µg/m ³	--	0.85 U	0.85 U	0.85 U
t-Butyl alcohol	µg/m ³	--	3.3 J	3.5 J	15 U
Tetrachloroethene	µg/m ³	30	1.4 U	1.4 U	1.4 U
Tetrahydrofuran	µg/m ³	--	15 U	15 U	15 U
Toluene	µg/m ³	--	0.52 J	0.54 J	0.75 U
Trichloroethene	µg/m ³	2	0.21	0.20 U	0.20 U
Trichlorofluoromethane	µg/m ³	--	1.5	1.5	1.5
Vinyl bromide	µg/m ³	--	0.87 U	0.87 U	0.87 U
Vinyl chloride	µg/m ³	--	0.20 U	0.20 U	0.20 U

Notes:

1. Table 3.1 Air Guideline Values Derived by NYSDOH in *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. Issued October 2006 Updated September 2013, and August 2015.

2. Detection Limits shown are PQL.

PQL - practical quantitation limit

µg/m³ - micrograms per cubic meter

D - Result reported from a secondary dilution analysis.

J - The reported concentration is an estimated value.

U - Not detected above the method detection limit.

BOLD = Exceeds Criteria

-- no criteria

Table 5-1
Preliminary Screening of General Response Actions for Soil
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Overview of Soil Impacts					
Soil Impacts: CVOCs probable source area		GRAs and subsequent screening applies to CVOCs in subsurface soil.			
General Response Actions	Technology	Process	Description	Applicability	
No Action	(n/a)	(n/a)	(n/a)	Applicable - Retained as a baseline to compare other remedial alternatives against.	
Limited Action	Institutional Controls	Environmental Easement	Non-physical means of enforcing a restriction on the site that limits exposure to impacted materials and prevents actions that would interfere with the remedial program.	Applicable - Limited soil impacts may be addressed by institutional controls and may be required for contamination left in place.	
		Zoning / Ordinance			
		Current Site Use			
		Site Management Plan			
In-situ Treatment	In-situ Solidification	Bucket/blender, auger rig, pressure/jet grout - Portland cement, bentonite, fly ash, slag, activated carbon blend	Solidification seeks to reduce the potential mobility of soil contaminants. Treatment is possible when mixed with solidification materials.	Not Applicable - Cost prohibitive based on limited soil impacts.	
	Physical Treatment	Solidification / Stabilization	Physical treatment technologies	Applicable - Soil vapor extraction would be applicable. Others would not be cost effective due to the small treatment area and volume.	
		Soil flushing			
		Surfactant enhanced recovery			
		Electro kinetic separation			
		Vitrification			
		Thermal resistivity			
		Electromagnetic heating			
		Heat enhanced recovery			
Removal	Excavation	Off-site Disposal	Excavate soils from impacted areas, requires off-site treatment and/or disposal	Potentially Applicable - Impacts are likely limited to area beneath machining building footprint. Approach would significantly impact building structure; a building integrity /structural assessment would be required.	
		On-Site Treatment and Backfill	Excavated soils treated on-site by one of the treatment options listed above (in-situ treatment).	Not Applicable - Based on limited impacts in soil, technologies not practical for the Site.	
Conclusion					
<p>The following technologies were identified as applicable or potentially applicable for the site conditions and will undergo initial screening:</p> <ol style="list-style-type: none"> 1) No Action 2) Institutional Controls (Limited Action) 3) Soil vapor extraction (In-situ Treatment) 4) Excavation (Off-site Disposal) 					

Table 5-2
Preliminary Screening of General Response Actions for Groundwater
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Overview of Groundwater Impacts				
Groundwater: CVOCs.			GRAs and subsequent screening apply to CVOCs in the groundwater.	
General Response Actions	Technology	Process	Description	Applicability
No Action	(n/a)	(n/a)	(n/a)	Applicable - Retained as a baseline to compare other remedial alternatives against.
Limited Action	Institutional Controls	Environmental Easement	Non-physical means of enforcing a restriction on the site that limits exposure and use of impacted groundwater and prevents actions that would interfere with the remedial program.	Applicable - May be required in addition to remediation, depending on future site use and selected remedy.
		Zoning / Ordinance		
		Current Site Use		
		Site Management Plan		
Containment	Environmental Monitoring	Groundwater Monitoring	Monitoring natural attenuation mechanisms, and plume mobility. Assumes plume is stable.	Applicable - CVOC concentrations are relatively low and will reduce with time.
		Monitored Natural Attenuation		
Containment	Physical Containment	Slurry Wall, Solidification, Sheet Pile	Geotechnical methods for the isolation of source areas, thus preventing the ongoing migration of contaminants. Methods include sheet pile walls, diaphragm walls and bentonite slurry walls. Barrier will likely alter natural groundwater flow paths.	Not Applicable - This is a passive technology that would not treat VOCs within the groundwater. Requires significant civil works to install barrier wall. May be feasible in future phase if remediation works are unsuccessful.
	Hydraulic Containment	Induced Drawdown - Pump and Treat	Proven method for containment of dissolved phase contaminants. Extraction wells intercept groundwater and recirculate back to upgradient injection locations until contaminants have attenuated.	Not Applicable - Requires installation of extraction wells, and relies completely on attenuation for remediation. Requires long-term infrastructure and operation which does not meet Site objectives.
In-situ Treatment	Biological Treatment	Aerobic	Aerobic bioremediation enhances biodegradation of with the addition of oxygen and/or limiting nutrients to subsurface.	Applicable - Aerobic bioremediation process is applicable to some CVOCs (e.g., chloroethane, vinyl chloride). Could be applied as a polish step after another remedial technology.
		Anaerobic	Anaerobic bioremediation enhances anaerobic reductive degradation by adding electron donor (carbon substrate and/or nutrients) to stimulate the microbial activity of dechlorinating bacteria.	Applicable - Anaerobic bioremediation is effective for CVOCs found in groundwater at the Site. Based on presence of degradation products, reductive dechlorination may be occurring naturally. Process could also be applied as a polish step after another remedial technology.
		Bioaugmentation	Bioaugmentation comprises adding a known contaminant-degrading microbial culture (e.g., KB-1) to accelerate the bioremediation process.	Applicable - Additional microbial cultures may enhance and/or increase the rate of biodegradation at the Site.
	Chemical Treatment	In-situ Chemical Oxidation (Injection)	Apply chemical oxidant into subsurface for oxidation/destruction of contaminants in soil and groundwater. Strong oxidants require careful handling procedures.	Applicable - Chemical oxidation has been demonstrated to directly treat CVOC contaminants. Injection requires conservative design and more injection points. In-situ soil mixing allows for effective contact between oxidants and VOCs but may limit redevelopment schedule/reuse.
	In-situ Chemical Reduction	Inject amendments to treat subsurface contaminants through reduction reactions (i.e., zero valent iron).	Applicable - In-situ Chemical Reduction most commonly applied for CVOCs. In-situ chemical reduction also enhances bioremediation of CVOCs by reductive dechlorination.	

Table 5-2
Preliminary Screening of General Response Actions for Groundwater
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Overview of Groundwater Impacts				
Groundwater: CVOCs.			GRAs and subsequent screening apply to CVOCs in the groundwater.	
General Response Actions	Technology	Process	Description	Applicability
In-situ Treatment	Physical Treatment	Air Sparging	Strips VOCs from groundwater through addition of air below treatment zone, transferring VOCs to vapor phase for extraction and can enhance aerobic biodegradation by injecting air and providing oxygen source.	Not Applicable - Cost prohibitive based on limited impacts and low concentrations.
		Soil Vapor Extraction	Strips VOCs from groundwater, transferring VOCs to vapor phase for extraction.	Not Applicable - Cost prohibitive based on limited impacts and low concentrations.
		Electrical Resistive Heating (ERH)/Thermal Conductive Heating (TCH)	In-situ thermal remediation generates heat in-situ or applies heat directly to the subsurface, raising the temperature to above the boiling point of the target VOC contaminants (typically ~100°C or greater) and evaporating VOCs from the soil. Vapors are collected from the subsurface through soil vapor extraction wells for subsequent above-ground treatment.	Not Applicable - Cost prohibitive based on limited impacts and low concentrations.
		Pump and Treat	Impacted groundwater is pumped from the subsurface and treated ex-situ using air strippers, adsorption, and/or filtration	Not Applicable - Cost prohibitive based on limited impacts and low concentrations.
		High Vacuum Multi-phase Extraction (MPE)	Utilize high vacuums to extract groundwater and expose impacted upper saturated zone soil for vapor extraction. Provides aggressive contaminant removal. Ideally applied in 48-hour continuous events.	Not Applicable - Cost prohibitive based on limited impacts and low concentrations.

TABLE 6-1
EVALUATION OF TECHNOLOGIES AND PROCESS OPTIONS
EKONOL POLYESTER RESINS BCP SITE
WHEATFIELD, NEW YORK

General Response Action	Remedial Technology	Process Option	Effectiveness	Implementability	Relative Cost	Screening Comments	COCs		
							Groundwater	Soils	Soil Vapor
No Action	No Action	None	Not effective by itself. Does not mitigate potential risk or exposures, does not comply with SCGs, does not reduce contaminant concentrations within a reasonable period of time.	No action makes this the easiest technology alternative to implement.	No cost	Retained.	X	X	X
Limited Action	Institutional Controls	Environmental Easement	Effective in preventing exposure to construction/utility/maintenance workers and visitors.	Limited actions can make this response action easy to implement. Additional actions may be required in the future.	Low. Additional costs for remediation may be required in the future.	Retained for use in conjunction with other options.	X	X	X
	Monitoring	Monitored Natural Attenuation	Natural attenuation will reduce contaminant concentrations, but the timeframe to meet RAOs may be long.	Environmental sampling and the sampling for parameters associated with natural attenuation is standard practice for contaminated sites.	Low. O&M costs for monitoring and reporting may be required for a long period of time.	Retained for use in conjunction with other options.	X	X	X
Treatment	Biological	Enhanced Bioremediation	Treatment technology has been shown to be effective in reducing mass of organic contaminants. Does not generate large amounts of waste material.	Easily implemented because remedial actions are limited to application to an open excavation or injection through semi-permanent wells.	Low to Moderate. Bioaugmentation may be required.	Retained for use in conjunction with other options.	X		X
	Chemical	In-situ Chemical Oxidation	Treatment technology has been shown to be effective in reducing mass of organic contaminants over a short period of time. Does not generate large amounts of waste material.	Easily implemented because remedial actions are limited to injection and monitoring. Technology could lead to preferential pathways, daylighting, and adverse impacts to buried utilities and structures. Additional injections may be required in the future.	Moderate.	Not Retained.	X		X
		In-situ Chemical Reduction	Treatment technology has been shown to be effective in reducing mass of organic contaminants over a short period of time. Does not generate large amounts of waste material.	Easily implemented because remedial actions are limited to injection and monitoring. Technology could lead to preferential pathways, daylighting, and adverse impacts to buried utilities and structures.	Moderate to high.	Not Retained.	X		X
	Mechanical	Soil Vapor Extraction	Treatment technology has been shown to be effective in reducing mass of organic contaminants in soil and groundwater. Does not generate large amounts of waste material.	Would require subsurface and above grade equipment installation and operation.	Medium	Not retained. Would only address impacts in soil. Limited effect on impacts in groundwater.	X	X	X

Notes:

COCs = constituents of concern

HVAC = heating, ventilation and air conditioning

Shading indicates Process Option not retained

Table 7-1
Criteria Comparison and Ranking of Remedial Alternatives
Ekonol Polyester Resins BCP Site
Wheatfield, New York

Alternative	Overall Protection of Human Health & the Environment	Compliance with SCGs	Long-Term Effectiveness and Permanence	Reduction of Toxicity, Mobility, and Volume through Treatment	Short-Term Effectiveness	Implementability	Land Use	Green Remediation	Cost	Total Score/Relative Ranking
Ranking:	3	3	3	3	3	1	3	1	Not ranked	20
Alternative 1 No Action	Alternative would not be protective because there would be no removal, immobilization, or containment of impacted materials and there would be no monitoring or administrative means to prevent exposure.	Chemical SCGs would be met over time. However, the alternative does not include monitoring to assess compliance with SCGs.	Alternative would be not be effective as it does not involve removal, treatment or containment. There would be no monitoring or administrative means to prevent exposure.	Alternative would reduce volume and toxicity over time through natural attenuation. However, alternative does not include monitoring to evaluate contaminant reduction.	Alternative requires no action but would not effectively reduce contaminant levels.	Alternative requires no technical or administrative action, and therefore is easy to implement.	With no action, alternative would have no impact on land use. However, contamination would remain in place reducing potential for redevelopment and potential property values.	Alternative involves no remedial action.	This alternative is required by DER-10 and is retained as a baseline alternative for comparison purposes. No cost generated.	3
Ranking:	2	2	2	2	2	2	2	2	3	19
Alternative 2 Maintenance of Site Cover, Maintain Bioreactor Trenches, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/ECs	Alternative would be protective with enhanced bioremediation of residual impacts in source area. However, groundwater impacts would remain, but decrease over time in areas away from the source area.	Alternative would meet chemical specific SCGs over time. Action- and location-specific SCGs would be met.	Bioremediation occurring in the bioreactor trenches would reduce impacts in overburden source area. Impacts away from source area and in bedrock would decrease over time.	Bioremediation occurring in the bioreactor trenches in overburden would reduce volume and toxicity in source area. Remaining VOC impacts would decrease over time through MNA.	Bioremediation occurring in the boreactor trenches in overburden would eventually reduce volume and toxicity in source area, but would require time to be effective.	Alternative would be easy to implement.	Bioremediation and MNA would attain SCGs over a period of time, thereby requiring land use restrictions until impacts achieve unrestricted use SCGs.	Alternative relies on natural processes in less contaminated areas to reduce volume, toxicity, and mobility, which is viewed favorably by DER 31. Limited environmental impact would occur from injections, sampling and laboratory activities.	\$532K	2
Ranking:	1	1	3	1	1	3	1	3	1	15
Alternative 3 Maintenance of Site Cover, Maintain Bioreactor Trenches, Enhanced In-situ Treatment of Bedrock Groundwater, MNA of Dissolved-Phase Impacts in Overburden and Bedrock Groundwater, SMP with ICs/Ecs	Alternative would be protective with bioremediation of residual overburden impacts in source area via the bioreactor trenches and enhanced bioremediation in the bedrock. However, groundwater impacts would remain, but decrease over time in areas away from the source area.	Chemical SCGs would be met over time. Action- and location-specific SCGs would be met over time. Time-frame expedited through bedrock groundwater treatment.	Bioremediation occurring in the bioreactor trenches would reduce impacts in the overburden source area and enhanced bioremediation in the bedrock bedrock would reduce volume and toxicity in source area more rapidly. Remaining VOC impacts would decrease over time through natural attenuation.	Bioremediation in the overburden bioreactor trenches and enhanced bioremediation in the bedrock bedrock would reduce volume and toxicity in source area and downgradient faster than Alternative#2, but would require time to be effective.	Enhanced bioremediation in bedrock would eventually reduce volume and toxicity in source area and downgradient faster than Alternative#2, but would require time to be effective.	Alternative would be more difficult than Alternative #2, but is not anticipated to be problematic and therefore should be relatively easy to implement, but installation of bedrock injection wells, if necessary, requires additional effort.	Bioremediation and MNA would attain SCGs over a period of time. Land use restrictions would remain in place until impacts achieve unrestricted use SCGs, although the time-frame would be reduced through bedrock treatment.	Alternative relies on natural processes in less contaminated areas to reduce volume, toxicity, and mobility, which is viewed favorably by DER 31. This alternative is slightly less favorable than Alternative#2 since it would involve the addition of amendments to the bedrock over an above that for Alternative#2. Limited environmental impact would occur from well installation, injections, sampling and laboratory activities.	\$472K	1

Notes:

Ranking scale of 1 through 3, with 1 being most favorable and 3 being least favorable

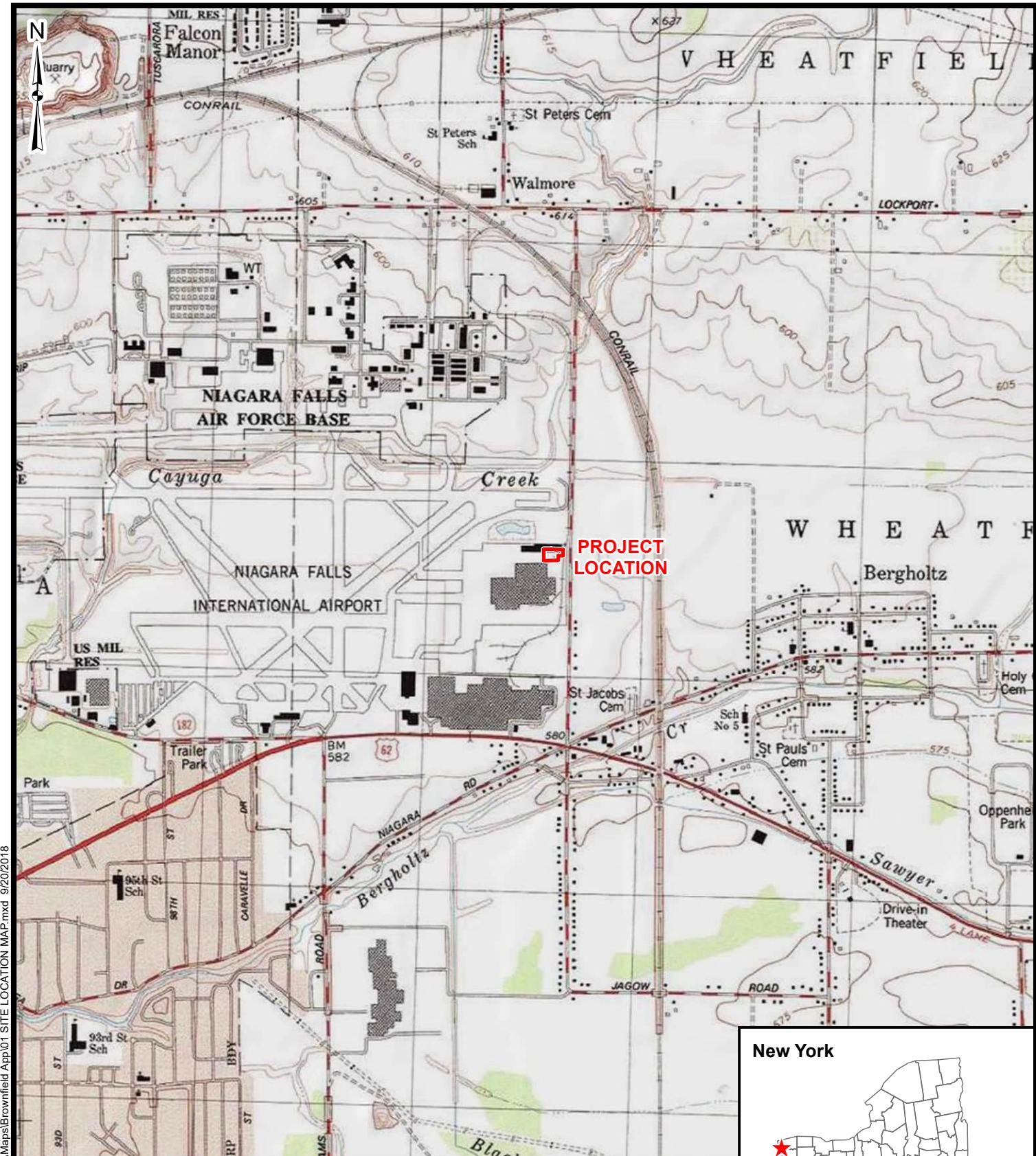
HASP - health and safety plan

IC - institutional control

MNA - monitored natural attenuation

SCG - standards, criteria, and guidance

Figures



J:\Projects\60481767_BPIOMISCGIS\Ekonol\Maps\Brownfield App\01 SITE LOCATION MAP.mxd 9/20/2018

Source: USA Topo Maps, ESRI Map Service;
1:24,000-scale USGS Topographic Map,
Ransomville, 1996
Tonawanda West, 1996

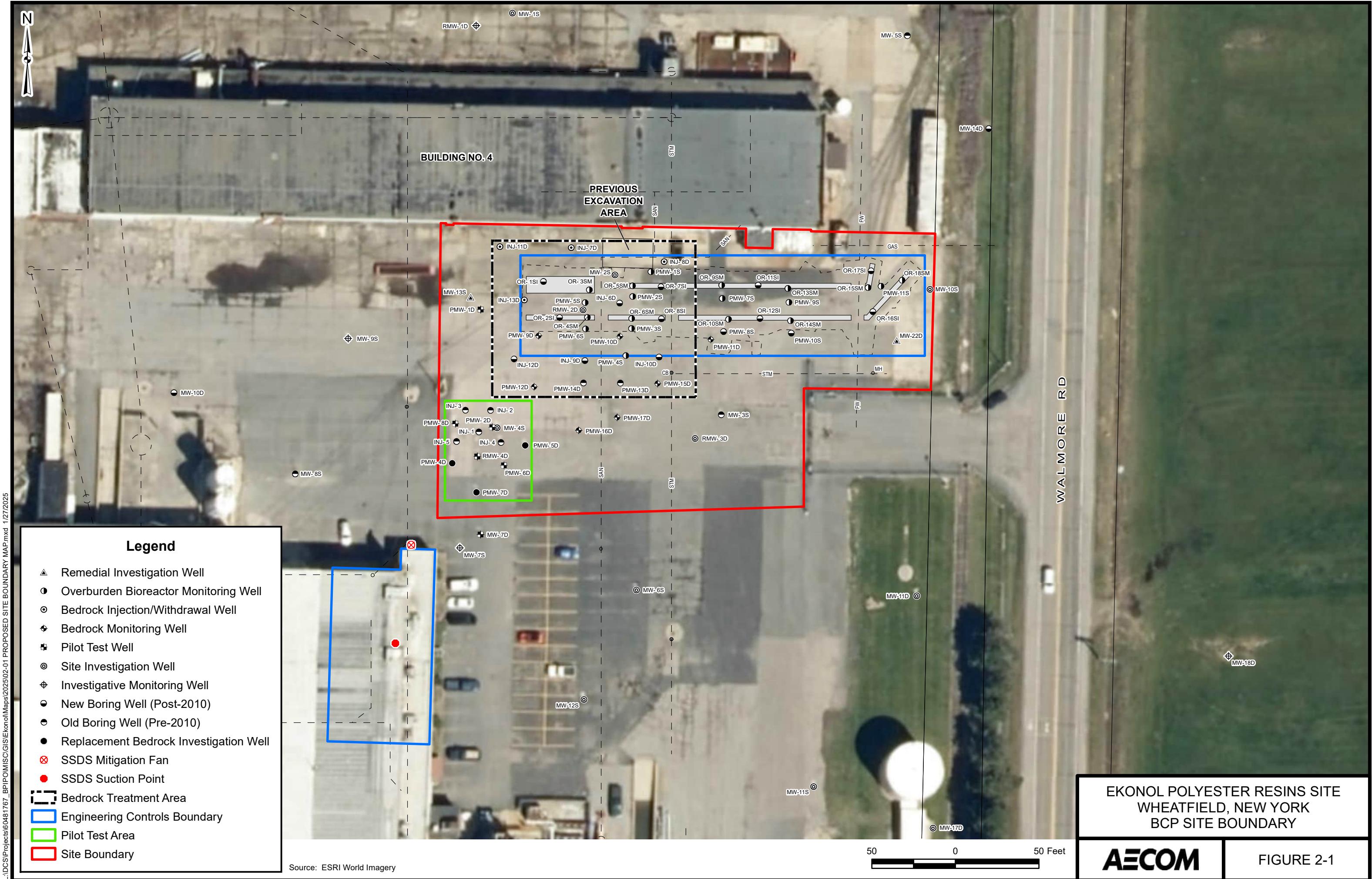
2,000 0 2,000 Feet

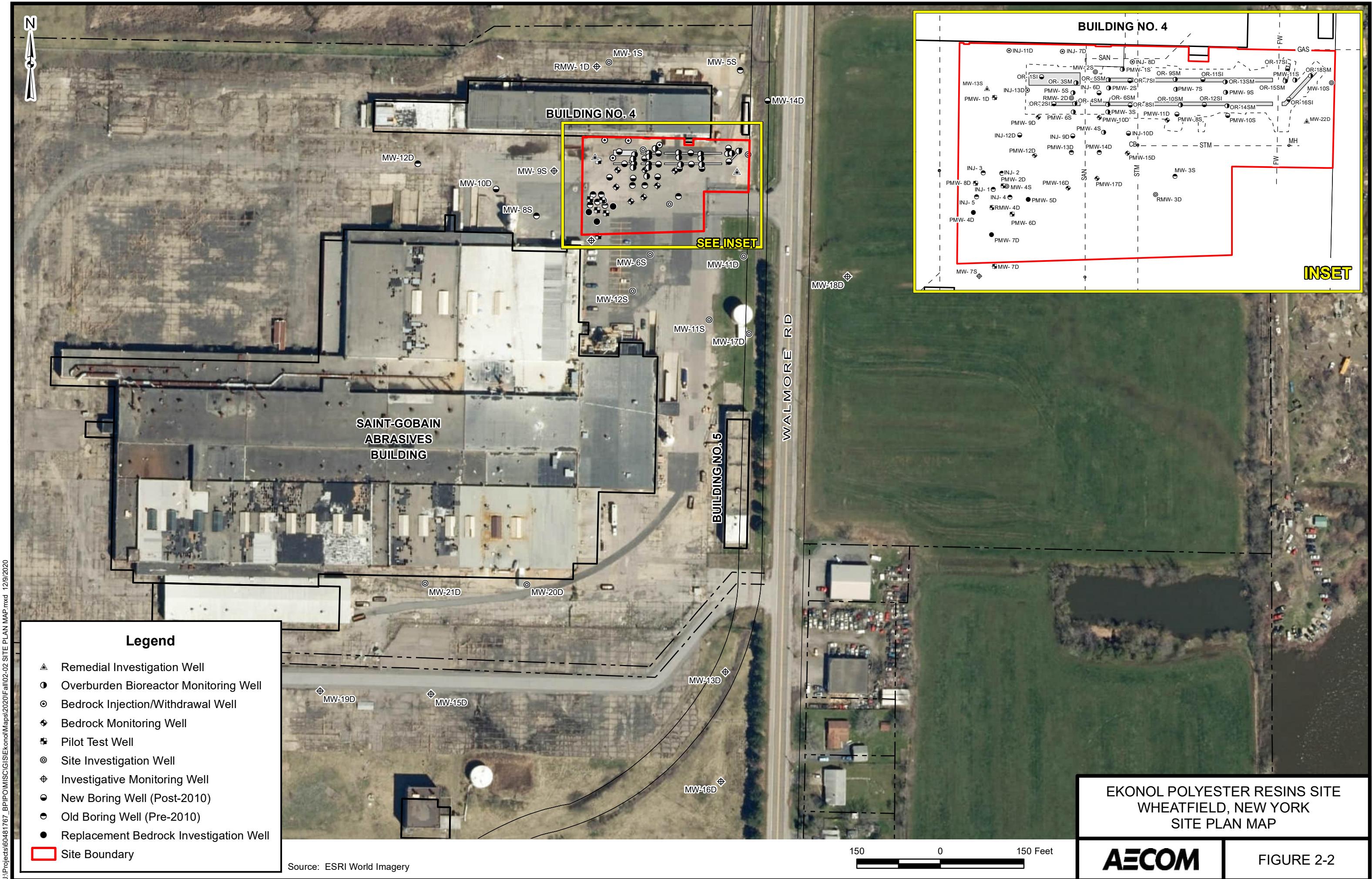


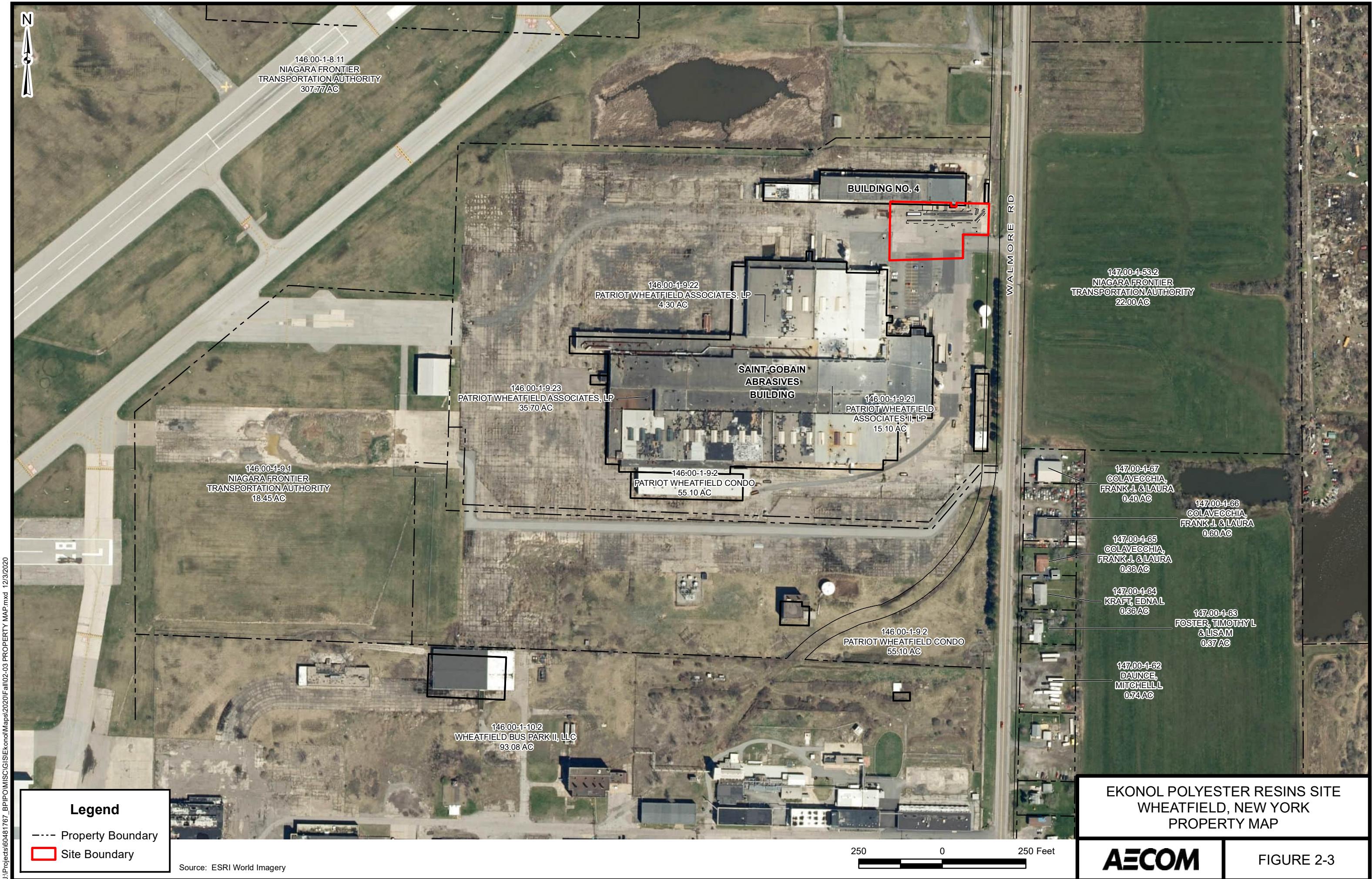
EKONOL POLYESTER RESINS SITE WHEATFIELD, NEW YORK SITE LOCATION MAP

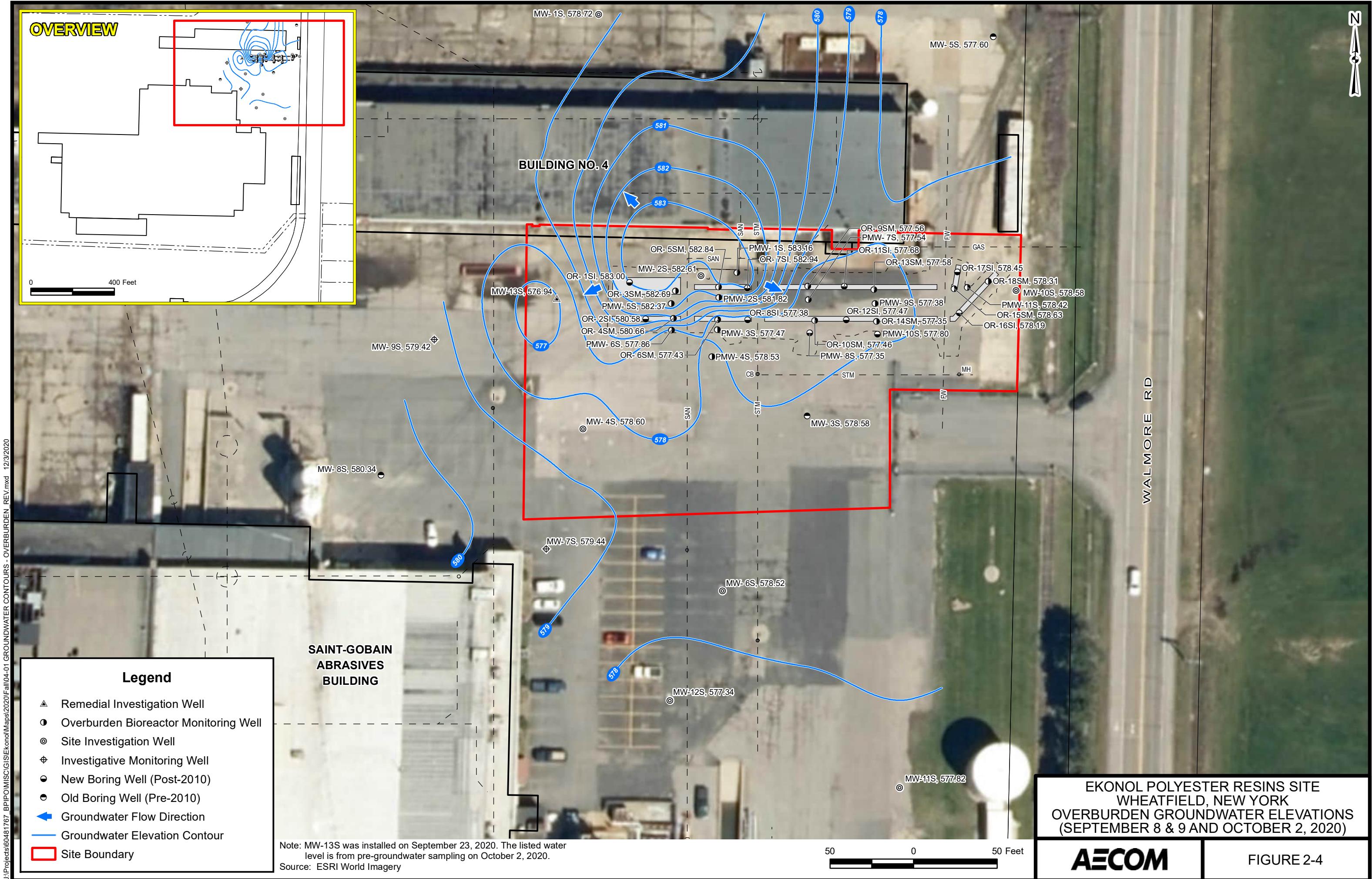


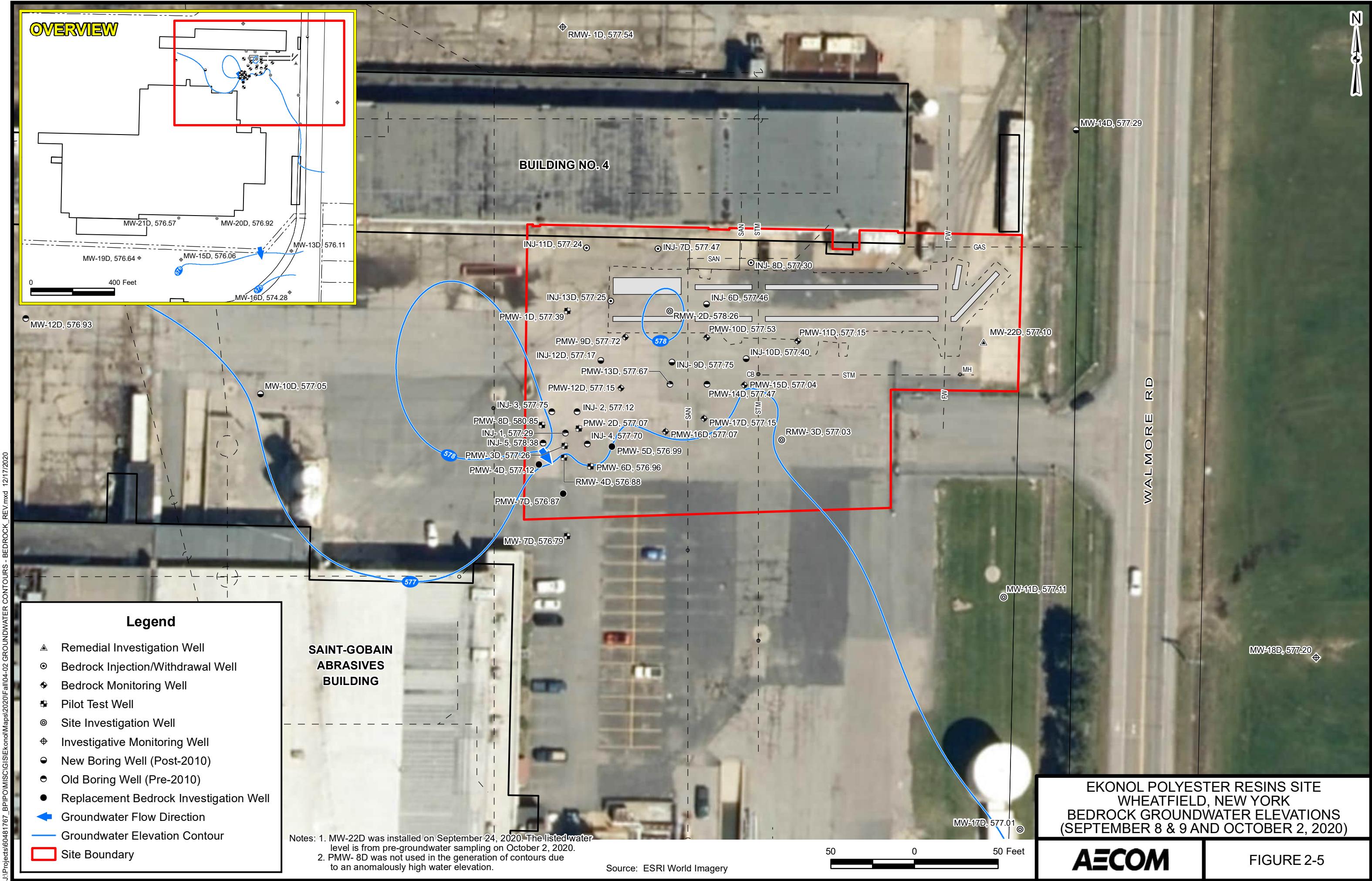
FIGURE 1-1

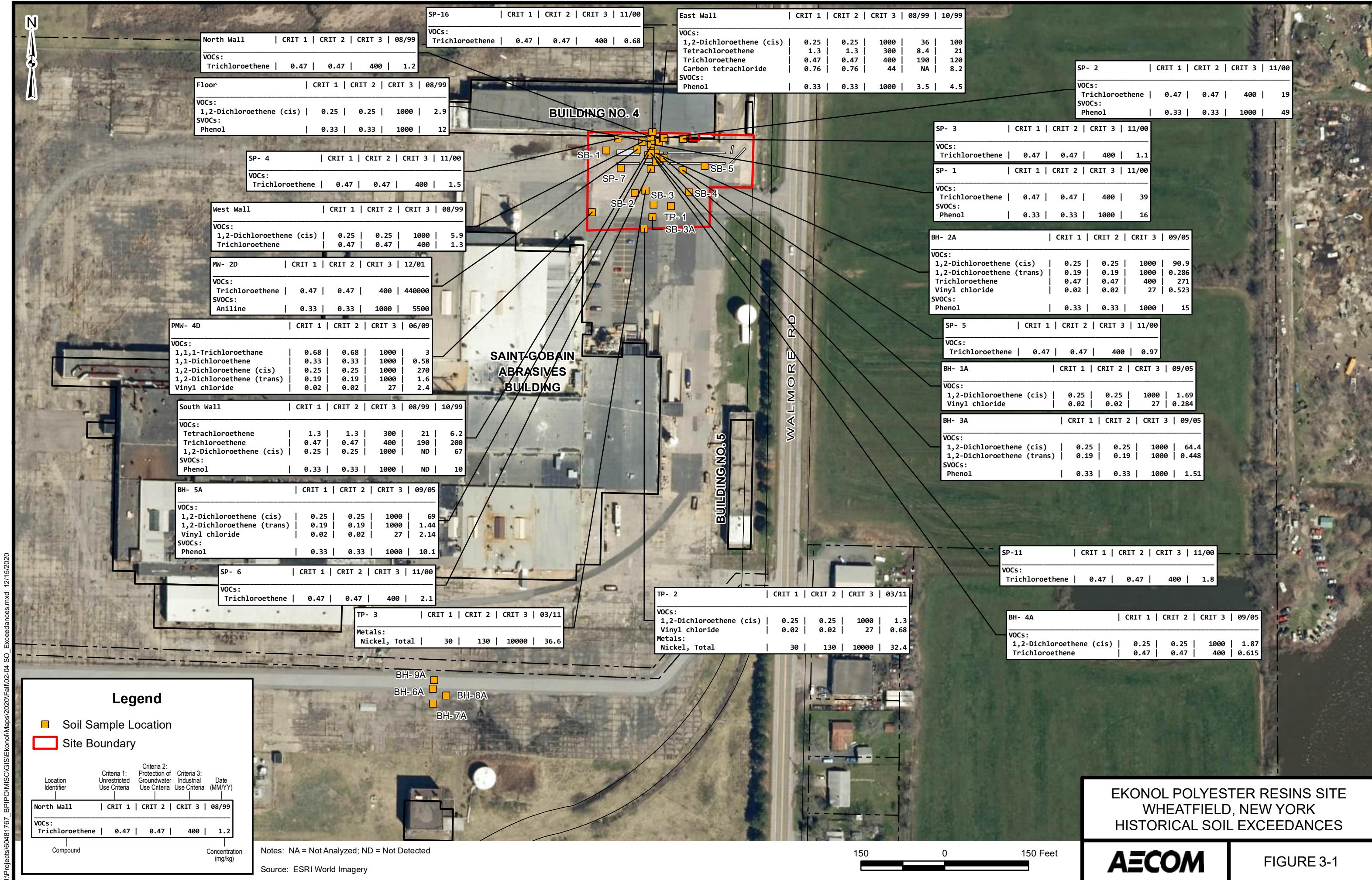


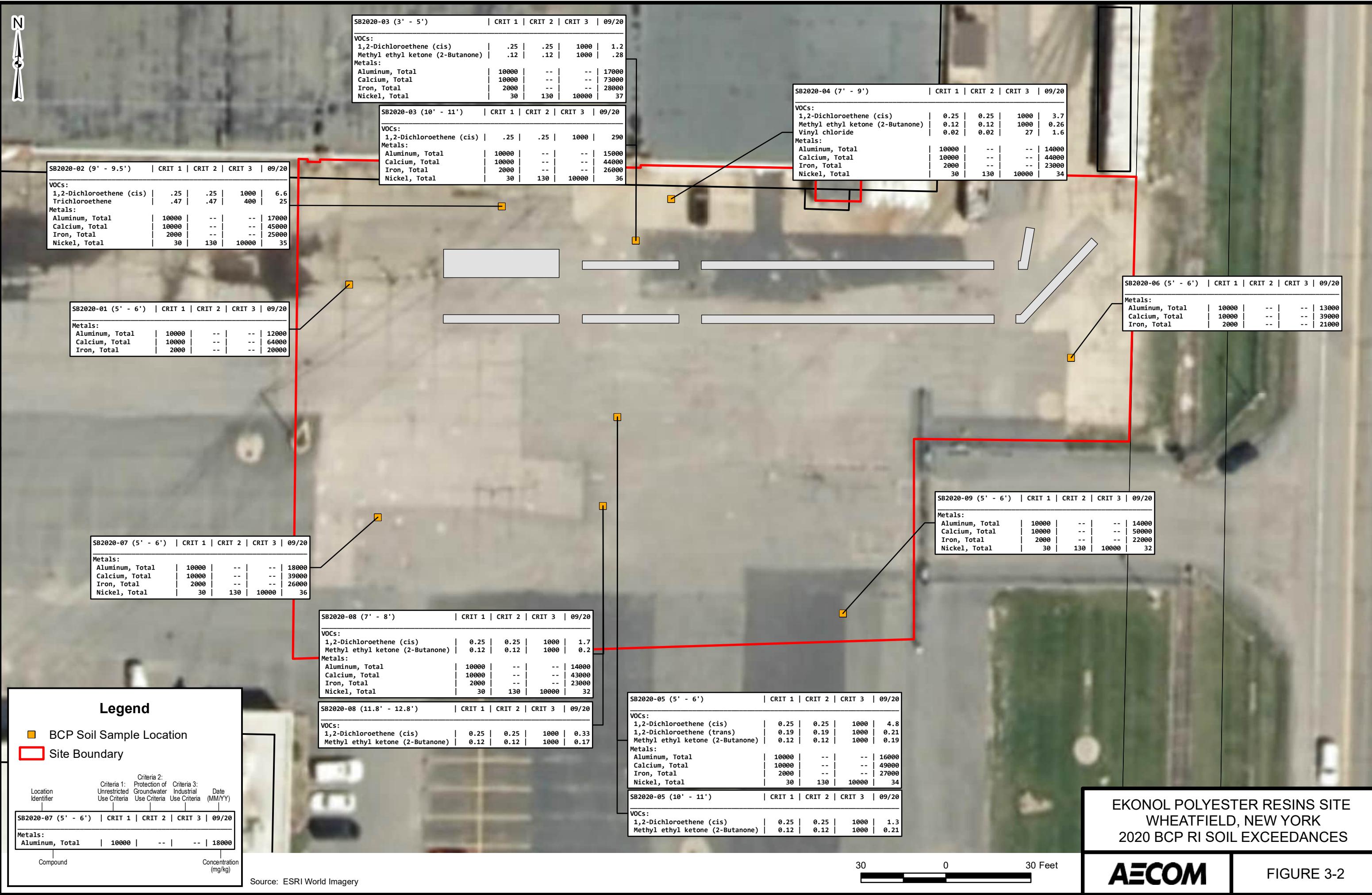


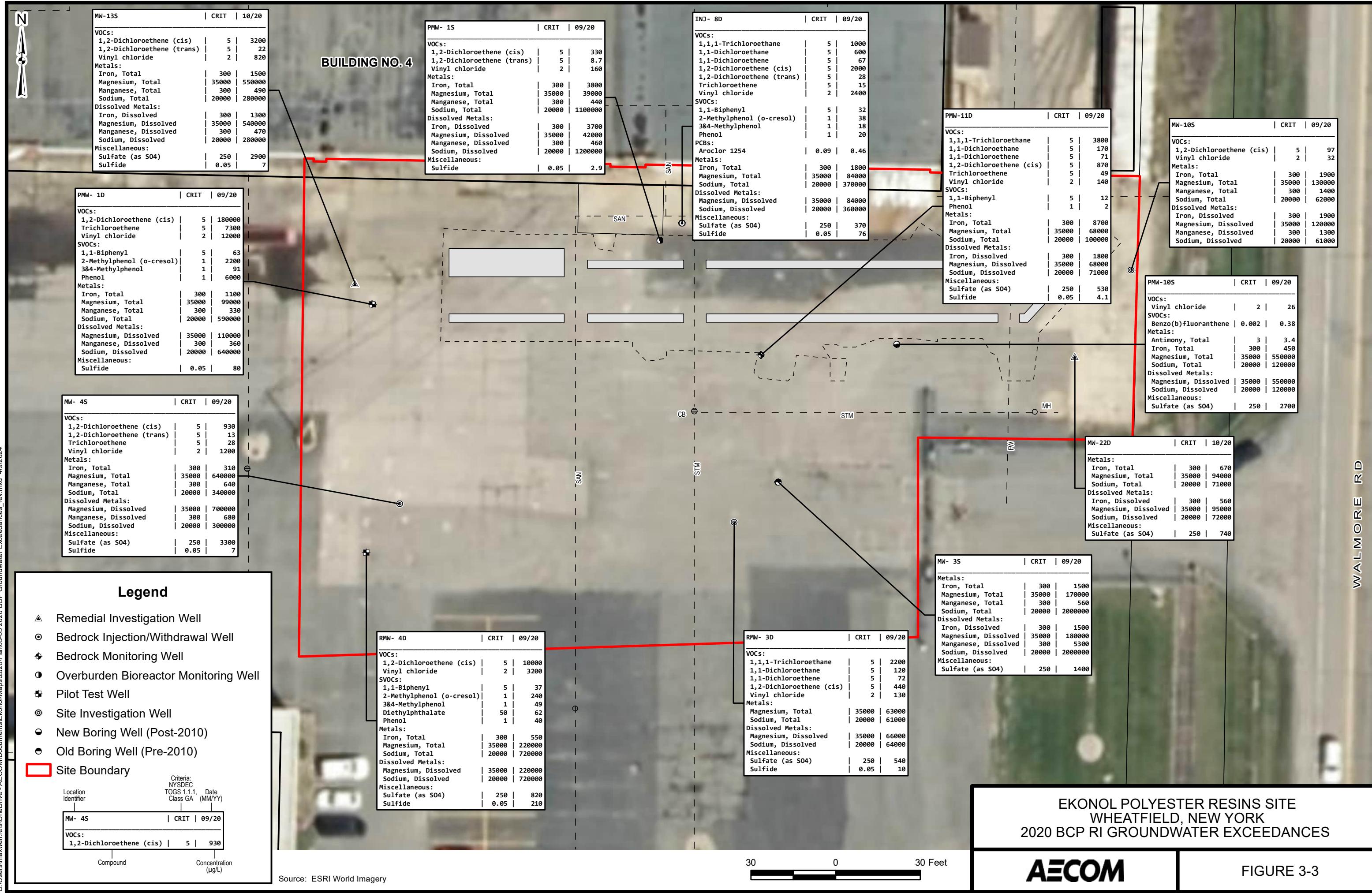


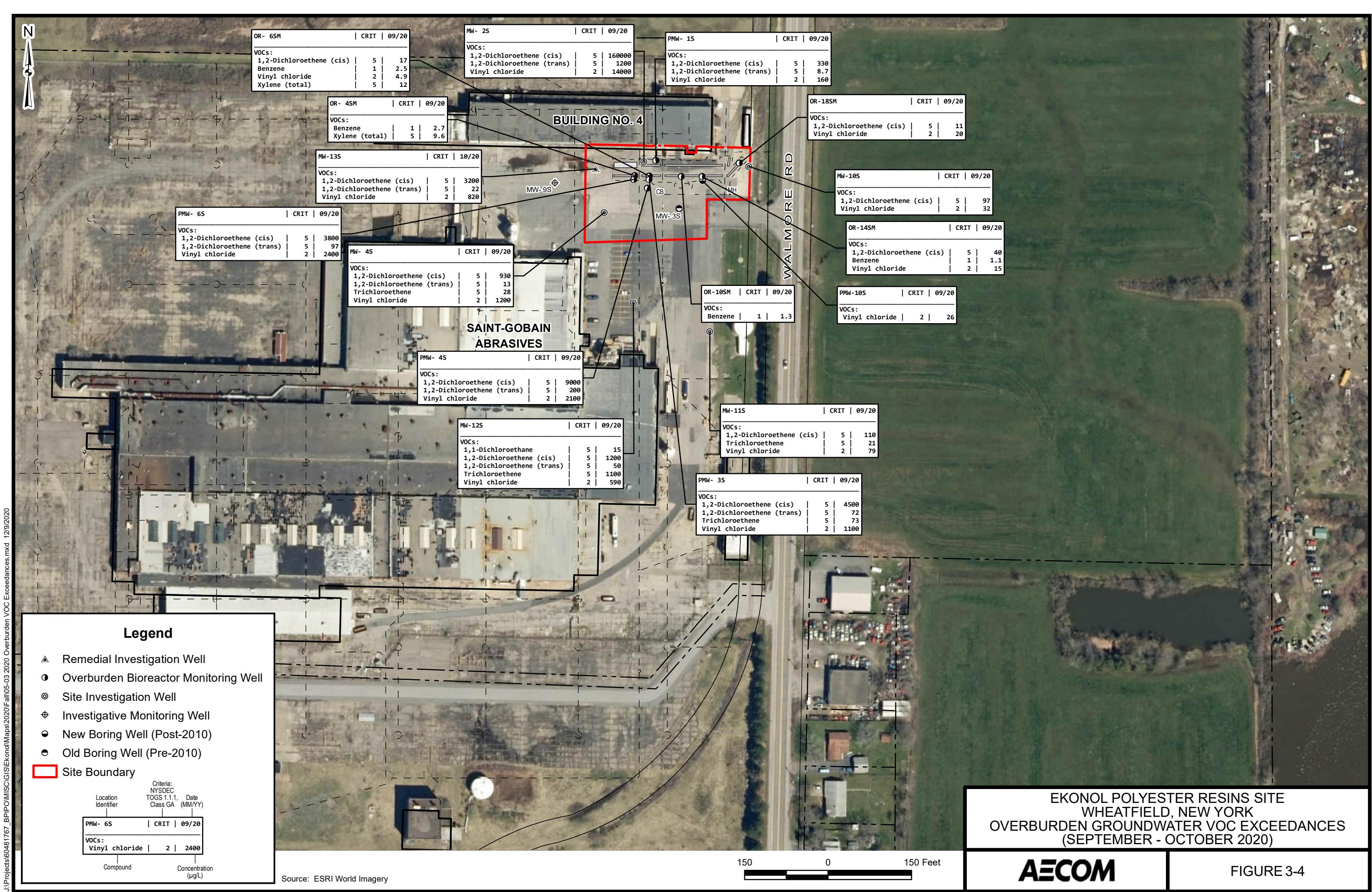


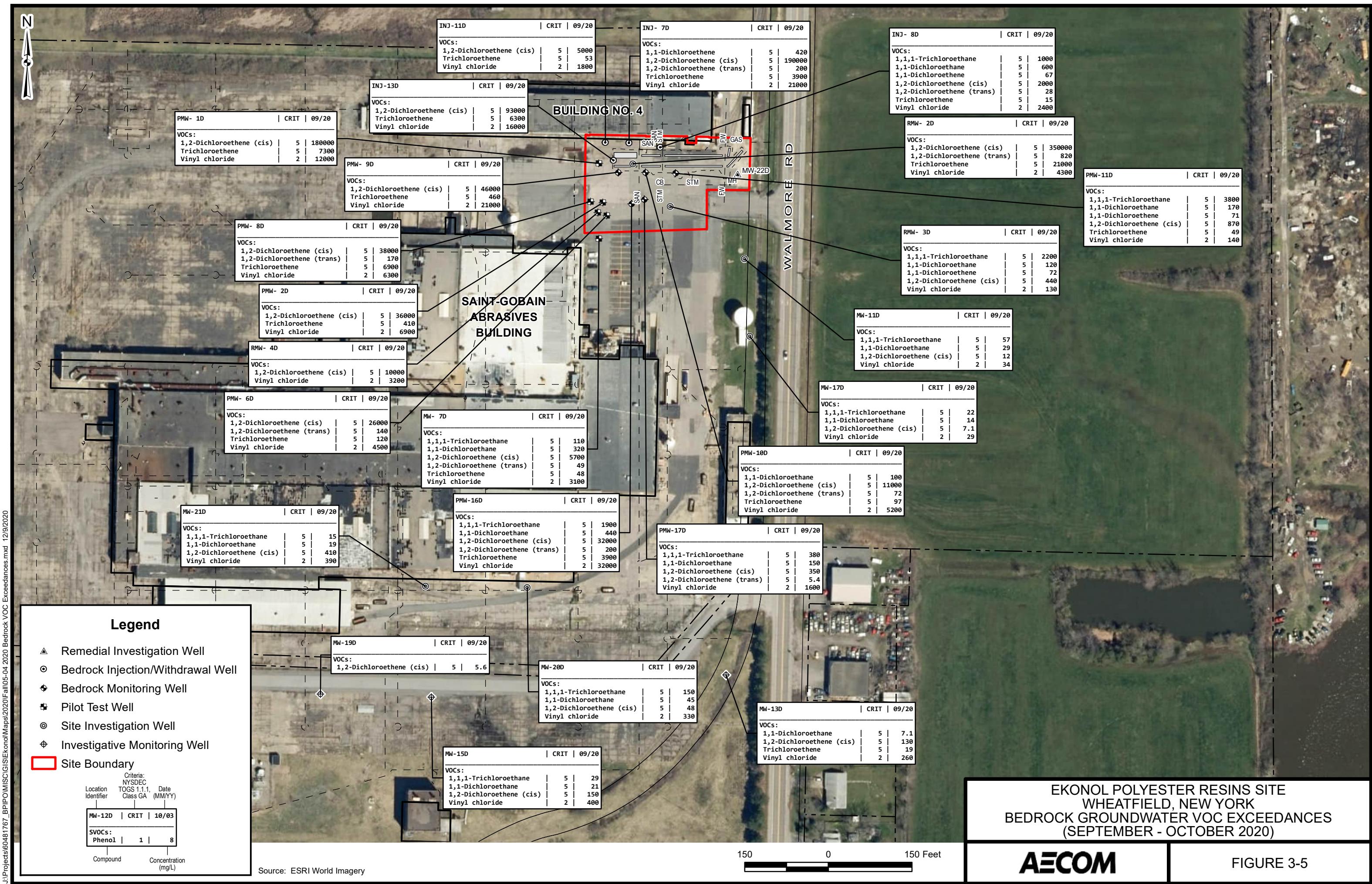


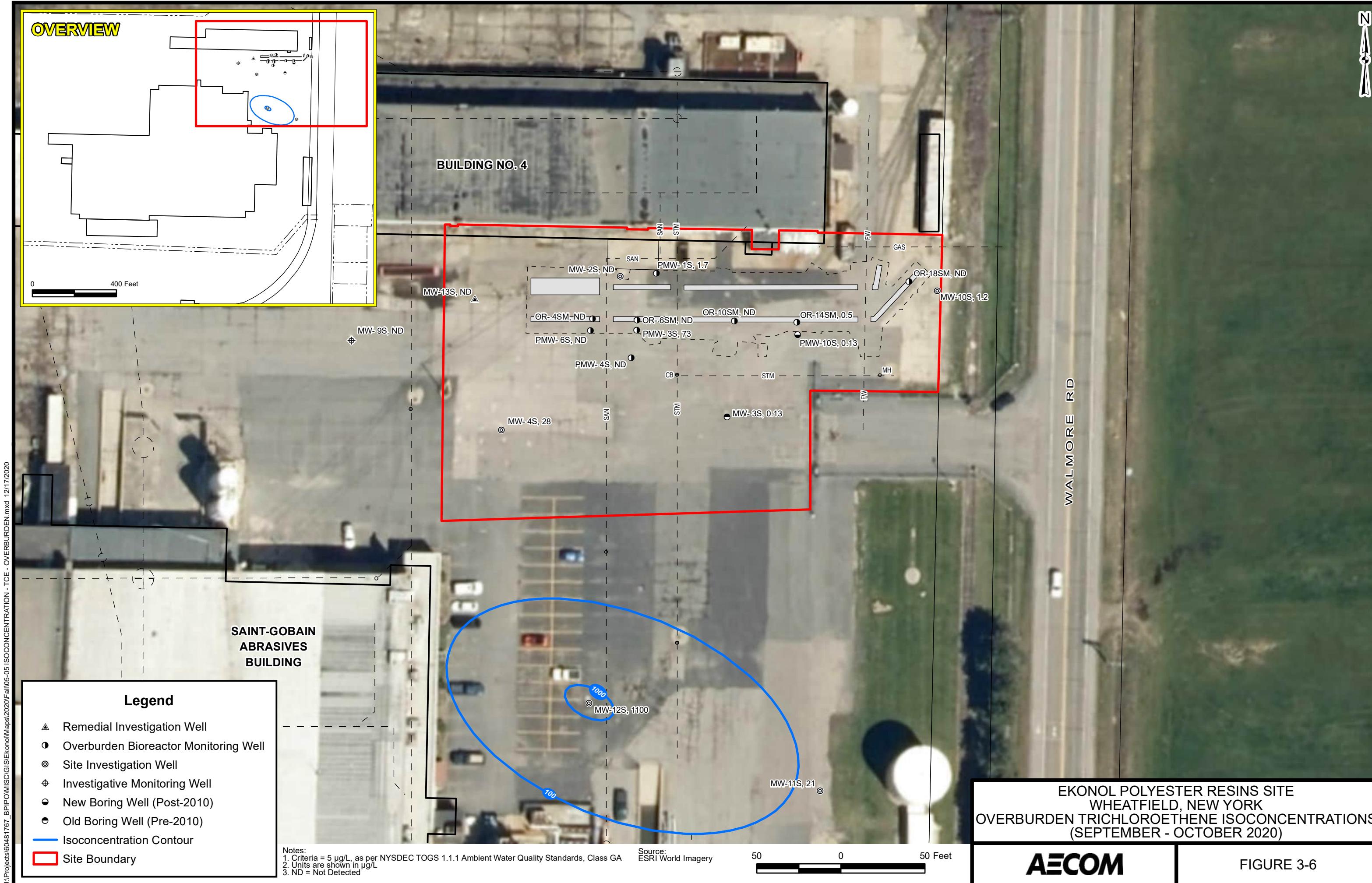


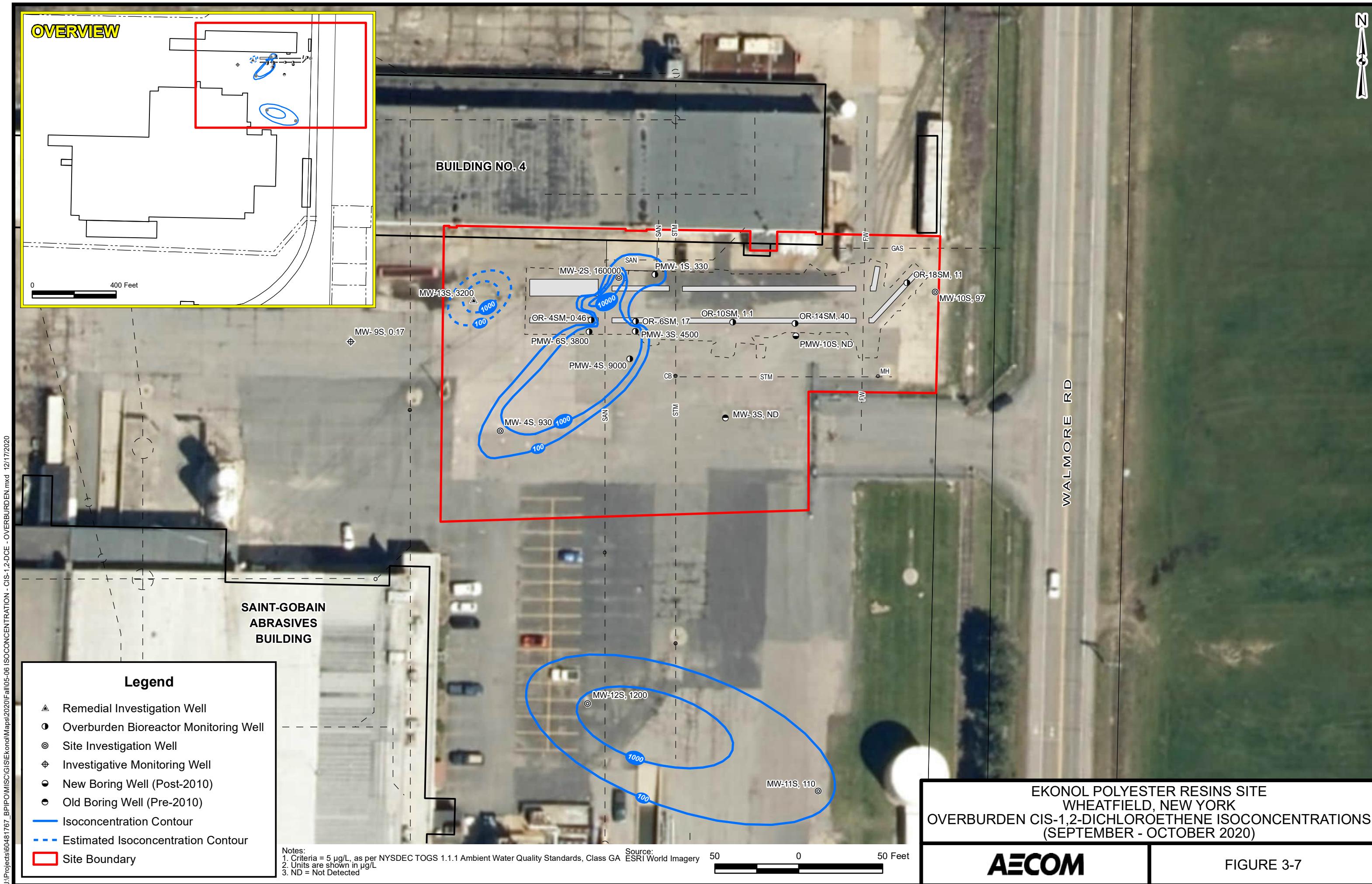


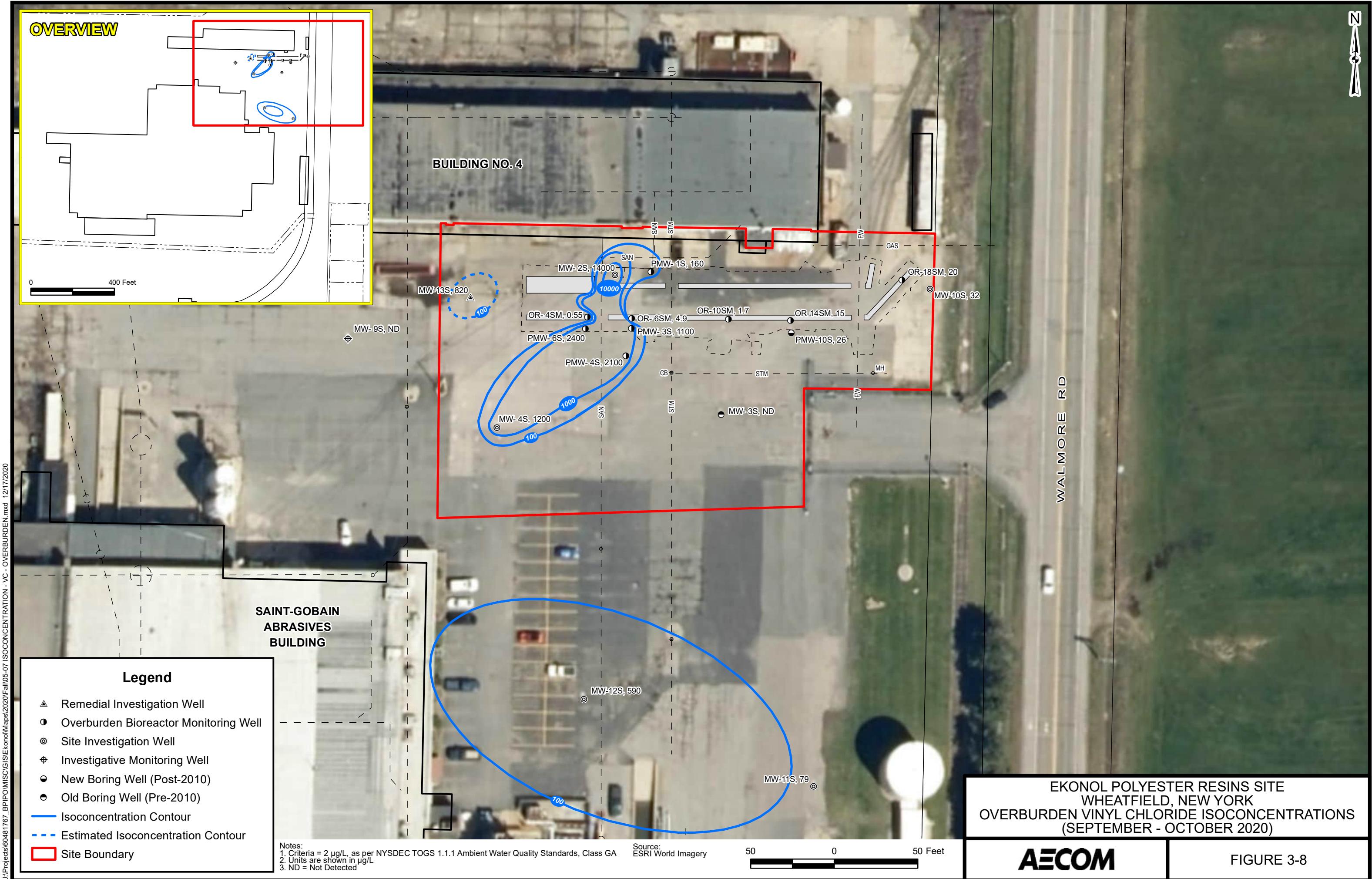


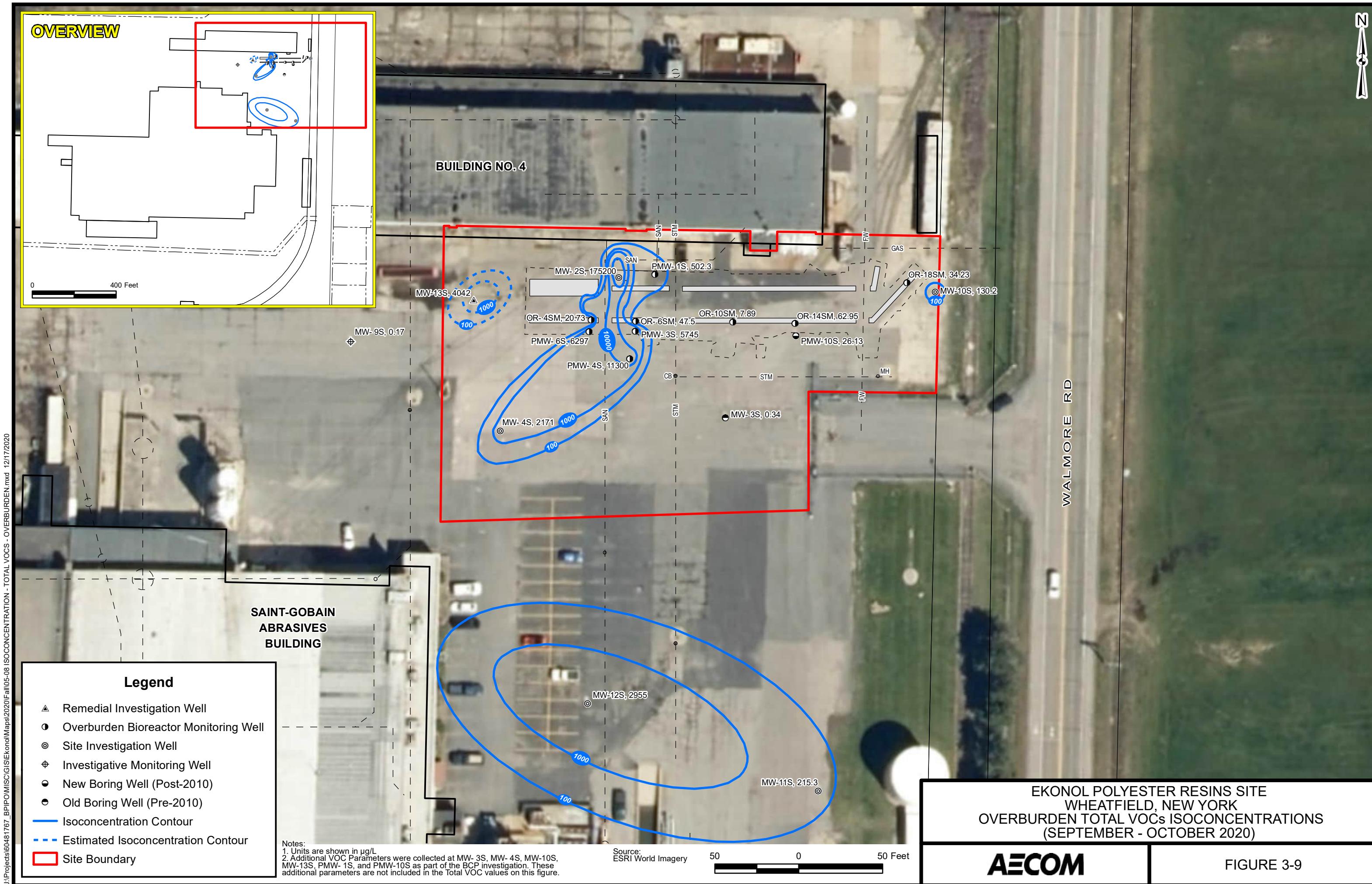


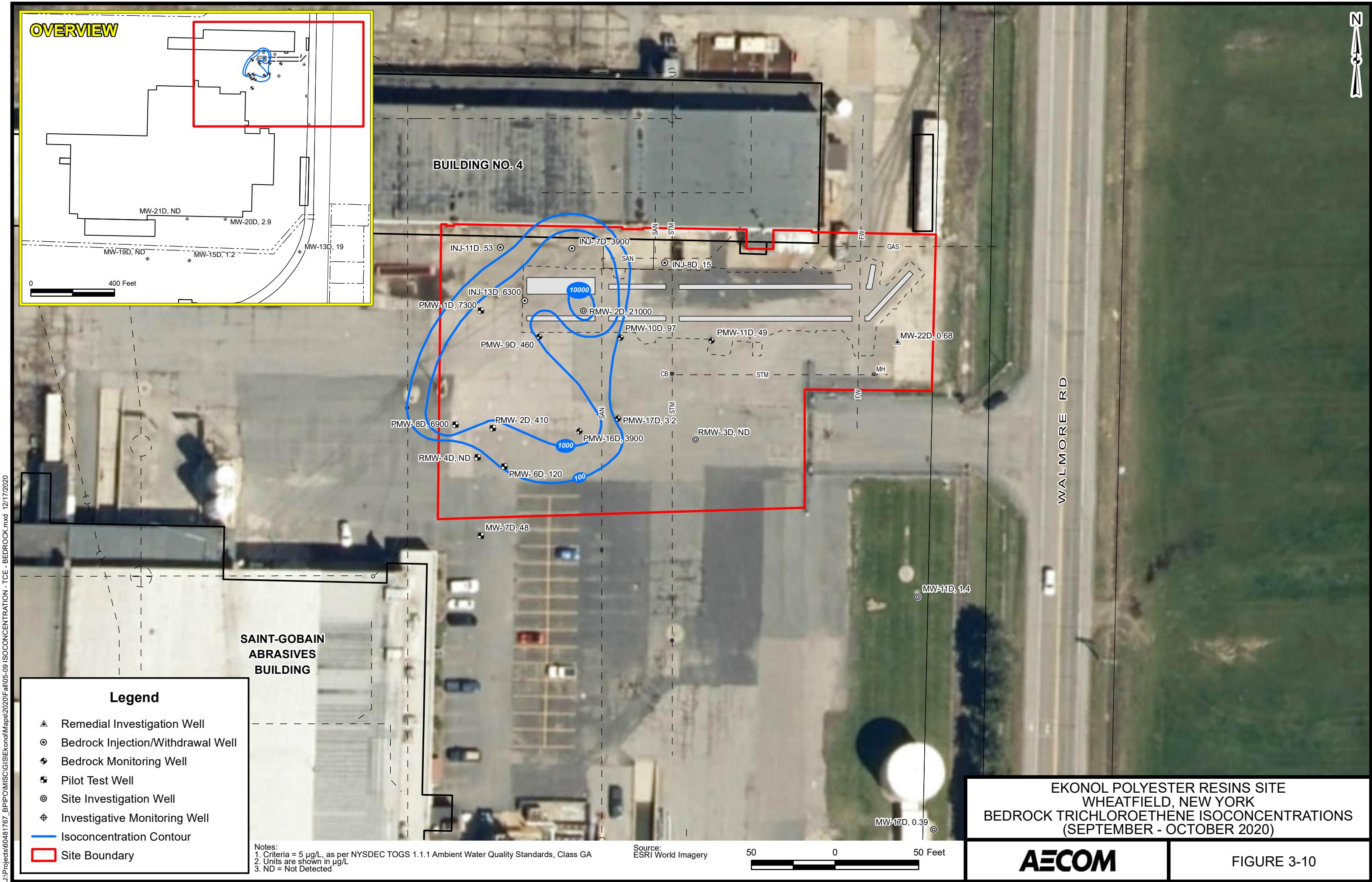


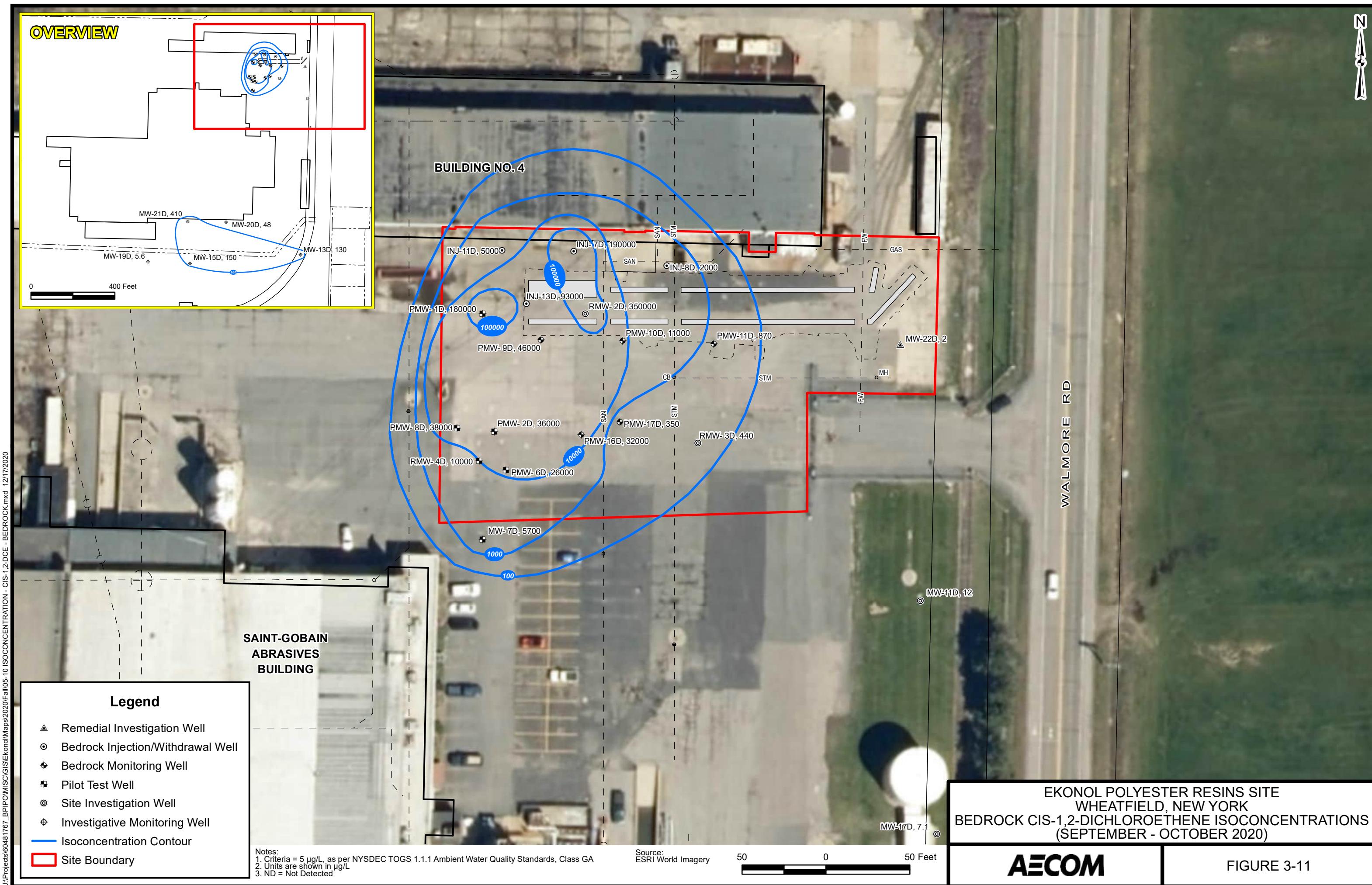


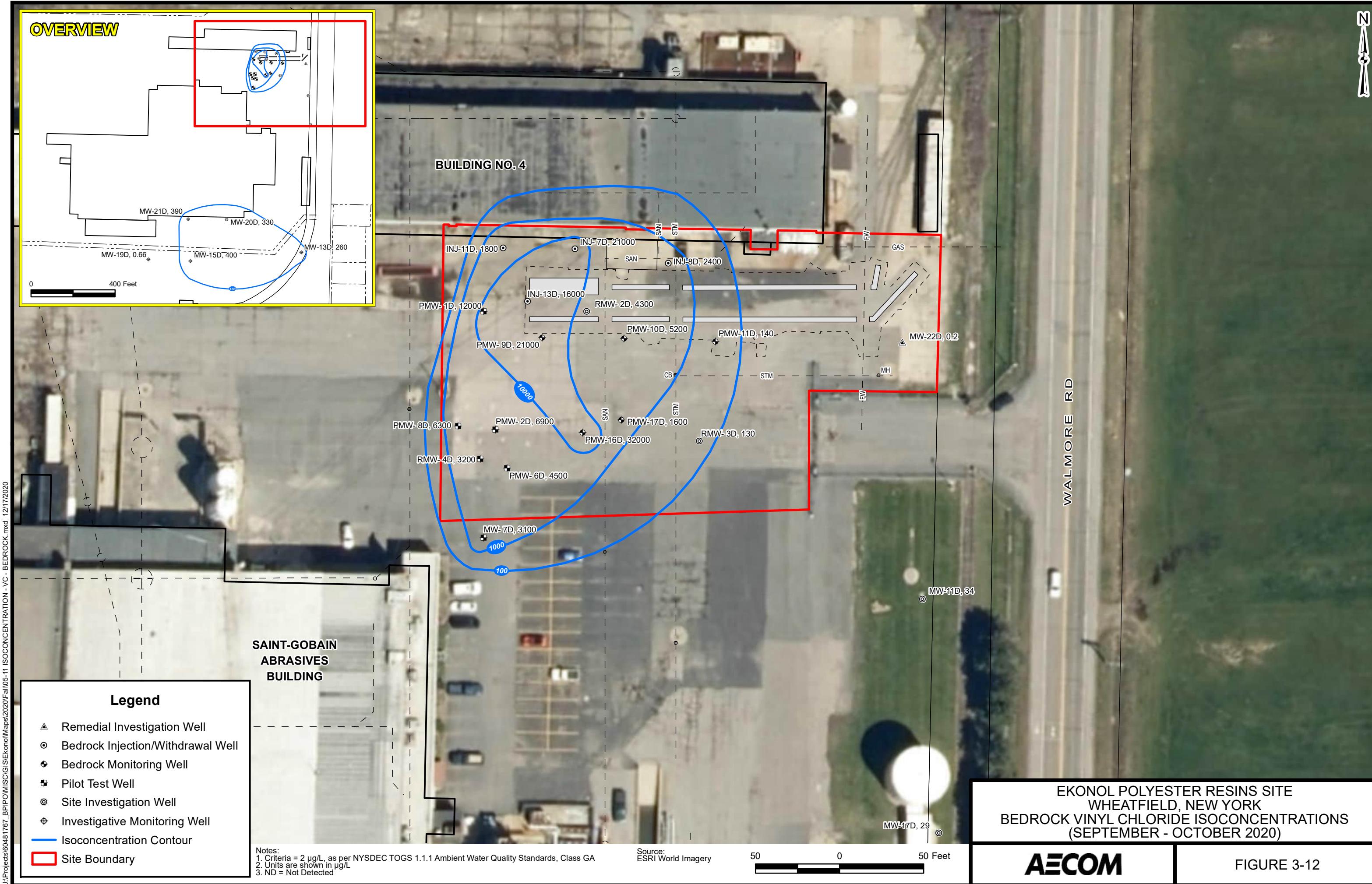


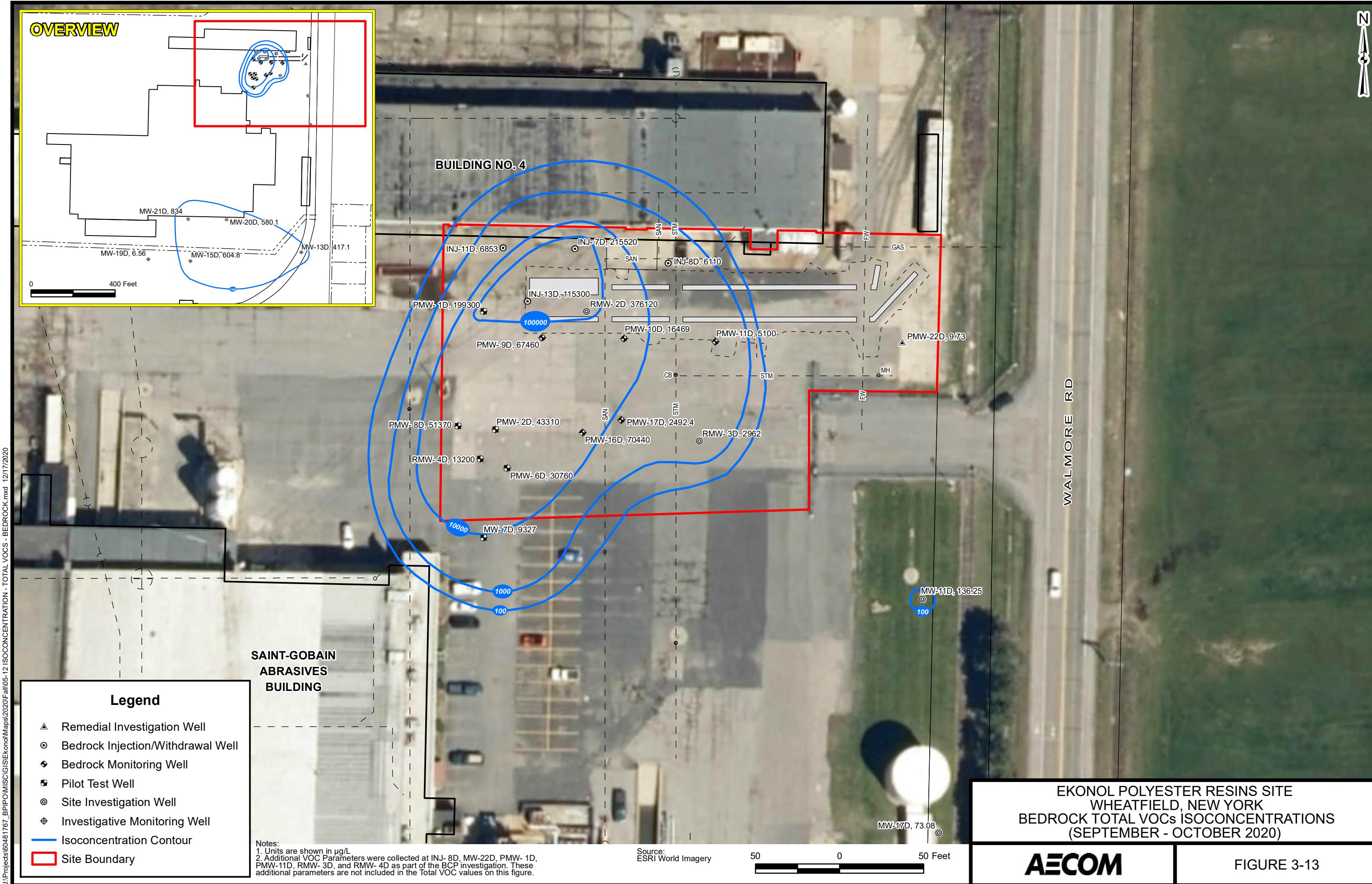


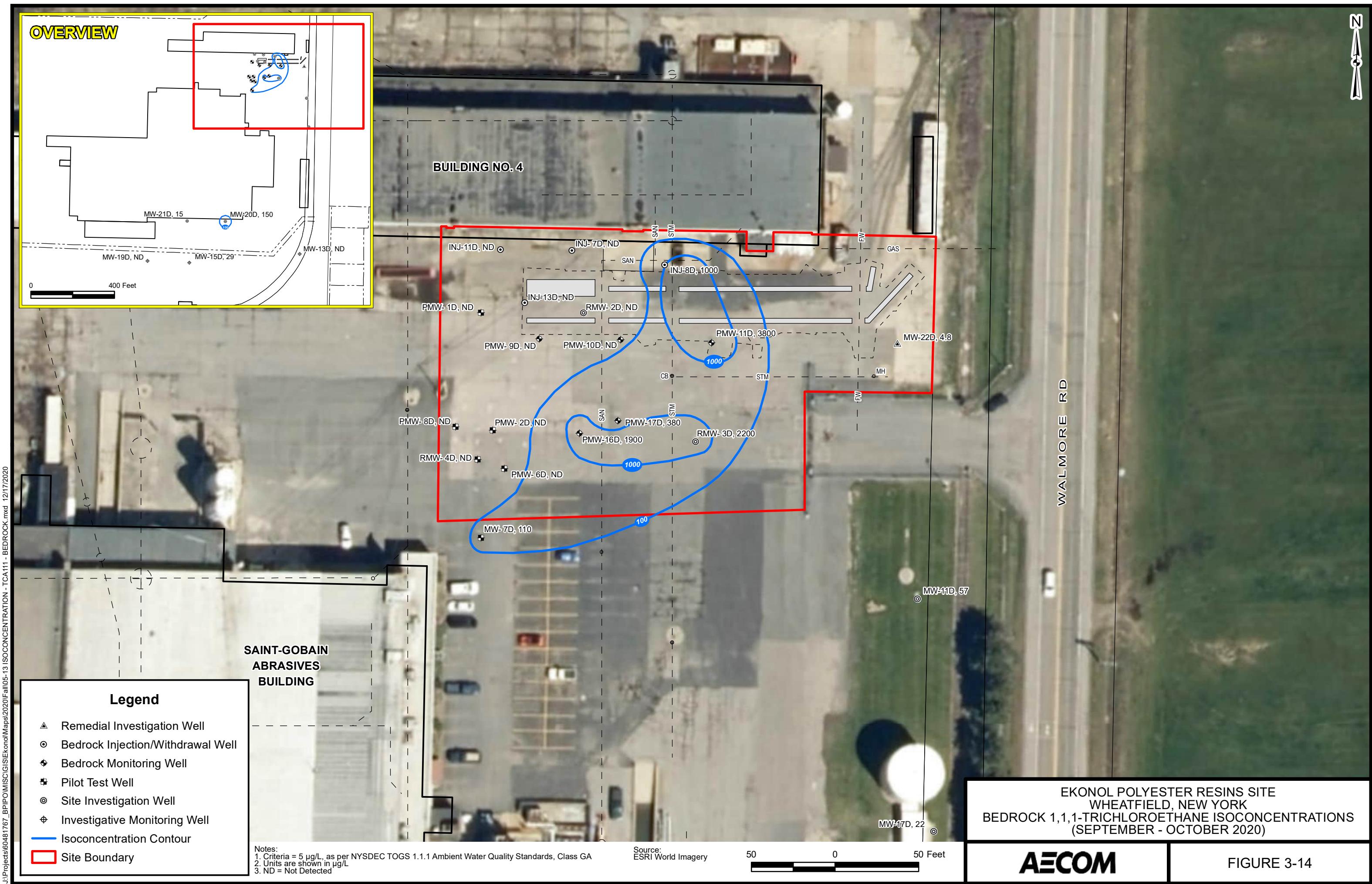


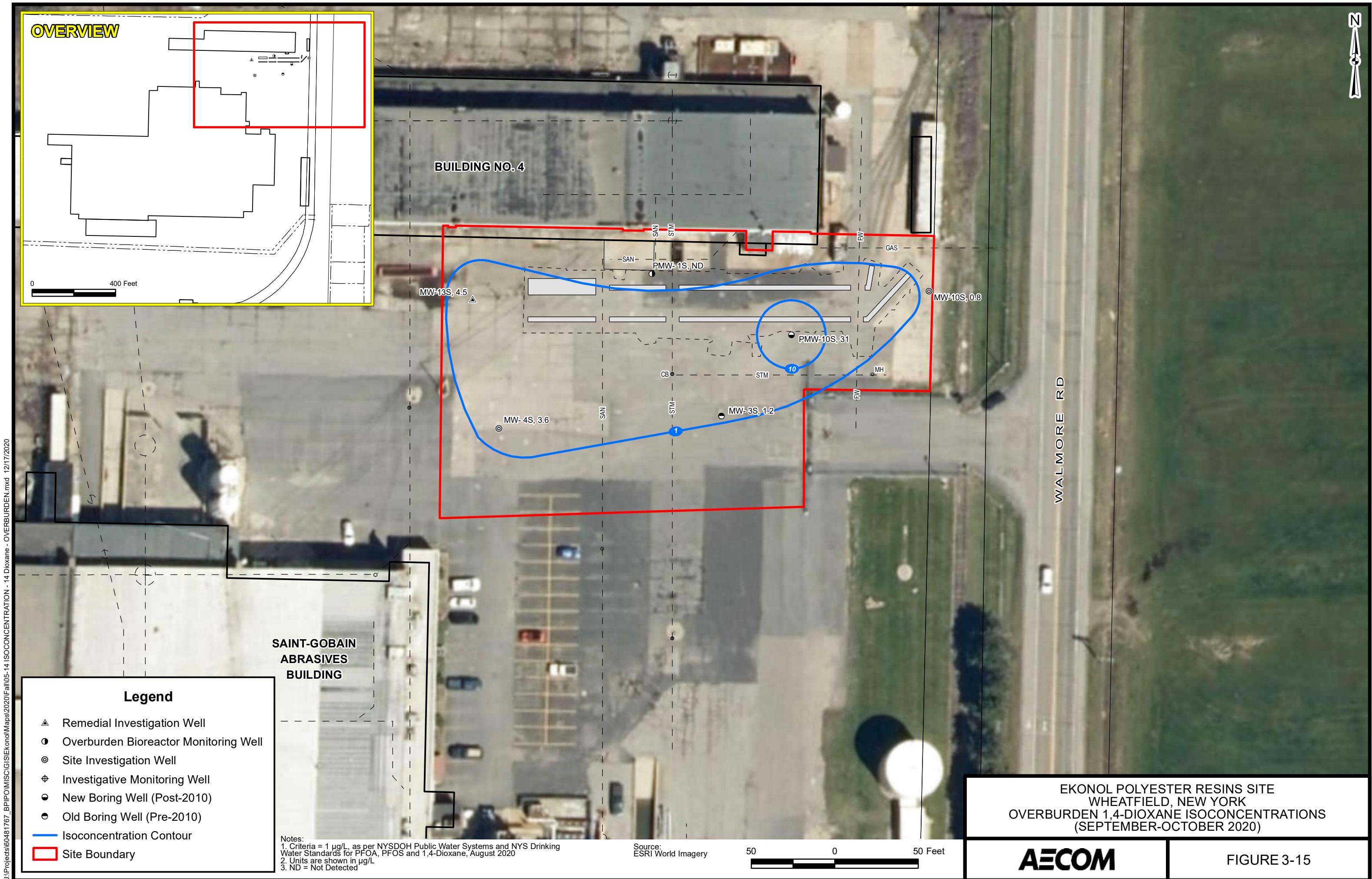


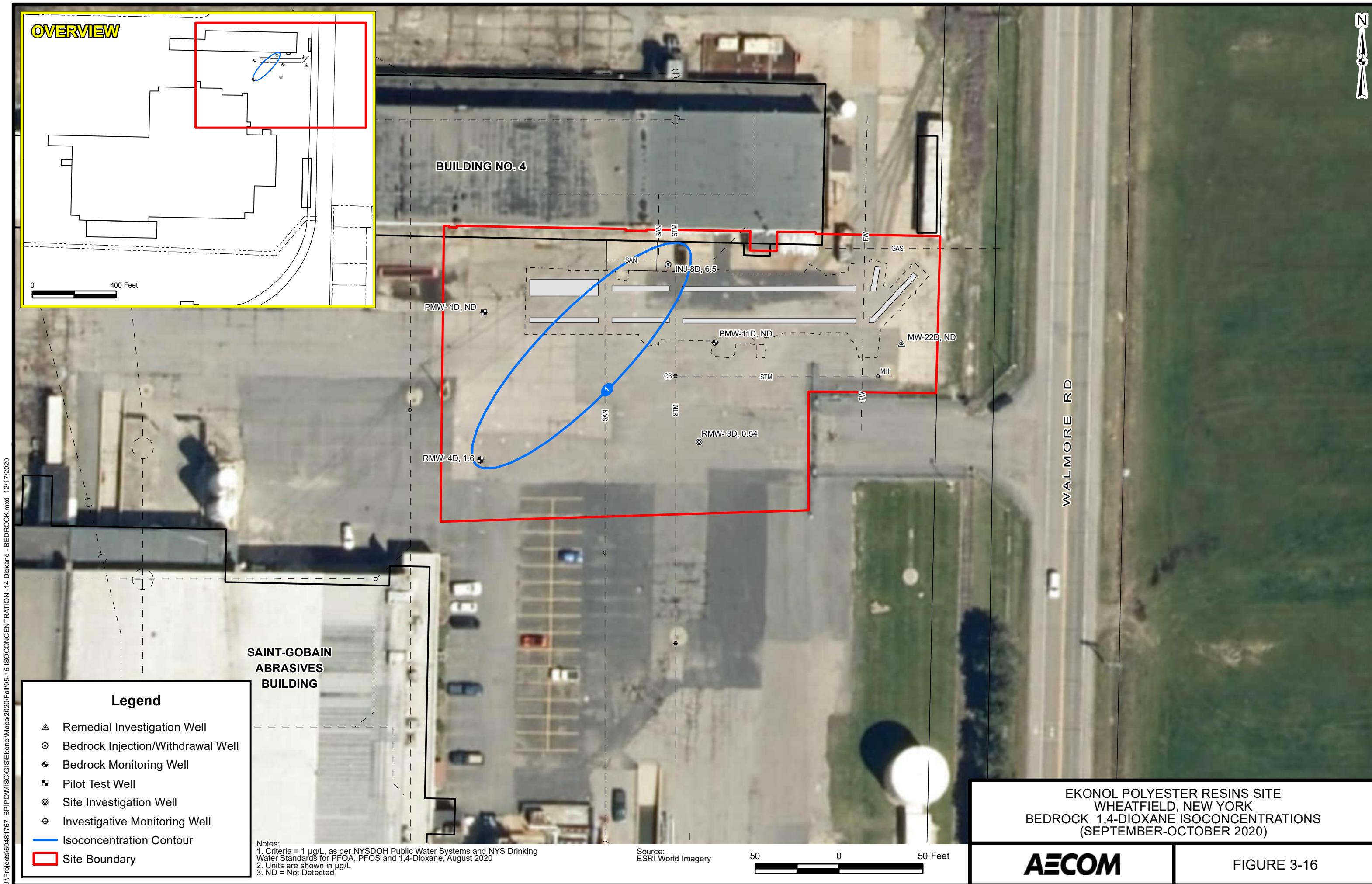


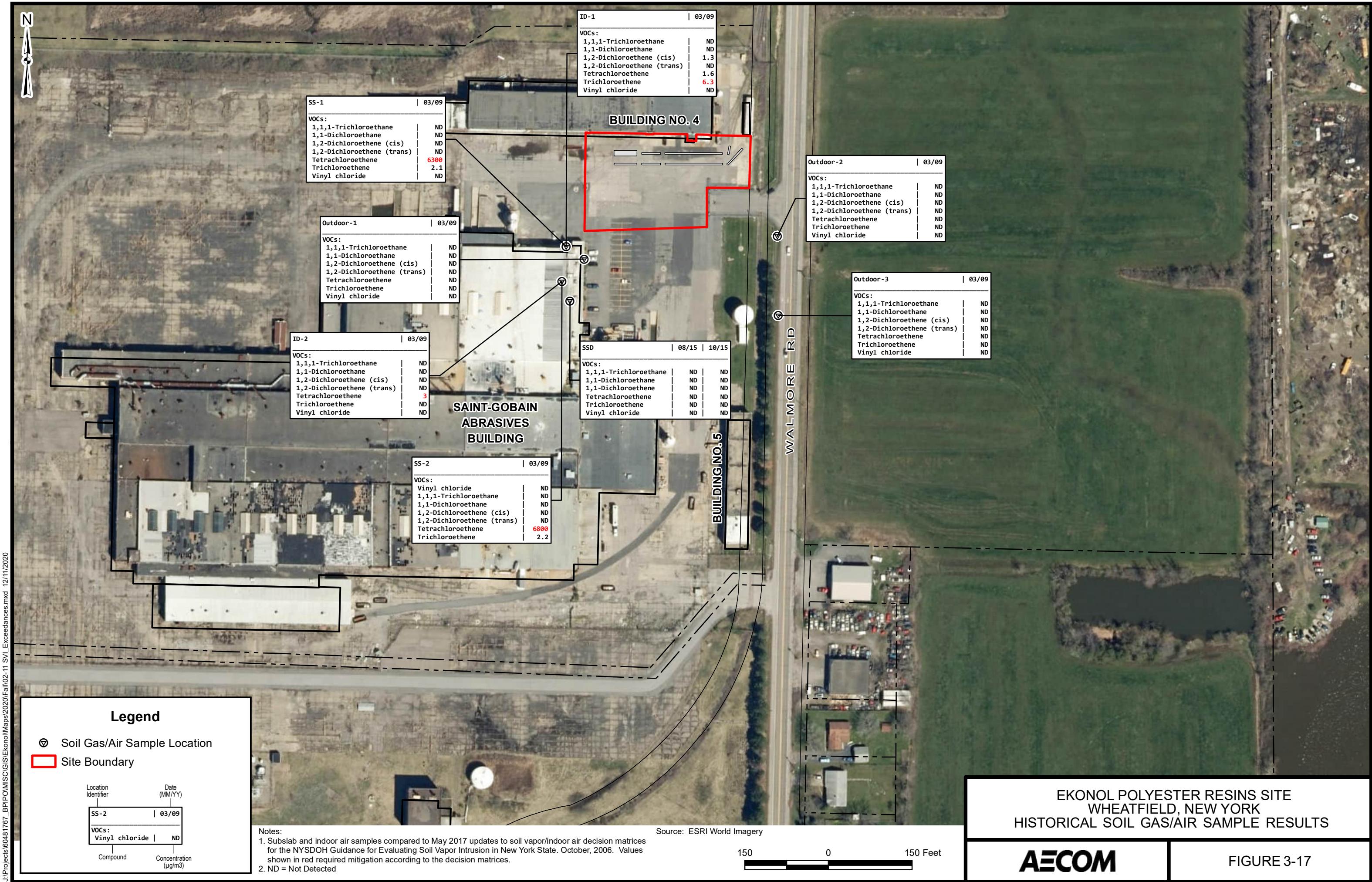


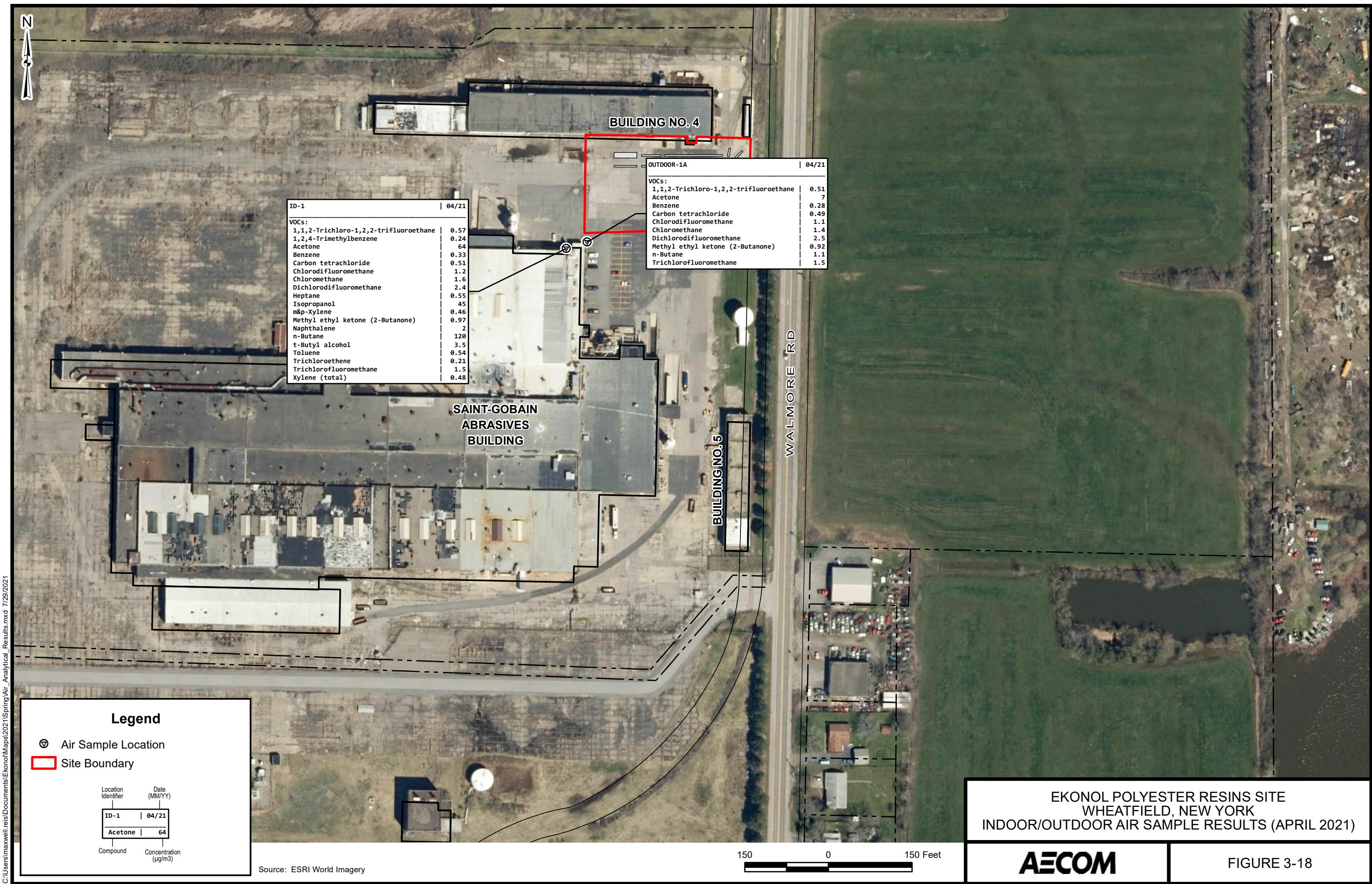


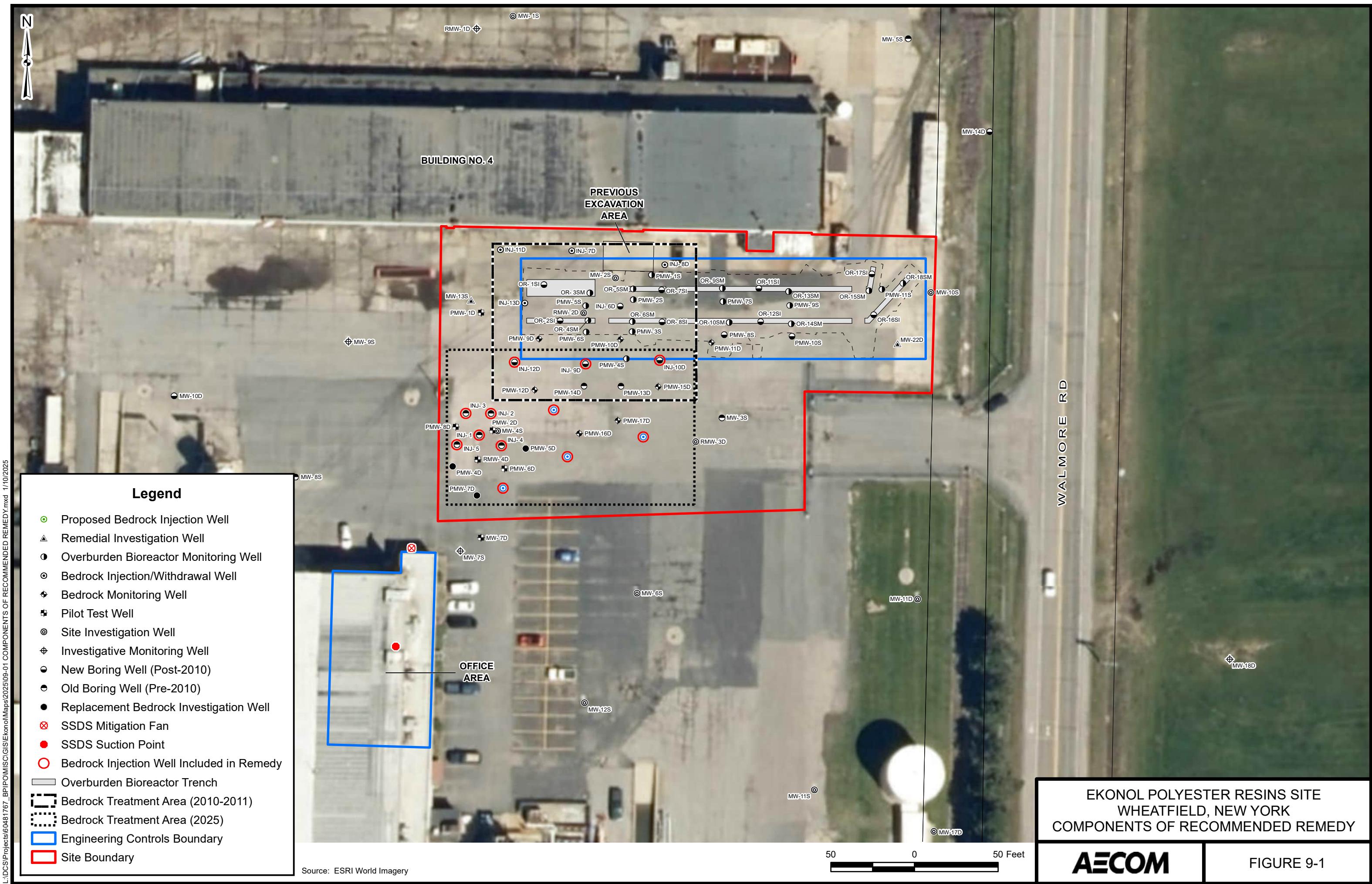












Appendix A

Historical Well Tables

Appendix A

A1

Monitoring Well Groundwater

Analytical Results Summary

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ- 1

Date	PCE (µg/L)	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCER (cells/ml)	VCR (cells/ml)
1/15/2008	840 J	100000	23000	5.0 U	5.0 U	1600 J	7	17	78	5.0 U	5000 UJ	5000 UJ	5000 U	6.46	1480							
7/24/2008	5000 UJ	2600 J	150000 J	380 J	5000 UJ	1600 J	9.2 J	52 J	100 J	5000 UJ	5000 UJ	5000 UJ	5000 U	202 J	1150 J							
9/29/2008	5000 U	3300 J	110000	920 J	210 J	2900 J	6.5	16	100	5000 U	5000 U	5000 U	5000 U	333	917							
12/15/2008	100 J	14000	120000 J	1100 J	220 J	3500	6.4	12	66	5.0 U	62 J	5.0 U	5.0 U	441	260							
6/4/2009	130 J	17000	110000	330 J	260 J	3600	9.2	140	250	1300 U	110 J	1300 U	0.376	515	311	102						
10/13/2009	110 J	19000	99000	300 J	260 J	3500	11	110	440	1000 U	72 J	1000 U	0.0394 J	365	991	247						
7/19/2010	500 U	9900	83000	170 J	120 J	3700	40	330	1000	500 U	500 U	500 U	4.72	545	130	169						
6/23/2011	600 J	90000	99000	180 J	290 J	3000	12	93	170	1000 U	1000 U	1000 U	0.0308 J	51	1390	117						
8/24/2011	390 J	44000	110000	240 J	220 J	2900	22	260	720	500 U	500 U	500 U	0.0878 J	239	270	272						
11/8/2011	660	54000	87000	130 J	200 J	3500	21	540	2800	110 J	500 U	500 U	0.127 J	139	464 J	190						
3/20/2012	470	29000	48000	88 J	110	3000	11	100	1800	87 J	37 J	100 U	0.2 U	32.4	1790 J	203						
6/27/2012	570	51000	34000	52 J	82 J	1100	13	76	1300	1000	83 J	250 U	0.04 J	25.6	261 J	148						
9/18/2012	450	32000	49000	80 J	120	5700	89	440	4300	290	58 J	100 U	0.0484 J	79.5	54.2	121						
12/10/2012	140 J	3600	100000	100 J	90 J	2800	28	310	1800	86 J	500 U	500 UJ	0.812	1640	498	170						
4/11/2013	84 J	5300	150000	220 J	110 J	3600	13	190	1700	500 U	140 J	500 U	1.32	1060	304	169						
7/16/2013	87 J	4100	120000	150 J	91 J	3900	18	370	1600	500 UJ	120 J	500 U	20.5	780	202	61.8						
10/14/2013	2500 U	3900	140000	2500 U	2500 U	4000	33	610	2100	2500 U	2500 U	2500 U	4.47	715	66.7	128						
12/9/2013	1300 U	3200	140000	1300 U	1300 U	4300	30	620	3000	1300 U	1300 U	1300 U	1.2	571	126	171						
4/9/2014	54 J	8800	160000	260	230	11000	24	1200	4800	100 U	89 J	100 U	2.92	440	25.8	87.1	6.23					
8/22/2014	100 U	7700	94000	210	160	19000	37	4600	9100	100 U	70 J	100 U	1.2	388	74.9	94.6	6.48					
12/10/2014	200 U	3500	89000	200 J	100 J	13000	30	5000	9400	200 U	200 U	200 U	0.357 J	337	86.7	113	6.34					
3/30/2015	30 J	4800	84000	210	150	14000	26	5200	10000	50 U	45 J	50 U	1.21	269	17	76	6.32					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ- 2

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane		1,1-Dichloroethane		Chloro Iron (mg/L)	Dissolved				BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)				ethane (µg/L)	thane (µg/L)	ethane (µg/L)	Chloro (mg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)						
6/3/2009	2500 U	5300	75000	2500 U	2500 U	8400	13	630	4400	2500 U	2500 U	2500 U	0.595	297	62.7	97.8							
7/19/2010	250 U	250 U	78000	240 J	170 J	29000	24 U	340	6300	250 U	250 U	250 U	0.24	121	3.5 J	62.7							
8/31/2011	250 U	93 J	90000	110 J	170 J	19000	31	1300	400	250 U	250 U	250 U	11.4	194	2.5 J	0.68							
3/27/2012	5.9 J	190	4900	8.4 J	18 J	1500	6.5	140	350	25 U	25 U	25 U	1.84	92.5	3.1 J	93.1							
6/22/2012	100 U	38 J	14000	26 J	51 J	4200	18 J	360 J	1200	100 UJ	100 U	100 U	1.32 J	97.8	1.7 J	24.1							
9/25/2012	66	5700	13000	26 J	110	2100	20	220	1400	9.4 J	50 U	50 U	0.339	50.1	2.6 J	5.8							
12/13/2012	93 J	3600	54000	2700	430 J	8800	17	110	1500	95 J	230 J	500 U	425	1940	8.4	9.5							
4/12/2013	190 J	26000	200000	220 J	1000 U	2500	13	140	1400	1000 U	1000 U	1000 U	13.4	1170	270	135							
7/11/2013	500 U	6200	140000	230 J	180 J	2400	45	490	1200	500 UJ	500 U	500 U	241	1040	5 J	5.5							
10/17/2013	1000 U	270 J	190000	240 J	340 J	3800	86	690	1500	1000 U	1000 U	1000 U	338	962	5 U	0.36							
12/11/2013	95 J	8600	160000	240 J	310 J	5800	51	440	1000	500 U	500 U	500 U	22.4	690	42.2	58							
4/10/2014	100 U	930	65000	120	67 J	5100	29	620	2000	100 U	100 U	100 U	182	611	1.6 J	2.3	6.02						
8/20/2014	55	4400	44000	160	58	12000	63	3700	11000	50 U	37 J	50 U	2.53	258	18	60.2	6.55						
12/11/2014	200	20000	90000	220	110	11000	37	6300	12000	100 U	100 U	100 U	1.53	311	163	87.6	6.96						
4/2/2015	92	5100	24000	91	49 J	6600	34	4400	8700	50 U	50 U	50 U	118	396	4.4 J	2.8	6.44						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ- 4

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
6/3/2009	2500 U	14000	120000	2500 U	2500 U	1900	9.7	80	220	2500 U	2500 U	2500 U	0.509	637	56.7	158					
10/13/2009	240 J	20000	110000	290 J	290 J	3200	10	70	300	1000 U	120 J	1000 U	0.0381 J	454	506	221					
7/19/2010	150 J	17000	130000	260 J	170 J	6200	19	260	1400	500 U	120 J	500 U	0.442	469	73.3	155					
8/30/2011	870	74000	84000	130 J	200 J	1300	23	200	660	250 J	500 U	500 U	1.52	259	146	257					
3/27/2012	720	40000	48000	83 J	77 J	1300	20	250	3300	170 J	96 J	250 U	0.256	34.9	2790	254					
6/22/2012	780	54000	69000	89 J	160 J	2200	21	370	2600	730 J	130 J	500 U	0.2 U	56.5	166 J	176					
9/25/2012	710	30000	57000	85 J	130 J	3400	60	400	3300	390	78 J	250 U	0.2 U	41.2	11.4 J	149					
12/13/2012	170 J	3300 J	77000 J	500 UJ	500 UJ	780 J	13	340	3500	120 J	100 J	500 UJ	0.923	782	680	176					
4/12/2013	1000 U	2400	110000	1000 U	1000 U	2500	26	440	3700	1000 U	1000 U	1000 U	0.365	302	833	133					
7/18/2013	500 U	950	120000	110 J	86 J	2700	29	760	1900	500 U	150 J	500 U	5.78	709	62.3	140					
10/17/2013	500 U	500 U	65000	500 U	500 U	5000	74	830	2700	500 U	500 U	500 U	479	1150	5 U	0.17					
12/12/2013	500 U	1100	120000	130 J	84 J	2500	26	520	2300	500 U	120 J	500 U	0.792	546	13.4	117					
4/14/2014	20	53	15000	22	17	880	14	80	790	10 U	10	10 U	11.5	135	1.9 J	0.68	6.15				
8/22/2014	7.4	8.5	1700	3.4	2.5	130	9.9	35	3600	1 U	1.3	1 U	46.7	143	5 U	0.094 J	6.85				
12/11/2014	100 U	730	100000	210	92 J	9000	32	1600	9800	100 U	55 J	100 U	0.0866 J	176	413	167	7.32				
4/2/2015	100 U	1500	56000	160	100 J	16000	43	2700	9400	100 U	100 U	100 U	0.494	152	8.4	52.4	6.39				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ- 5

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved						
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)
6/4/2009	1100 J	300000	110000	340 J	280 J	2000	55	740	130	2500 U	2500 U	2500 U	3.31	639	718					
7/19/2010	800 J	270000	87000	190 J	210 J	1100	89	1400	69	1000 U	1000 U	1000 U	2.24	258	1250	146				
8/30/2011	600	110000	99000	180 J	250 J	2300	80	800	360	500 U	500 U	500 U	0.0959 J		460	217				
9/1/2011														292						
3/26/2012	730	61000	48000	92	100	1600	18	140	1900	170	55	10 U	0.2 U	60.7	1250	161				
6/22/2012	650	45000	27000	42 J	62 J	290	15	120	730	1100 J	76 J	250 U	0.2 U	26.8	214 J	156				
9/18/2012	360 J	27000	75000	500 U	230 J	830	150	1000	1500	220 J	500 U	500 U	2.52	124	23.7	61.3				
12/13/2012	230 J	17000	92000	500 U	500 U	1100	22	180	2500	500 U	500 U	0.539	1250	373	273					
4/12/2013	200 J	27000	110000	1000 U	1000 U	1700	28	290	4400	1000 U	1000 U	1000 U	0.528	566	500	211				
7/18/2013	230 J	29000	99000	1000 U	1000 U	1800	20	160	3000	1000 U	1000 U	1000 U	0.582	477	205	210				
10/17/2013	230 J	29000	130000	1000 U	1000 U	1400	54	390	2400	1000 U	1000 U	1000 U	0.728	465	211	234				
12/12/2013	270 J	30000	140000	160 J	130 J	1900	50	350	4000	500 U	110 J	500 U	0.633	434	333	202				
4/16/2014	170	17000	150000	100 J	97 J	2500	32	470	4200	100 U	62 J	100 U	4.65	499	47	103	5.77			
8/19/2014	110	9400	150000	150	130	10000	51	1200	5600	100 U	81 J	100 U	2.39	467	152	119	6.53			
12/11/2014	170	16000	120000	160	110	11000	44	1700	7100	100 U	76 J	100 U	0.392 J	332	456	176	6.91			
4/2/2015	110	9800	73000	97 J	85 J	12000	48	1600	6700	100 U	100 U	100 U	4.78	479	60.5	85.8	6.6			

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-7D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroe thane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/5/2011	1400 J	580000	7900	2500 U	2500 U	11	7.7	73	2500 UJ	2500 U	2500 U	1.6	47.4	971	2.2	6.8	2.7E+02	8.7E+00	5.3E+01	4.6E+00	5.5E+00	
8/30/2011	1500	270000	47000	500 U	170 J	140 J	9.4	32	45	620	500 U	500 U	15.3	286	562	26.2	6.06	1.1E+01	4.4E+03	5.8E+01	8.0E+01	1.7E+01
11/2/2011	1600	240000	63000	500 U	260 J	500 U	5.5	7.9	34	1400	500 U	500 U	0.32	149	317	98.6	6.47	6.0E+01	2.2E+04	2.3E+02	3.5E+02	1.6E+02
3/21/2012	2200 J	380000	100000	2500 U	2500 U	12	16	110	530 J	2500 U	2500 U	0.931	117	413 J	40.3	6.33	1.1E+04	3.4E+04	2.9E+04	2.1E+03	1.5E+04	
6/28/2012	2300	290000	56000	64 J	200	150	13	20	170	870	53 J	100 U	0.2 U	62.9	407	97.6	6.56	2.8E+02	5.6E+03	1.6E+03	3.4E+01	2.2E+02
9/19/2012	2400	250000	64000	500 U	220 J	250 J	13	24	220	760	500 U	500 U	0.2 U	66.8	85.5 J	161	7.03	2.2E+03	1.1E+04	2.4E+03	2.9E+03	1.6E+03
11/1/2012	2400	350000	61000	110 J	210 J	200 J			500	500 U	500 U		70.8									
12/6/2012	1200	330000	72000	96 J	100 J	270	9.8	23	150	250 J	73 J	250 U	45.7	941	92.3	1.5	6.27	1.1E+01	3.0E+04	5.7E+04	1.1E+04	
4/3/2013	1200	340000	280000	1900 J	460	1300	40	340	470 J	48	71	5 U	72.1	935	293	0.17	6.7	1.4E+05	3.1E+05	2.3E+06	2.2E+06	3.6E+04
7/10/2013	1600	360000	380000	240 J	870	3800	22	290	370	120 J	500 U	500 U	44.3	703	327	0.47	6.64	4.6E+04	4.8E+04	3.8E+04	4.5E+02	
10/10/2013	1200 J	300000	280000	5000 U	5000 U	5500	37	430	590	5000 U	5000 U	5000 U	37.8	424	341	1.1	6.38	5.0E+04	1.4E+04	1.7E+05	1.7E+05	2.2E+03
12/5/2013	850	210000	370000	280 J	900	2500	20	340	740	500 U	500 U	500 U	25	251	161	0.66	6.26	8.8E+04	3.6E+03	2.7E+05	2.7E+05	1.4E+04
4/10/2014	460	110000	370000	380	920	5100	20	260	550	200 U	200 U	200 U	21.1	191	110	0.59	6.19	8.9E+04	7.3E+03	2.9E+05	8.7E+02	1.4E+04
8/12/2014	420	160000	380000	270	940	11000	38	430	1000	200 U	200 U	200 U	23.6	258	153	1.4	6.6	4.1E+05	9.6E+03	2.9E+06	1.5E+04	4.7E+04
12/4/2014	840	340000	410000	320	850	4500	25	350	1500	200 U	200 J	200 U	15.4	222	179	0.92	6.45	6.1E+05	4.2E+03	1.2E+06	4.5E+03	5.5E+03
3/25/2015	400	160000	180000	180	430	3700	10	140	380 J	50 U	50 U	50 U	9.81	109	116	0.46	7.21	4.8E+05	7.1E+03	1.7E+06	6.2E+03	5.7E+04
10/21/2015	330	120000	380000	420	590	6600	44	480	1800	200 U	200 U	200 U	25.9	148			8.11					
5/10/2016	220	110000 D	540000 D	410	670	11000	19	1200 D	1800 D	100 U	100 U	100 U	25.2	187	250	1.1	7.05	2.6E+05	1.6E+04	9.1E+05	8.1E+03	1.1E+05
9/30/2016	25000 U	170000	540000	25000 U	25000 U	15000 J	33 J	880 J	880 J	25000 U	25000 U	25000 U	28	160			6.68					
4/20/2017	5000 U	70000	250000	5000 U	5000 U	15000	15	1000	780	5000 U	5000 U	5000 U	11	100	150	3.1	7	6.3E+04	6.9E+03	8.9E+05	3.7E+04	9.9E+04
10/9/2017	2500 U	120000	180000	2500 U	2500 U	6200	12	1000	980	2500 U	2500 U	2500 U	7.1	54			6.81					
3/29/2018	2000 U	36000	250000 D	2000 U	600 J	12000	7.7	3000	3400	2000 U	2000 U	2000 U	6.4	63	120	1.1	6.75	4.4E+04	2.0E+04	1.8E+05	1.6E+04	3.1E+04
9/17/2020	1000 U	3900	190000 D	200 J	420 J	21000	48	5000	3300	1000 U	1000 U	1000 U	4.3	100	63	2.2	6.93	7.5E+04	1.2E+04	4.9E+05	1.0E+04	7.6E+04

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-8D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
6/27/2011	63	2100	8200	14 J	73	210 J	3 J	49	1900	100	25 U	6.7	4.7	843	0.33	6.91					
8/30/2011	11 J	990	9100	21 J	25	82	5.6	3.5 J	35	1200	58	25 U	0.702	283	422	62.6	6.11				
11/4/2011	32	340	4100	9.2 J	22 J	79	2.4 J	2.4 J	63	2300	82	25 U	1.16	301	321	45	6.38				
3/23/2012	10 J	220	1700	4.2 J	21 J	65	5 U	180	2400	110	25 U	0.109 J	996	437	93.8	6.24					
6/25/2012	25 U	49	5500	6.8 J	12 J	250	8	6.1	15000	42	41	25 U	20.2	190	18.7	0.13 J	7.62				
9/19/2012	8.6	1400	2400	7.7	27	350	3.6 J	19	2700	760	99	5 U	0.2 U	46.5	121 J	106	6.97				
12/7/2012	50 U	27 J	9500	27 J	19 J	180	5.6	12	7300	190	28 J	50 UJ	4.83	299	1.6 J	12.1	6.21				
4/10/2013	25 U	6.3 J	9800	12 J	15 J	2300	6.7	63	16000	110	200	25 U	3.36	463	7.3 J	55.3	7.47				
7/12/2013	50 U	50 U	3500	16 J	50 U	9400	23	450	20000	40 J	320	50 U	132	509	5 U	0.069 J	7.12				
10/11/2013	100 U	45 J	16000	100 U	100 U	2900	16	2300	7500	340	510	100 U	5.66	544	6.8	90.9	6.26				
12/9/2013	25 U	14 J	7600	21 J	8.3 J	2300	24	5100	19000	180	610	25 U	31.8	545	3.1 J	2.8	6.1				
4/16/2014	9.8	44	22000	36	42	2800	16	2100	12000	640	730	6.9	4.6	405	6.8	65.3	6.95				
8/21/2014	0.94 J	3.8	740	31	4.8	610	59	6600	24000	110	690	11	10	443	2.4 J	21.5	7.39				
12/11/2014	1 U	1.6	33	12	0.62 J	140	33	3500	15000	4.7	340	3.2	21.2	321	5 U	1.2	7.08				
4/2/2015	50 U	30 J	22000	37 J	26 J	2400	28	1700	7100	680	910	50 U	1.07	426	57.4	105	6.78				
10/21/2015	5 U	7.4	3600	18	5.7	1200	21	2600	15000	130	490	5 U	3.05	437							
5/16/2016	1.0 U	2.4	170	13	0.95 J	210	20	1400 D	14000 D	14	320 D	2.8	26.1	465	5.0 U	0.095 J	7.41				
4/14/2017	250 U	250 U	10000	250 U	250 U	2500	12	820	3600	610	990	250 U	2	370	18	29	6.72				
4/5/2018	200 U	200 U	4400	200 U	200 U	1600	52 J	2100 J	8500 DJ	220	530	200 U	2.8	260	11	21	6.61				
9/16/2020	100 U	15 J	2000	28 J	67 J	2400	35	1500	7200 D	1000	600	100 U	0.11	150	370	76	6.99				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-9D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/5/2011	400	23000	11000	100 U	68 J	200	2.5 J	11	55	810 J	69 J	100 U	0.706	3.7	969	1.3	6.55	1.5E+03	2.7E+01	1.6E+02	4.5E+00	2.5E+01
8/30/2011	30 J	910	14000	30 J	52	36 J	2 J	2.2 J	16	3800	56	50 U	1.66	251	354	66	5.96	0.1 J	2.4E+02	2.3E+01	4.6E+00	1.5E+00
11/3/2011	8.6 J	130	8700	29 J	25 J	100	15	7	38	360	150	50 U	90.4	353	2.3 J	5.8	6.05	3.6E+01	2.6E+03	6.0E+01	1.2E+02	5.0E+02
3/27/2012	10 U	14	1600	4.2 J	4 J	17	1.3 J	1.2 J	75	22	8 J	10 U	13.3	31.3	5 U	0.16 U	7.45	7.2E+02	6.9E+02	4.5E+02	1.1E+02	2.7E+01
6/21/2012	10 U	25	550	10 U	1.7 J	21	5 U	5 U	97	73 J	3.9 J	10 U	0.539	26.7	20 J	3.9	7.67	1.8E+02	1.2E+02	4.8E+02	4.1E+00	7.8E+01
9/19/2012	0.99 J	32	250	5 U	0.98 J	56	5 U	5 U	370	24	1.8 J	5 U	0.195 J	10.9	3 J	2.4	8.03	3.9E+03	2.6E+03	3.5E+03	2.3E+01	1.1E+03
11/1/2012														51.5								
12/5/2012	270	29000	90000	51 J	43 J	340	13	27	140	190	80 J	100 U	23.6	1320	21.9	21.5	5.91	2.8E+02	1.1E+02	2.7E+04	5.3E+04	1.2E+04
4/3/2013	110	12000	81000	58	69	720	18	80	6000 J	170	100	50 U	67.5	709	15.9	13.5	6.27	2.8E+03	6.9E+03	1.7E+04	1.1E+04	1.3E+01
7/11/2013	500 U	3700	120000	110 J	140 J	13000	27	680	3600	150 J	210 J	500 U	67.1	679	31.9	5.1	6.34	2.9E+05	4.3E+05	2.0E+05	3.1E+03	
10/10/2013	2500 U	20000	250000	2500 U	2500 U	11000	23	1100	1600	2500 U	2500 U	2500 U	15.3	784	44.2	27.5	6.03	1.9E+05	9.7E+03	1.0E+06	1.7E+06	1.8E+04
12/5/2013	80 J	12000	110000	73 J	190 J	5900	12	730	3500	150 J	140 J	250 U	12.3	321	20.8	11.3	6.29	5.4E+05	1.4E+04	9.7E+05	3.6E+05	4.0E+04
4/10/2014	1 U	8.6	1800	11	4.1	890	7	1500	5000	5.3	21	1 U	34.7	89.5	5 U	0.18	6.84	5.0E+05	3.1E+03	3.4E+06	1.1E+04	3.6E+05
8/13/2014	74 J	11000	93000	110	170	14000	32	5400	11000	100 J	120	100 U	9.08	279	8.4	10.2	6.91	1.6E+05	1.9E+03	1.8E+06	9.2E+03	9.3E+04
12/4/2014	42 J	6200	60000	86	100	7800	16	4300	11000	60	100	50 U	7.25	216	7.2	10.4	6.37	3.8E+05	2.6E+03	2.3E+06	7.3E+03	2.6E+04
3/25/2015	10 J	2400	23000	41	47	5500	15	6300	8700	31	67	20 U	28.2	216	33.5	4.2	6.6	3.4E+05	2.2E+03	2.9E+06	1.3E+04	3.1E+05

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-10D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/29/2011	140	1800	2900	50 U	130	110	5 U	3.4 J	23	12000	100	50 U	0.399	4.4	706 J	0.4	7.69	2.9E+02	2.3E+01	3.9E+01	4.6E+00	3.6E+00
8/29/2011	18 J	120	2600	8.7 J	41 J	73	5 U	2.4 J	13 J	5900	67	50 U	0.688	55.7	569	20.3	6.81	2.1E+00	4.1E+02	8.2E+00	1.5E+00	6.0E-01
11/1/2011	5.2	59	1200	6	15	51	3.9 J	2.4 J	82	1100	60	5 U	2.64	61.6	93	30.2	7.08	2.1E+01	4.9E+03	1.8E+01	1.4E+00	6.9E+00
3/27/2012	3.1 J	18	450	2.1 J	9.7	110	1.2 J	2.9 J	47	620	30	5 U	0.0172 J	15.1	228	18.1	6.97	8.4E+03	7.8E+03	2.1E+04	5.3E+04	1.2E+03
6/21/2012	5.8	23	710	4.1 J	16	210	1.1 J	23	85	1400 J	59	5 U	1.36	17.7	615 J	23.9	7.54	1.3E+03	2.5E+03	1.1E+04	4.9E+03	9.7E+03
9/20/2012	4.9 J	14	560	3.2 J	17	190	1.8 J	40	960	1000	55	5 U	0.0727 J	17.4	425	19.7	8.03	1.4E+03	1.2E+03	3.6E+04	1.2E+04	4.2E+04
11/1/2012																	17.3					
12/5/2012	11 J	220	8000	16 J	19 J	220	2 J	6.3	170	590	86	25 U	0.0585 J	152	53.6	162	6.51	7.9E+01	3.6E+01	2.9E+02	2.6E+02	9.1E+01
4/4/2013	16	47	9900	19	33	1200	19	430	3500	400	280	10 U	28.2	629	4.1 J	51.2	6.03	2.4E+05	1.4E+04	3.7E+06	5.4E+06	3.4E+04
7/15/2013	50 U	18 J	4500	11 J	18 J	1100	24	890	6100	760	400	50 U	36.3	553	71	70.5	6.4	3.8E+04	2.4E+04	6.5E+05	2.6E+05	1.4E+04
10/16/2013	17 J	13 J	5200	16 J	150	770	15	470	9100	9900	1700	25 U	2.45	218	3.2 J	77.6	6.22	1.3E+04	3.9E+03	4.7E+05	1.8E+05	8.8E+04
12/5/2013	25 J	18 J	8000	22 J	170	840	12	190	4100	9100	1500	50 U	1.93	280	7.8	91.8	6.55	2.2E+04	7.7E+03	2.1E+05	1.2E+05	3.1E+04
4/15/2014	0.85 J	1.3	8.5	1 U	1 U	1.8	12	2 J	720	2.8	0.8 J	1 U	0.383 J	24.2	31.3	0.25	7.76	6.4E+02	2.6E+02	1.2E+03	5.2E+01	8.1E+02
8/12/2014	18	12	7600	32	130	2800	11	190	5600	2500	600	10 U	0.0599 J	74.3	44.4	138	7.12	4.2E+04	2.6E+03	2.8E+05	1.6E+03	5.4E+03
12/4/2014	3.8 J	5 U	5900	27	80	2400	12	170	8700	1500	550	5 U	0.0514 J	84.2	5.4	131	6.87	1.5E+05	4.4E+03	3.3E+05	2.1E+03	8.1E+02
3/25/2015	2.6	3.9	2100	15	34	1300	13	97	5000	540	250	0.98 J	0.0409 J	40.9	46.3	117	7.39	3.9E+04	5.4E+03	1.3E+05	9.8E+02	5.0E+03

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-11D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
4/4/2012	33 J	2500	8200	19 J	35 J	270	5 U	16	53	970	82	50 U	0.295	3.8	475 J	15.3						
6/21/2012	27	3500	14000	29	51	390	1.8 J	22	98	980 J	98	25 U	0.149 J	4.1	1070 J	17.1	6.87	1.2E+04	2.4E+02	2.1E+04	6.0E+02	5.2E+03
9/25/2012	8.6 J	500	14000	33 J	68	1300	11	120	370	1000	130	50 U	0.161 J	3.5	812 J	23.9	6.73					
11/1/2012																						
12/12/2012	590	200000	83000	250 J	140 J	2700	83	460	2700	170 J	500 U	500 UJ	4.67	652	337	49.1	6.18					
4/5/2013	360	72000	170000	170	290	1700	62	420	970 J	170	78	50 U	0.457	270	325	206	6.68					
7/12/2013	310 J	40000	180000	180 J	320 J	3500	70	440	2500	1000 U	1000 U	1000 U	0.0838 J	265	334	183	6.47					
10/8/2013	500 U	5800	76000	100 J	150 J	2300	15	99	1800	500 U	500 U	500 U	0.186 J	171	178	97	6.28					
12/10/2013	520	160000	110000	110 J	280 J	2800	16	170	2300	500 UJ	500 U	500 U	3.11	202	84.3	45.2	6.44					
4/11/2014	43 J+	7100	29000	58	75	2100	5.7	130	1500	11	19	10 U	0.156 J	66.8	23.1 J+	40.4	7.14					
8/13/2014	320	140000	230000	150 J	500	6800	34	550	5600	200 U	200 U	200 U	0.562	202	164	78.5	6.28					
12/12/2014	100	36000	95000	87 J	200	4700	53	700	7700	100 U	100 U	100 U	0.32 J	107	353	83.9	7.49					
4/1/2015	5 U	81	3600	10	8.3	980	7.4	150	3100	5 U	6.4	5 U	0.386 J	5.3	22.7	23.7	6.19					
10/21/2015	10 U	660	5700	17	13	1900	73	460	13000 J	10 U	6.7 J	10 U	0.2 J	70.6			7.6					
5/16/2016	200 U	27000	120000 D	140 J	260	4500	82	980 D	16000 D	200 U	200 U	200 U	0.167 J	83.2	266	56.7	8.17					
9/29/2016	5000 U	14000	57000	5000 U	5000 U	2500 J	73 J	1200 J	10000 J	5000 U	5000 U	5000 UJ	0.35	82			6.93					
4/18/2017	1000 U	1200	29000	1000 U	1000 U	1900	43	650	5800	1000 U	1000 U	1000 U	0.52	35	530	25	7.38					
10/9/2017	500 U	1400	20000	500 U	500 U	2700	79	780	10000 D	500 U	500 U	500 U	1	29			6.79					
4/4/2018	1000 U	16000	30000	1000 U	1000 U	2300	35	1000	10000 D	1000 U	1000 U	1000 U	0.26	37	86	4.1	7.18					
9/18/2020	200 U	53 J	5000	200 U	200 U	1800	170	1100	15000	200 U	200 U	200 U	0.43	12	260	21	7.07					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-12D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)		
4/4/2012	43 J	3900	63000	57 J	100 J	1100	23	280	2200	110 J	250 U	0.0427 J	17.4	251 J	48.7	6.25							
6/28/2012	200	19000	17000	34 J	56 J	510	49	210	4100	540	31 J	100 U	0.0506 J	17.5	267	128	7.38						
9/26/2012	17	820	760	10 U	3.1 J	38	5 U	1.5 J	23	10 U	10 U	10 U	0.142 J	8.6	24.7	29.2	9.06						
11/1/2012																		4.8					
12/13/2012	220 J	14000	120000	1000 U	1000 U	710 J	15	55	390	1000 UJ	1000 UJ	1000 U	8.7	1420	86.5	76.8	5.89						
4/5/2013	130	10000	94000	110	80	2100	92	990	5900 J	120	70	50 U	18.2	659	36.1	31.3	6.34						
7/15/2013	320 J	31000	130000	1000 U	1000 U	2800	63	1200	4400	1000 U	1000 U	1000 U	17.6	658	92.3	9.7	5.84						
10/11/2013	330 J	34000	210000	190 J	310 J	9200	85	2200	5100	1000 U	1000 U	1000 U	43.3	668	176	80.8	6.06						
12/9/2013	380 J	42000	100000	110 J	170 J	9200	30	1800	4200	500 U	500 U	500 U	12.2	308	65.2	22.8	6.47						
4/16/2014	53	3900	21000	53	42 J	2000	49	690	5100	50 U	50 U	50 U	0.948	56.8	9.9	9.5							
8/14/2014	2.3	6	110	0.85 J	1 U	50	4 J	19	2000	1 U	1 U	1 U	11.7	58	5 U	0.24	7.05						
12/10/2014	10 U	93	5800	20	7.8 J	970	17	990	10000	10 U	10 U	10 U	3.13	103	13.3		6.58						
12/12/2014																		82	7.04				
4/3/2015	27 J	2900	22000	38 J	51	2500	11	1200	4300	50 U	50 U	50 U	1.07	50.8	8.4	12.6	7						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: INJ-13D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroe thane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
4/4/2012	340 J	47000	44000	40 J	92 J	260	1.6 J	21	57	710	79 J	250 U	0.0398 J	15.6	820 J	25						
6/28/2012	810	140000	26000	500 U	140 J	320 J	15	91	260	810	500 U	500 U	0.2 U	30	566	108	6.8					
9/24/2012	990	100000	21000	500 U	500 U	640	13	63	310	680	500 U	500 U	0.2 U	13.9	703	72	6.79					
11/1/2012																		7.7				
12/13/2012	1000 U	9800	130000	320 J	1000 U	1600	34 J	130 J	1200	1000 UJ	1000 UJ	1000 U	4.78	1420	57.2	64.4	6.02					
4/5/2013	120	15000	110000	130	100	1800	100	680	4500 J	110	79	50 U	1.97	767	80.4	65	6.47					
7/15/2013	290 J	33000	120000	140 J	130 J	2300	69	1400	5100	500 U	500 U	500 U	2.13	608	135	79.7	6.03					
10/8/2013	1000 U	8300	86000	1000 U	1000 U	9400	52	5200	8500	1000 U	1000 U	1000 U	2.2	530	133	60.7	6.07					
12/10/2013	100	17000	79000	90 J	100	9600	44	1500	3800	47 J	60 J	100 U	3.26	292	60.9	20.7	6.41					
4/10/2014	100 U	4300	65000	100	100	4700	77	1400	8000	100 U	100 U	100 U	0.107 J	142	37.2	51.6	7.04					
8/14/2014	100 U	1000	51000	100	95 J	6500	70	2700	15000	100 U	100 U	100 U	0.0627 J	164	45.9	62.7	6.85					
12/9/2014	2 U	38	2800	50	6.6	830	61	1800	15000	2 U	2 U	2 U	0.595	67.8	59.3	40.7	6.62					
4/3/2015	11 J	2000	13000	23	27	1100	11	560	3800	20 UJ	20 U	20 U	0.173 J	24.1	18.8	8.3	7.75					
10/20/2015	10 U	90	10000	54	12	2500	140	2100	7200	10 U	8.1 J	10 U	17.6	191			7.75					
5/16/2016	10 U	33	4300 D	38	15	2500	380	2300 D	17000 D	10 U	10 U	10 U	9.13	101	10.5	3.3	7.82					
9/29/2016	500 UJ	1300	12000	500 U	500 U	3100	270	1300	9700	500 UJ	500 U	500 U	4	82			6.73					
4/18/2017	200 U	200 U	4300	200 U	200 U	2400	170	2000	6600	200 U	200 U	200 U	2.8	93	92	6.7	7.14					
10/12/2017	500 U	2100	15000	500 U	500 U	1900	180	1800	14000 D	500 U	500 U	500 U	1	65			6.94					
4/5/2018	330 U	450	6100	330 U	330 U	2200	190 J	2400 J	11000 DJ	330 U	330 U	330 U	0.65	41	63	8.1	7					
9/18/2020	1000 U	6300	93000	1000 U	1000 U	16000	230	7100	17000	1000 U	1000 U	1000 U	0.84	160	160	26	6.8					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 1D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl		1,1,1-		1,1-		Dissolved								
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
11/2/2001		5.0 U								5.0 U		5.0 U										
12/6/2001		5 U								5 U		5 U										
9/30/2002		180								9.3		5.0 U										
11/4/2002		50 D								6.5		1.0 U										
9/19/2003		12				5.0 U				5.0 U		5.0 U										

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 1S

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl		1,1,1-		1,1-		Dissolved								
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroe thane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
11/2/2001		32								5.0 U	5.0 U											
12/6/2001		28								5 U	5 U											
9/26/2002		6.9								5.0 U	5.0 U											
11/4/2002		10								1.0 U	1.0 U											
9/19/2003		7.8				18				5.0 U	5.0 U											
10/28/2003		17				19				5.0 U	5.0 U											
5/17/2004		24				25				5 U	5 U											
6/21/2004		8				7				5.0 U	5.0 U											
8/29/2005		13	104	5.1	1.2	18.4	0.29	0.52	13.3	1.0 U	1.0 U	1.0 U		2.3	2230							
9/18/2006	1 U	4	84	5	1 U	12	12 U	17 U	12	1 U	1 U	2 U		2.1	2580							
5/27/2008	5 U	19	150	6.9	2.2 J	19	1.1 J	1.7 J	55	5 U	5 U			2.2	2140 J							
5/28/2009	5.0 U	7.1	150	6	1.6 J	16	1.0 U	1.0 U	29	5.0 U	5.0 U	5.0 U	1.18	3	2130	1.0 U						
7/13/2010	5 U	2.7 J	100 J	4.7 J	1.2 J	10	5 U	5 U	20	5 U	5 U	5 U	2.44	2.9	2350 J	0.16 J						
6/21/2011	5 U	2 J	88	3.6 J	5 U	5.3	5 U	5 U	15 J	5 U	5 U	5 U	1.8	3	2830	0.076 J	7					
8/26/2011	5 U	1.1 J	96	3.9 J	5 U	7.5	5 U	5 U	14 J	5 U	5 U	5 U	1.56	3.2	2750	0.093 J	7.03					
11/7/2011	5 U	3.5 J	120	5.1	1.2 J	14	5 U	5 U	25	5 U	5 U	5 U	1.77	1.3	2110	0.25						
3/20/2012	5 U	4.4 J	120	4.5 J	1.1 J	5.2	5 U	5 U	14 J	5 U	5 U	5 U	0.421	2.8	2420 J	0.24	6.12					
6/19/2012	5 U	14	170	7.4	2 J	15	5 U	5 U	32	5 U	5 U	5 U	1.14	2.6	2260	0.16 U						
9/18/2012	5 U	1.5 J	110	4.4 J	0.84 J	7.8	5 U	1.2 J	29	5 U	5 U	5 U	1.02	2.7	2120	0.16 U	7.21					
12/12/2012	5 U	17	170	7.2	2.1 J	15	5 U	1.2 J	37	5 U	5 U	5 UJ	2.55	1.1	2130	0.16 U	6.7					
4/2/2013	5 U	8.4	140	5.6	1.3 J	7.7	5 U	5 U	14	5 U	5 U	5 U	0.427	1.6	2030	0.16 U	7.58					
7/16/2013	5 U	14	170	7.1	1.7 J	12	5 U	5 U	25	5 UJ	5 U	5 U	0.703	1.3	2000	0.16 U	7.4					
10/16/2013	5 U	41	200	8.9	2.4 J	13	5 U	5 U	15	5 U	5 U	5 U	0.4 U	1.2	1940	0.16 U						
12/3/2013	5 U	7.8	170	7.4	1.6 J	8.9	5 U	5 U	22	5 U	5 U	5 U	0.961	2 J	1840	0.16 U						
4/14/2014	1 U	4.2	150	5.9	1.3	6.8	5 U	5 U	16	1 U	1 U	1 U	0.984	3	1920	0.16 U	6.67					
8/15/2014	1 U	1.8	24	1.3	1 U	1.4	5 U	5 U	9.9	1 U	1 U	1 U	1.68	5.7	533	0.23	7.87					
12/2/2014	1 U	2.7	28	1.5	1 U	1.7	5 U	5 U	19	1 U	1 U	1 U	0.46	2.3	290	0.4	7.41					
3/26/2015	1 U	2.4	17	0.89 J	1 U	1 J	5 U	5 U	5 UJ	1 U	1 U	1 U	0.24 J	1.6	254	0.16 U	7.14					
10/13/2015	1 U	1 U	14	0.82 J	1 U	1.4	5 U	5 U	260	1 U	1 U	1 U	0.238 J	2.7								
5/12/2016	1.0 U	1.7	58	2.6	0.55 J	10	5.0 U	5.0 U	240	1.0 U	1.0 U	1.0 U	1.01	2.2	1460	0.39	7.26					
4/12/2017	1.3 U	0.78 J	37	1.6	1.3 U	10	0.2 J	0.5	23	1.3 U	1.3 U	1.3 U	1.4	2.5	1600	1.0 U	7.49					
3/30/2018	1.7 U	1.8	55	2.4	0.5 J	4.5	0.26 J	0.38 J	17	1.7 U	1.7 U	1.7 U	0.92	2.1	2000	1.0 U	7.13					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 2D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane		1,1-Dichloroethane		Chloro Iron (mg/L)	Dissolved				
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)				ethane (µg/L)	thane (µg/L)	ethane (µg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)
11/2/2001	440000 BD								32	33								
12/6/2001	950000								50000 U	50000 U								
12/12/2001	440000								24000 U	24000 U								
10/2/2002	410000								12000 U	12000 U								
11/7/2002	400000								12000 U	12000 U								
9/23/2003	480000 D				12000 U				2900 J	12000 U								
10/30/2003	640000				25000 U				25000 U	25000 U								
6/23/2004	110000 B				1400 J				2500 J	4000 U								

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-2DP

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved			
	TCE PCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	1,1-DCE ($\mu\text{g/L}$)	Chloride Cl ($\mu\text{g/L}$)	Ethane ($\mu\text{g/L}$)	Ethene ($\mu\text{g/L}$)	Methane ($\mu\text{g/L}$)	Trichloro ethane 2500 U	Dichloroe thane 2500 U	Chloro ethane 5000 U	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
10/2/2002	11600000	24000000	611000	2500 U	2500 U	2500 U														

$\mu\text{g/L}$ micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

$\mu\text{g/L}$ micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 2S

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)			
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)					ethane (µg/L)	thane (µg/L)	ethane (µg/L)	ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)											
11/2/2001		140000	BD									5.0 U	85																		
12/6/2001		200000										25000 U	25000 U																		
10/3/2002		25000	U									25000 U	25000 U																		
11/7/2002		5600	J									25000 U	25000 U																		
9/19/2003		25000	U					30000				25000 U	25000 U																		
10/30/2003		25000	U					32000				25000 U	25000 U																		
5/19/2004		25000	U					35000				25000 U	25000 U																		
6/23/2004		7300	J					26000				25000 U	25000 U																		
8/31/2005	500	U	657000	2770	1680	94000	14.8	450	178	500	U	500	U	500	U	47.1	867														
9/18/2006	1000	U	2170	343000	3110	1080	116000	28	351	147	1000	U	1000	U	2000	U	11.7	1330													
5/29/2008	400	U	2700	400000	2300	J	1100	60000	44	650	290	400	U	500	U		7.6	1130	J												
6/2/2009	5000	U	31000	230000	1700	J	660	28000	40	390	210	5000	U	5000	U	4.39	7.5	1120	0.98	U											
7/13/2010	2500	U	2500	250000	1700	J	680	32000	30	320	120	2500	U	2500	U	4.23	7.9	1270	J	0.16	U										
6/29/2011	1300	U	6400	230000	1400		610	26000	12	76	56	1300	U	1300	U	3.28	9.6	957	J	0.16	U	6.7	6.3E+03	3	U	1.1E+04	5.7E+01	1.1E+01			
8/25/2011	500	U	500	220000	1400		490	24000	12	120	55	500	U	500	U	4.23	7	1510	J	0.16	U	6.52	1.0E+05	7.0E+01	9.9E+04	8.3E+01	3.6E+02				
11/2/2011	500	U	150	J	120000	1100		340	J	18000	15	J	92	J	62	J	500	U	500	U	1.32	5.4	868	0.16	U	6.95	2.1E+05	1.2E+02	3.7E+02	1.7E+02	
3/21/2012	1000	U	520	J	240000	1700		590	J	30000	17		140		98		1000	U	1000	U	1.28	5	1100	J	0.16	U	6.5	2.5E+05	1.0E+02	2.3E+05	1.4E+03
6/20/2012	250	U	600	250000	1700		560	27000	62	390	1800	250	U	250	U	3.88	5.5	1170	0.16	U	6.73	8.5E+04	8.6E+02	2.3E+05	1.5E+02	2.8E+02					
9/19/2012	500	U	210	J	240000	1900		650	33000	80	450	2500	500	U	500	U	3.05	4.7	1090	J	0.16	U	6.6E+03	9.3E+02	2.3E+05	2.3E+04	6.3E+05				
12/5/2012	500	U	760	230000	1700		620	27000	55	280	1800	500	U	500	U	1.87	5	1130	0.16	U	6.44	1.9E+04	2.8	J	2.5E+04	2.9E+01	2.9E+01				
4/3/2013	44	J	2000	250000	1800		560	28000	45	230	950	J	47	J	38	J	100	U	0.958	4	1230	0.16	U	7.07	6.8E+04	4.7E+02	1.4E+05	2.7E+02	8.0E-01		
7/11/2013	500	U	1400	220000	1600		530	18000	18	130	300	500	U	500	U	1.16	4.3	1130	0.16	U	6.84	7.5E+03	3.1E+01	1.7E+03	1.5E+01	9.0E-01					
10/15/2013	2500	U	730	J	240000	1800	J	670	J	27000	43	460	860	2500	U	2500	U	4.1	5.7	1020	0.16	U	6.15	3.7E+03	1.9E+02	6.3E+03	3.7E+02	1.0E+01			
12/5/2013	250	U	7100	190000	1200		540	14000	11	96	240	250	U	250	U	0.183	J	5	562	0.16	U	3.8E+05	2.7E+01	8.3E+05	6.1E+02	2.4E+02					
4/14/2014	1	UJ	3.5	77	4.9	1	U	67	190	190	19000	1	U	1.2	1	U	0.376	J	10.3	32.1	17.7		6.4	1.7E+04	1.3E+02	5.9E+04	1.3E+02	2.4E+04			
8/18/2014	250	U	630	300000	2000		810	30000	17	190	240	250	U	250	U	5.17	7	954	0.16	U	6.93	3.9E+05	3.1E+02	6.7E+05	1.3E+01	3.4E+00					
12/9/2014	200	U	3500	240000	1300		450	12000	5.2	59	70	200	U	200	U	0.186	J	4.2	974	0.16	U	7.49	1.6E+05	1.6E+02	4.7E+05	3.1E+01	9.6E+00				
3/26/2015	82	J	5300	240000	1400		500	14000	7.6	34	140	J	100	U	100	U	0.111	J	3	894	0.16	U	3.8E+05	1.3E+01	6.0E+05	2.7E+01	1.2E+02				
10/15/2015	500	U	500	U	260000	1200		360	J	9300	14	170	210	500	U	500	U	3.4	4.4												
5/9/2016	50	U	320	240000	1600		520	14000	22	180	310	50	U	29	J	50	U	2.23	2.3	1220	0.10	U	6.78	2.3E+03	1.6E+03	4.6E+03	2.1E+00	1.9E+00			
9/29/2016	5000	U	5000	U	190000	5000	U	5000	U	17000	8.8	J	80	J	120	J	5000	U	5000	UJ	3	2.8		6.57							
4/19/2017	5000	U	5000	U	190000	1500	J	5000	U	15000	15	58	300	5000	U	5000	U	1.4	2.8	1300	1.0	U	7.09	9.9E+03	1.3E+03	6.8E+03	2.5E+00	9.6E+00			
10/12/2017	5000	U	5000	U	160000	5000	U	5000	U	17000	20	120	410	5000	U	5000	U	4	3.1												
3/28/2018	2000	U	770	J	230000	D	1500	J	2000	U	14000	29	87	620	2000	U	2000	U	1.8	2.5	1400	1.0	U	6.9	3.6E+03	4.7E+02	5.5E+02	9.0E-01	1.6E+00		
9/16/2020	5000	U	5000	U	160000	1200	J	5000	U	14000	62	230	960	5000	U	5000	U	3.6	3.9	1300	1.0	U	6.8	4.2E+03	3.5E+01	5.9E+03	2.7E+00	2.4E+01			

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-2SP

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
10/2/2002	5000 U	5000 U	970000 D	2200 J	5000 U	46000				5000 U	5000 U	10000 U										

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 3D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)				ethane (µg/L)	ethane (µg/L)	ethane (µg/L)	ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)		
11/2/2001		30000	BD						87000	D	1200	DJ												
12/6/2001		20000							44000		2000	U												
9/30/2002		5500							25000		1000	U												
11/7/2002		4600							16000	D	110	J												
9/22/2003		1600				500	U			11000		100	J											
5/28/2008	9.7 J	150	2600	5.4 J	37	160	2.8 J	13	43	750	32			2.6	808 J									

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-3DP

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-	Trans-1,2-	Vinyl	1,1,1-		1,1-		Dissolved										
			DCE (µg/L)	DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
10/2/2002	8.9	130	46	5.0 U	4.4 J	5.0 U			590 D	5.9	10 U									

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 3S

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)				
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)					1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)					
11/2/2001								4.3 BJ				5.0 U	5.0 U																		
12/6/2001								2.3 J				5.0 U	5.0 U																		
9/26/2002								5				5.0 U	5.0 U																		
11/4/2002								2				1.0 U	1.0 U																		
9/18/2003								5.0 U				5.0 U																			
10/28/2003								5.0 U				5.0 U																			
5/19/2004								5 U				5 U																			
6/22/2004								2.4 J				5.0 U																			
8/31/2005								1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.10 U	0.10 U	0.2	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.3	13.1							
5/29/2008								5 U	5 U	1.8 J	5 U	5 U	5 U	5 U	11	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.8	2090 J							
6/1/2009								5.0 U	2.2 J	1.5 J	5.0 U	5.0 U	2.0 U	1.0 U	1.0 U	3.7	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	0.832	2680	1.0 U					
7/12/2010								5 U	5 U	0.81 J	5 U	5 U	5 U	5 U	5 U	23	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.93	2610	0.16 U					
6/22/2011								5 U	5 U	5 U	5 U	5 U	5 U	5 U	16	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.637	3.3	2740	0.16 U	7.59				
8/23/2011								5 U	1.3 J	7.1	5 U	5 U	5 U	5 U	5 U	11 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.4	3.8	3170 J	0.11 J	7.39			
11/9/2011								5 U	5 U	5 U	5 U	5 U	5 U	5 U	32	5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.31	8.6	3470	0.16 U	6.8				
3/20/2012								5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.3 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.0961 J	14.1	283 J	0.16 U	6.67			
6/26/2012								5 U	5 U	5 U	5 U	5 U	5 U	5 U	15 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.945	19.8	462	0.16 U	7.49				
9/27/2012								5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.6 J	5 U	240	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.398	12.4	529	0.16 U	7.54		
12/12/2012								5 U	5 U	5 U	5 U	5 U	5 U	5 U	140	5 U	5 U	5 U	5 U	5 U	5 U	5 U	1.98	8.4	662	0.16 U	6.6				
4/10/2013								5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	150	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.0842 J	8.3	254	0.16 U				
7/17/2013								5 U	5 U	5 U	5 U	5 U	5 U	5 U	2.8 J	1.5 J	150	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.768	8.4	342	0.16 U	7.11		
10/10/2013								5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	69	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.228 J	4.4	450	0.16 U				
12/3/2013								5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	3.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.151 J	5.1 J	699	0.16 U				
4/11/2014								1 UJ	1 U	1.3	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.162 J	9.6	226 J+	0.16 U	7.31		
8/19/2014								1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	31	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.0397 J	4.7	523	0.16 U				
12/3/2014								1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.4 U	9.8	88.5	0.16 U	6.56		
4/1/2015								1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.236 J	76.3	215	0.16 U			
9/15/2020								1.0 U	0.13 J	1.0 U	1.0 U	1.0 U	1.0 U	6.4	1.0 U	690	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.5	2.3	1400	1.0 U	7.4			

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 4D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)	Dissolved				
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)				ethane (µg/L)	thane (µg/L)	ethane (µg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)
11/2/2001		250000	BD						56		21							
12/6/2001		190000							10000	U	10000	U						
9/30/2002		61000							1300	J	2500	U						
11/6/2002		58000							3300		2500	U						
9/19/2003		31000				780	J		4200		1000	U						
6/23/2004		130000	BD			720	J		1800		210	J						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 4S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloroform (mg/L)		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCer (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					1,1,1-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	Chloroform (mg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)									
11/2/2001		110000 BD								13	7.2															
12/6/2001		46000								1200 U	1200 U															
9/26/2002		4100								250 U	250 U															
11/4/2002		9000 D								150	13 J															
9/18/2003		190				230				100	100 U															
10/28/2003		130				320				100	100 U															
5/19/2004		1600				1000				710	68 J															
6/23/2004		250				410				43 J	100 U															
8/31/2005		941	12200	100 U	50.5 J	1460	5.86	13.1	84.8	209	100 U	100 U		2.9	2420											
9/19/2006	50 U	932	11000	50	54	1530	12 U	17 U	71.4	70	50 U	100 U		3.4	3410											
5/29/2008	34 J	15000	19000	31 J	43 J	360	13	9.8	140	100 U	100 U			3.9	2920 J											
6/2/2009	5.0 U	1.5 J	23	1.4 J	5.0 U	93	15	24	200	5.0 U	0.72 J	5.0 U	0.671	6.2	3750	1.7										
10/8/2009	5.0 U	6.7	92	2.4 J	0.51 J	79	8.8	11	120	0.38 J	0.78 J	5.0 U		11.4												
7/15/2010	5 U	5 U	34 J	1 J	5 U	130	16	13	170	5 U	5 U	5 U	0.693	3.5	3970 J	4.6										
6/23/2011	10 U	59	670	11	3 J	220	12	100	150	2.7 J	3.4 J	10 U	0.338	12.2	3730	45.4	7.69									
8/23/2011	5 U	10	130	3.6 J	5 U	91	12	75	110	5 U	1.8 J	5 U	0.855	5.4	4090 J	1.4	7.12									
11/8/2011	5 U	2.7 J	27	2.3 J	5 U	50	11	110	430	5 U	1.6 J	5 U	0.498	6.1	4190 J	11	7.04									
3/20/2012	5 U	1.4 J	46	5 U	5 U	140	14	42	180	5 U	1.4 J	5 U	0.6	4.1	4440 J	0.35	6.53									
6/27/2012	5 U	1.6 J	37	5 U	5 U	74	5.9	15	100 J	5 U	5 U	5 U	0.72	3.8	3190 J	5.1	7.14									
9/25/2012	5 U	2.1 J	120	1.6 J	5 U	210	15	94	320	5 U	1.2 J	5 U	0.589	7	3710 J	6.4	6.41									
12/12/2012	5 U	8	330	8.9	1.1 J	260	15	110	1400	5 U	1.3 J	5 U	0.617	5 U	2200	12.1	6.39									
4/10/2013	25 U	39	3400	55	8 J	1700	31	380	6100	25 U	6.2 J	25 U	0.186 J	9.2	2320	22.9	6.75									
7/18/2013	5 U	10	530	12	1.4 J	470	11	89	1300	1.3 J	2 J	5 U	0.414	5.1	3420	14.1	6.87									
10/17/2013	5 U	32	1300	27	4 J	920	20	300	4400	0.86 J	3.2 J	5 U	0.24 J	13.6	1840	29.1	6.25									
12/12/2013	5 U	27	660	20	2.9 J	810	16	230	3600	5 U	2.3 J	5 U	0.587	13.6	3050	26.1	6.44									
4/14/2014	5 U	23	3000	47	6.7	1400	54	350	5000	5 U	4.5 J	5 U	0.684	9	2190	19.5	6.73									
8/22/2014	1 U	10	1100	13	3.2	450	20	88	2900	1 U	2	1 U	0.185 J	7.7	2240	11.3										
12/8/2014	1 U	17	2600	20	8.7	1100	18	150	5500	1 U	2.4	1 U	0.3 J	7.8	2560	16.3	6.73									
3/30/2015	2 U	8.6	2500	29	7.4	1000	16	170	4700	1 J	3.4	2 U	0.564	7.3	1950	10.8	7.61									
10/19/2015	1 U	3.2	2300	5.7	5.2	420	15	79	2000	1 U	1.3	1 U	0.533	4.7												
5/16/2016	1.0 U	5.1	320 D	1.8	1.2	230	9.3	24	480 D	1.0 U	0.79 J	1.0 U	0.639	5.6	4110	2.4	6.79									
9/26/2016	2.5 UJ	1.2 J	40 J	2.5 UJ	2.5 UJ	72 J	3.5	4	90	2.5 UJ	2.5 UJ	2.5 UJ	0.56	3.9												
4/18/2017	33 U	33 U	770	33 U	33 U	790	7.6	49	1200	33 U	33 U	33 U	0.32	6.1	3700	11	7									
10/11/2017	100 U	100 U	4000	100 U	100 U	2000	17	130	2500	100 U	100 U	100 U	0.26	6												
4/4/2018	130 U	130 U	3600	130 U	130 U	1400	14	100	4100	130 U	130 U	130 U	3.6	7.6	10 U	1.9	7.02									
9/17/2020	25 U	28	930	13 J	25 U	1200	22	290	5300	25 U	25 U	25 U	0.086 J	13	3300	7	7									

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 5S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)			
9/26/2002		5.0 U								5.0 U	5.0 U														
11/4/2002		5.0 U								5.0 U	5.0 U														
9/18/2003		5.0 U				5.0 U				5.0 U	5.0 U														
10/28/2003		5.0 U				5.0 U				5.0 U	5.0 U														
5/17/2004		5 U				5 U				5 U	5 U														
6/21/2004		5.0 U				5.0 U				5.0 U	5.0 U														
8/29/2005		0.42 J	1	1.0 U	1.0 U	1.5				1.0 U	1.0 U	1.0 U													
6/1/2009	5.0 U	5.0 U	0.85 J	5.0 U	5.0 U	15	1.6	1.0 U	38	5.0 U	5.0 U	5.0 U	1.16		1110	0.98 U									
7/8/2010	5 U	5 U	1.5 J	5 U	5 U	34	2.6 J	2 J	44	5 U	5 U	5 U	1.3		1150	0.16 U									
8/30/2011	5 U	6.5	1.2 J	5 U	5 U	24	2.4 J	1.9 J	30	5 U	5 U	5 U	0.723	2.4	932	0.16 U	7.06								
3/28/2012	5 U	5 U	5 U	5 U	5 U	3.6 J	5 U	5 U	7.9 J	5 U	5 U	5 U	0.193 J	1.7	1200	0.16 U									
6/27/2012	5 U	5 U	1.3 J	5 U	5 U	27	1.6 J	1.1 J	24 J	5 U	5 U	5 U	0.678	1.6	966 J	0.16 U									
9/26/2012	5 U	5 U	1.4 J	5 U	5 U	35	1.4 J	5 U	19	5 U	5 U	5 U	0.818	1.5	859	0.16 U	7.32								
12/11/2012	5 U	5 U	2 J	5 U	5 U	33	1.8 J	1.1 J	20 J	5 U	5 U	5 U	0.549	1.8	945	0.16 U									
4/2/2013	5 U	5 U	0.99 J	5 U	5 U	3.3 J	5 U	5 U	5.6	5 U	5 U	5 U	0.152 J	1.5	1060	0.16 U	7.59								
7/16/2013	5 U	5 U	1.7 J	5 U	5 U	27	1.3 J	5 U	21	5 UJ	5 U	5 U	0.639	2.1	877	0.16 U	7.36								
10/8/2013	5 U	5 U	1.6 J	5 U	5 U	30	1.5 J	5 U	17	5 U	5 U	5 U	0.591	1.9	790	0.16 U	6.93								
12/3/2013	5 U	5 U	1.3 J	5 U	5 U	21	1.3 J	5 U	22	5 U	5 U	5 U	0.679	2.6 J	767	0.16 U	6.94								

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 6S

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Dissolved					
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	Chloroethane (µg/L)					Chloroethene (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
9/27/2002								29				5.0 U	5.0 U								
11/4/2002								0.68 J				1.0 U	1.6								
9/18/2003								3.4 J				5.0 U	5.4								
10/29/2003								3.9 J				5.0 U	4.4 J								
5/17/2004								5 U				5 U	5.6								
6/22/2004								11				2 J	6.6								
8/31/2005								0.96 J	2.2	1.0 U	1.0 U	9.1	0.48	0.10 U	0.32	1.0 U	0.43 J	1.0 U	2.6	21.5	
9/21/2006	1 U	2	58	1 U	1	267	48.3		17 U	185	1 U	11	2 U			3.5	3700				
5/28/2008	5 U	2.5 J	34	5 U	1.6 J	280	57	8.2	300	1.4 J	11				3.5	2440 J					
5/29/2009	5.0 U	0.76 J	72	3.1 J	1 J	410	58	7.5	290	0.86 J	6.8	5.0 U	0.0514 J	6.5	2610	1.0 U					
7/14/2010	5 U	5 U	58	5 U	1.1 J	300	56	6.6	200	0.86 J	6.7	5 U	0.137 J	5.5	3540	0.16 U					
6/22/2011	5 U	1.4 J	60	2.5 J	5 U	120	12	2 J	62	5 U	1.9 J	5 U				10.1					
8/24/2011	5 U	5 U	23	5 U	0.98 J	210	45	3.5 J	110	5 U	6.3	5 U				6.96					
11/1/2011	5 U	5 U	40	5 U	1.5 J	250	46	4.8 J	150	5.5	9.9	5 U				6.78					
3/23/2012	5 U	5 U	670	2.4 J	3.3 J	280	17	5.4	48	1.5 J	10	5 U									
6/27/2012	5 U	5 U	53	5 U	5 U	210	34	4 J	110	5 U	3.9 J	5 U									
9/26/2012	5 U	5 U	31	5 U	1.5 J	250	50	5.8	140 J	1.1 J	8.5	5 U				6.45					
12/11/2012	5 U	5 U	29	5 U	5 U	110	24	3.3 J	75 J	5 U	2.8 J	5 U				6.89					
4/11/2013	5 U	5 U	1.9 J	5 U	5 U	1.3 J	5 U	5 U	5 U	5 U	5 U	5 U				8.37					
7/19/2013	5 U	5 U	97	0.9 J	5 U	230	27	4.6 J	140	1.1 J	5.3	5 U				6.45					
10/17/2013	5 U	5 U	66	5 U	1.3 J	230	54	15	200	0.87 J	7.4	5 U				6.24					
12/11/2013	500 U	500 U	500 U	500 U	170 J	45	4.7 J	160	500 U	500 U	500 U										
4/16/2014	0.53 J	76	67	0.55 J	1 U	60	5.4	1.1 J	56	1 U	1.2	1 U				7.7					
8/21/2014	1 U	1.3	44	0.6 J	0.63 J	170	31	6.4	140	1 U	4.5	1 U									
12/10/2014	1 U	1 U	38	1.1	0.97 J	190	32	3.4 J	100	0.91 J	6.5	1 U				7.73					
4/1/2015	1 U	1	30	0.84 J	1 U	35	2.7 J	5 U	23	1 U	1 U	1 U				8.28					
10/19/2015	1 U	0.7 J	42	1 U	1 U	53	2.9 J	1.7 J	100	1 U	0.55 J	1 U				9.31					
5/12/2016	1.0 U	1.0 U	25	1.0 U	1.0 U	91	11	12	88	1.0 U	1.4	1.0 U				7.33					
4/12/2017	2.0 U	2.0 U	12	2.0 U	2.0 U	43	12	16	93	2.0 U	1.1 J	2.0 U				7.36					
4/2/2018	1.0 U	1.0 U	1.1	1.0 U	1.0 U	2.4	2	4.3	6	1.0 U	0.27 J	1.0 U				7.85					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 7D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (s.u.)	pH	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCER (cells/ml)	VCR (cells/ml)
10/25/2006	501	18300	7480	20 U	24	96	12 U	17 U	15.7	309	39	40 U	3.3	857							
1/15/2008	720 J	140000	26000	5.0 U	5.0 U	690 J	12	15	82	360 J	5.0 U	5.0 U	7.79	1150							
5/30/2008	740	75000	26000	500 U	110 J	1000	8.9	15	74	120 J	500 U		5.1	1400							
7/25/2008	5000 UJ	5000 UJ	130000 J	360 J	5000 UJ	900 J	16 J	28 J	72 J	5000 UJ	5000 UJ	5000 UJ	480 J	1190 J							
9/30/2008	2500 U	1200 J	59000	740 J	140 J	1500	4.4	13	55	2500 U	2500 U	2500 U	212	1280							
12/11/2008	5.0 U	2600	53000	350 J	5.0 U	1400 J	5.3	15	62	5.0 U	5.0 U	5.0 U	278	649							
6/2/2009	500 U	1600	19000	68 J	44 J	1200	7.8	18	380	500 U	53 J	500 U	0.043 J	124	1210	304					
6/5/2009	53 J	2200	26000	79 J	37 J	1200	5.6 J	10 J	200 J	42 J	75 J	500 U									
10/8/2009	100 J	3100	23000	88 J	55 J	940	12	21	890	64 J	100 J	500 U	0.0317 U	117	485						
7/14/2010	47 J	1800	17000	41 J	30 J	1400	13	110	3700	100 U	47 J	100 U	0.2 U	77	1310	229					
6/23/2011	830 J	63000	80000	1000 U	250 J	1300	8.3	56	130	730 J	1000 U	1000 U	0.106 J	56.1	856	128	7.64				
8/24/2011	500 U	770	140000	98 J	350 J	990	80	530	160	500 U	120 J	500 U	0.11 J	138	170	41.2	6.93				
11/8/2011	560	25000	29000	60 J	65 J	1300	38	210	3200	110 J	140 J	250 U	2.56	166	12.7 J	157	7.26				
3/20/2012	70	150	3100	50 U	12 J	890	19	93	170	50 U	50 U	50 U	0.977	4.4	5 U	0.27	7.42				
6/26/2012	390	19000	32000	56 J	60 J	630	17	190	3100	150	80 J	100 U	0.2 U	14.7	376	230	8.67				
9/18/2012	420	20000	31000	61 J	76 J	1000	29	370	4200	200	110	100 U	0.2 U	27.9	579 J	243	7.2				
12/7/2012	500 U	500 U	110000	110 J	500 U	930	22	250	2800	260 J	520	500 UJ	0.292	935	7.5	302	5.96				
4/9/2013	46 J	190 J	64000	81 J	130 J	740	8.1	79	1100	2600	1000	250 U	0.0459 J	210	10 J	224					
7/17/2013	89 J	1300	59000	91 J	500 U	1200	17	180	3400	900	1100	500 U	0.2 U	178	37.9	242	6.73				
10/16/2013	65 J	270	72000	89 J	81 J	850	9.9	120	2400	2100	1400	250 U	0.4 U	216	6.1	219	6.27				
12/13/2013	84 J	530	69000	110 J	190 J	1100	17	280	2000	2100	1900	500 U	0.4 U	192	22.2	208	6.55				
4/8/2014	100 U	360	44000	88 J	85 J	2100	45	360	4700	510	740	100 U	0.4 U	589	96.3	165	7.17				
8/18/2014	100 U	780	72000	140	93 J	3000	41	470	8600	360	650	100 U	0.4 U	219	12.2	220	6.89				
12/11/2014	66 J	1100	98000	120	110	2200	27	410	6900	630	990	100 U	0.183 J	213	13.5 J+	212	6.58				
4/2/2015	200 U	320	72000	200 U	200 U	3500	58	410	8000	270	660	200 U	0.0579 J	112	7.1	119	6.76				
10/20/2015	290	24000	69000	140	53 J	2300	26	420	7900	150	310	100 U	0.4 U	85.4			6.73				
5/17/2016	94 J	560	67000 D	130	69 J	2500	12	260	9600 D	100 U	150	100 U	0.400 U	84.8	31.6	159	7				
9/30/2016	170 U	66 J	72000	140 J	46 J	5300	7.5 J	300 J	5000 J	41 J	350	170 U	0.063 J	240			6.54				
4/21/2017	250 U	110 J	11000	250 U	250 U	2600	4	100	2500	250	180 J	250 U	0.037 J	15	370	140	7.59				
10/13/2017	1000 U	1000 U	23000	1000 U	1000 U	4200	26	480	7800 D	1000 U	270 J	1000 U	0.100 U	53			6.9				
4/5/2018	500 U	500 U	9200	500 U	500 U	2200	6.4 J	310 J	5300 DJ	170 J	160 J	500 U	0.064 J	5.6	340	180	7.23				
9/17/2020	200 U	45 J	5700	46 J	200 U	2500	27 J	1800 J	18000 DJ	110 J	320	200 U	0.057 J	210	580	340	7.1 J				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 7S

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl			1,1,1-			1,1-			Dissolved					
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
9/27/2002		5.0 U								5.0 U												
11/4/2002		5.0 U								5.0 U												
9/18/2003		5.0 U				5.0 U				5.0 U												
10/29/2003		2.9 J				5.0 U				5.0 U												
5/17/2004		5 U				5 U				5 U												
6/22/2004		12				5.0 U				1.2 J												
8/29/2005		1.0 U	1	1.0 U	1.0 U	1.0 U				1.0 U												
9/21/2006	1 U	1 U	1 U	1 U	1 U	1 U				1 U												
5/28/2008	5 U	5 U	5 U	5 U	5 U	5 U				5 U												
6/1/2009	5.0 U	6.9	0.75 J	5.0 U	5.0 U	2.0 U	1.0 U	1.0 U	5.7	5.0 U	5.0 U	5.0 U	0.122	2070	1.0 U							
7/14/2010	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.6 J	5 U	5 U	5 U	0.307	2070	0.16 U							
8/31/2011	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	9.4 J	5 U	5 U	5 U	0.716	3.6	2170	0.16 U	6.65					
3/20/2012	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	15 U	5 U	5 U	5 U	0.0756 J	2.7	2430 J	0.16 U	6.89					
6/26/2012	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	7.5 J	5 U	5 U	5 U	0.709	2.4	1750	0.16 U	6.54					
9/18/2012	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6.9 J	5 U	5 U	5 U	1.32	1970	0.16 U	6.6						
12/12/2012	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.239	2	2070	0.16 U	6.53					
4/10/2013	5 U	5 U	2.1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.0446 J	2.6	2210	0.16 U						
7/17/2013	5 U	5 U	0.95 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.2 U	2.4	1940	0.16 U						
10/17/2013	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.307 J	2	12100	0.16 U	6.53					
12/3/2013	5 U	5 U	0.98 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.235 J	2.9 J	1880	0.16 U						
4/10/2014	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	0.0861 J	3.9	1800	0.16 U						
8/21/2014	1 U	1 U	0.71 J	1 U	1 U	1 U	1 U	5 U	5 U	1 U	1 U	1 U	4.44	2.9	1700	0.16 U						
12/12/2014	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	0.25 J	0.98 J	1780	0.16 U	6.72					
3/31/2015	1 U	1 U	0.66 J	1 U	1 U	1 U	5 U	5 U	5 U	1 UJ	1 U	1 U	0.48	2.7	1620	0.16 U						
10/21/2015	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	22	1 U	1 U	1 U	2.15	1.8			6.57					
5/6/2016	1.0 U	1.0 U	5.0 U	5.0 U	15	1.0 U	1.0 U	1.0 U	1.53	1.2	2010	0.10 U	6.64									
4/14/2017	1.0 U	1.0 U	0.50 U	0.50 U	11	1.0 U	1.0 U	1.0 U	2.9	1	2000	0.53 J	7.06									
3/30/2018	1.0 U	1.0 U	1.0 U	1.0 U	20	1.0 U	1.0 U	1.0 U	0.31	0.97 J	2100	1.0 U	6.88									

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 8S

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl		1,1,1-		1,1-		Dissolved								
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
9/27/2002		5.0 U								5.0 U	5.0 U											
11/4/2002		5.0 U								5.0 U	5.0 U											
9/18/2003		5.0 U				5.0 U				5.0 U	5.0 U											
10/28/2003		5.0 U				5.0 U				5.0 U	5.0 U											
5/17/2004		5 U				5 U				5 U	5 U											
6/22/2004		4.3 J				5.0 U				5.0 U	5.0 U											
8/31/2005		2.7	14.3	1.0 U	1.0 U	0.97 J				1.0 U	1.0 U	1.0 U										
9/21/2006	1 U	1 U	1 U	1 U	1 U	1 U				1 U	1 U	2 U										
5/29/2008	5 U	5 U	5 U	5 U	5 U	5 U				5 U	5 U											
5/29/2009	5.0 U	2.0 U	1.0 U	1.0 U	2.7	5.0 U	5.0 U	5.0 U	0.0088 J		850	0.99 U										
7/15/2010	5 U	5 U	14	5 U	5 U	18	5 U	5 U	15 U	5 U	5 U	5 U	0.2 U		3890 J	0.16 U						
9/1/2011	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	15 U	5 U	5 U	5 U	0.0192 J	14.9	424 J	0.16 U	9.86					
3/29/2012	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	15 U	5 U	5 U	5 U	0.0812 J	7	5270 J	0.16 U	6.34					
6/21/2012	5 U	5 U	4 J	5 U	5 U	3.8 J	5 U	5 U	15 U	5 UJ	5 U	5 U	0.0325 J	25.1	4390 J	0.16 U						
9/19/2012	5 U	5 U	2.8 J	5 U	5 U	3.5 J	5 U	5 U	8.3 J	5 U	5 U	5 U	0.2 U	5.7	4010 J	0.16 U	6.94					
12/12/2012	5 U	1.5 J	2.1 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.2 U	5.6	2450	0.16 U	6.85					
4/10/2013	5 U	5 U	1.7 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.2 U	5.3	3840	0.16 U						
7/17/2013	5 U	5 U	0.87 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.594	6.7	3270	0.16 U						
10/9/2013	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.122 J	4.2	1250	0.16 U	6.97					
12/10/2013	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.4 U	3.6	1360	0.16 U	7.05					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW- 9S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloroform (mg/L)		Dissolved Iron (mg/L)		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Dichloroethane (µg/L)	Chloroform (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)										
9/27/2002		5.0 U								5.0 U	5.0 U															
11/4/2002		5.0 U								5.0 U	5.0 U															
9/18/2003		5.0 U				5.0 U				5.0 U	5.0 U															
10/28/2003		5.0 U				22				5.0 U	5.0 U															
5/18/2004		5 U				84				5 U	5 U															
6/23/2004		5.0 U				120				5.0 U	5.0 U															
8/31/2005		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				1.0 U	1.0 U	1.0 U														
9/20/2006	1 U	1 U	358	3	1 U	212				1 U	1 U	2 U														
5/30/2008	5 U	67	130	5 U	5 U	35				5 U	5 U															
6/1/2009	2500 U	30000	99000	2500 U	2500 U	4100	19	27	210	2500 U	2500 U	0.0658 J			1410	50.2										
7/12/2010	5 U	5 U	410	2.2 J	1.6 J	140	5 U	3.2 J	24	5 U	1.2 J	5 U	1.28		3510	0.16 U										
8/31/2011	5 U	5 U	310	2 J	0.99 J	170	5 U	6	27	5 U	5 U	5 U	1.61	7.6	3190	0.16 U	5.92									
3/28/2012	5 U	5 U	1300	7.5	4.2 J	460	5 U	15	32	5 U	3.1 J	5 U	0.81	5.4	2640	0.16 U	6.44									
6/26/2012	5 U	5 U	1100	7.8	3.7 J	290	5 U	19	42	5 U	3.6 J	5 U	1.06	5.9	2300	0.16 U	6.84									
9/26/2012	10 U	10 U	930	5.4 J	2.7 J	510	5 U	20	43	10 U	2.8 J	10 U	1.14	5.8	2300	0.16 U	6.48									
12/12/2012	5 U	5 U	740	4.9 J	2.6 J	320	5 U	20	40	5 U	3.6 J	5 UJ	0.752	4.6	1990	0.16 U	6.52									
4/2/2013	5 U	5 U	1100	8.8	4.3 J	640	5 U	35	54	2.6 J	7.7	5 U	0.627	5.8	2480	15.2	7.28									
7/19/2013	5 U	5 U	480	4.1 J	5 U	360	5 U	25	50	5 U	3.6 J	5 U	1.1	7.5	2530	9	6.48									
10/17/2013	5 U	5 U	220	1.6 J	5 U	150	5 U	7.3	19	5 U	1.5 J	5 U	0.22 J	16.8	778	0.95	6.95									
12/11/2013	5 U	5 U	270	2.1 J	0.89 J	180	5 U	12	25	0.82 J	2.4 J	5 U	0.896	15.4	1740	1.3	6.61									
4/17/2014	1 U	2.4	1000	7.5	4.1	620	3.3 J	50	90	16	16	1 U	0.549	10.7	1160	13.3	6.93									
8/19/2014	1 U	0.9 J	460	3.8	2.3	330	5 U	26	58	5.6	7.3	1 U	1.76	10.8	2040	5.7	7.11									
12/12/2014	1 U	1 U	240	1.5	0.95 J	260	5 U	21	39	3.6	4.4	1 U	2.98	6	2490	4.6	6.65									
3/27/2015	1 U	2	710	4.9	5.1	500	1.6 J	30	100 J	19	18	1 U	1.37	14.7	892	2.6	7.13									
10/13/2015	1 U	1 U	1	1 U	1 U	1 U	5 U	5 U	19	1 U	1 U	1 U	2.02	8.9			6.74									
5/13/2016	1.0 U	1.0 U	5.0 U	5.0 U	26	1.0 U	1.0 U	1.0 U	0.400 U	7.6	1390	0.10 U	9.24													
9/28/2016	1.0 U	1.0 U	0.50 UJ	0.50 UJ	6.7 J	1.0 U	1.0 U	1.0 U	0.100 U	6.9			7.6													
4/14/2017	1.0 U	1.0 U	0.50 U	0.50 U	0.50 U	27	1.0 U	1.0 U	1.0 U	0.10 U	4.6	450	1.0 U	12.44												
10/13/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	14	1.0 U	1.0 U	1.0 U	0.99	5.1			6.93												
4/3/2018	1.0 U	1.0 U	2.3	1.0 U	1.0 U	0.88 J	1.0 U	1.0 U	8.3	1.0 U	1.0 U	1.0 U	0.22	3.4	1700	1.0 U	7.33									
9/11/2020	1.0 U	1.0 U	0.17 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	23	1.0 U	1.0 U	1.0 U	0.39	4.9	2600	1.0 U	6.56									

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-10D

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-	Trans-1,2-	Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Dissolved							
			DCE (µg/L)	1,1-DCE (µg/L)					ethane (µg/L)	thane (µg/L)	chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCER (cells/ml)
7/2/2002		960 D							5.0 U	5.0 U										
10/1/2002		4300 D							43	14										
11/6/2002		5400							140 J	250 U										
9/22/2003		2500			66 J				230	28 J										
10/29/2003		3700 D			130				200 DJ	46										
5/18/2004		4700			62 J				230	120 U										
6/22/2004		1000			66				53	12 J										
9/1/2005		1090	2630	5.8 J	15.6	180			147	25.6	10 U									
9/21/2006	5 U	37	1320	5 U	9	111	12 U	17 U	49.9	28	11	10 U		2.4	1060					
5/29/2008	5 U	5 U	98	5 U	5 U	27	14	2.3 J	150	1.4 J	5 U			2.7	722 J					
5/29/2009	5.0 U	5.0 U	34	5.0 U	5.0 U	17	7.4	1.0 U	110	0.89 J	5.0 U	5.0 U	1.03	706	1.15					
7/12/2010	5 U	5 U	24	5 U	5 U	10	13	1.1 J	190	1.3 J	5 U	5 U	0.822	934	4					
8/21/2011															6.17					
8/31/2011	25 U	58	6200	15 J	27	180	7.4	3.7 J	110 J	680	30	25 U	0.174 J	6.4	840	8.4				
3/27/2012	10 U	10	1500	3.5 J	10	120	4.6 J	2.2 J	71	290	17	10 U	0.751	3.2	766	1.7				
3/29/2012	5 U	8	1300	3.6 J	16	98	11	1.7 J	120	300	17	5 U	0.515	2.4	974 J	3.9	6.97			
6/25/2012	10 U	2.3 J	1300	3.1 J	15	91	15	3.5 J	200	190	15	10 U	0.168 J	2.1	932	6.2	6.95			
9/27/2012	5 U	1.8 J	1000	2.7 J	11	120	25	3.4 J	310	180	19	5 U	0.103 J	1.7	916	5.3	6.72			
12/13/2012	10 U	4.9 J	810	2.6 J	10	160	4.7 J	3.8 J	78	250 J	15 J	10 U	0.716	13.3	627	4.7	6.85			
4/2/2013	5 U	2.6 J	770	2.3 J	9	160	19	5.5	270	230	17	5 U	0.0773 J	2.5	815	7.5	7.92			
7/18/2013	10 U	2.8 J	1100	2.5 J	8.9 J	170	11	7.4	150	140	21	10 U	0.104 J	2.2	657	4.7	7.89			
10/11/2013	5 U	4.6 J	1100	3.2 J	13	250	5	8.4	82	250	30	5 U	0.125 J	1.9	636	3.2	7.12			
12/11/2013	5 U	2.2 J	770	2.4 J	9.8	160	16	5.6	240	150	21	5 U	0.097 J	2.1	761	6.1	6.73			

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-10S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHbt (cells/ml)	DHC (cells/ml)	TCer (cells/ml)	VCR (cells/ml)	
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					1,1,1-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	Chloro Iron (mg/L)	Dissolved														
9/15/2005		4.2	1120	17.2	1.8	75.7	0.45	1.9	13.8	1.0 U	1.0 U	1.0 U		2.5	501												
9/20/2006	1 U	12	355	2	1 U	40	12 U	17 U	11.3	1 U	1 U	2 U		2.4	766												
5/29/2008	5 U	64	730	5.3	2.3 J	140	22	14	200	5 U	5 U			2.4	1350 J												
5/28/2009	5.0 U	120	1900	37	4.7 J	240	2.3	10	46	5.0 U	5.0 U	5.0 U	2.99		804	0.99 U											
7/13/2010	5 U	66	750	5.1	2.4 J	110	1.4 J	4.1 J	31	5 U	5 U	5 U	1.65		1020 J	0.16 U											
6/21/2011	5 U	14	1100	8.7	2.9 J	210	5.5	18	260	5 U	3.4 J	5 U			6.77												
8/24/2011	5 U	16	1100	12	3 J	270	25	42	4400	5 U	2.3 J	5 U			6.85												
11/2/2011	25 U	34	5600	27	8.9 J	640	7.3	69	3000	25 U	25 U	25 U			6.86												
3/28/2012	5 U	6.2	880	11	2.6 J	510	12	230	1700	5 U	5 U	5 U			6.85												
6/19/2012	5 U	10	1000	19	2.7 J	740	16	590	6600	5 U	2.3 J	5 U			6.69												
9/25/2012	5 U	4.9 J	410	25	5 U	810	7	1700	1700	5 U	1.2 J	5 U			6.69												
12/10/2012	5 UJ	3.2 J	300	12	5 U	280	6.5	380	350	5 U	5 U	5 UJ			6.62												
4/5/2013	5 U	3 J	330	6.8	0.91 J	280	5.2	280	570 J	5 U	5 U	5 U															
7/12/2013	5 U	4.9 J	340	13	5 U	250	9	570	2700	5 U	5 U	5 U			7.13												
10/15/2013	5 U	5 U	230	4.2 J	5 U	170	3.2 J	100	240	5 U	5 U	5 U			6.69												
12/3/2013	5 U	5 U	280	3.6 J	5 U	130	2.5 J	48	250	5 U	5 U	5 U			7.09												
4/17/2014	1 U	1.2	280	2.9	0.75 J	130	1.9 J	45	570	1 U	1 U	1 U			6.91												
8/18/2014	1 U	3	630	4.7	1.8	190	2.9 J	23	440	1 U	1 U	1 U			6.97												
12/10/2014	1 U	1.6	240	6.3	0.97 J	140	6.2	14	2100	1 U	1 U	1 U			6.9												
3/27/2015	1 U	1.5	170	1.5	1 U	49	5 U	5.6	200 J	1 U	1 U	1 U			6.98												
10/21/2015	1 U	5.5	410	2.7	0.89 J	79	3.3 J	14	91	1 U	1 U	1 U			6.57												
5/13/2016	1.0 U	11	530 D	11	1.7	160	4.4 J	12	1300 D	1.0 U	1.0 U	1.0 U			6.83												
9/29/2016	20 U	14 J	520	20 U	20 U	79	0.94 J	5.3 J	23 J	20 U	20 U	20 UJ			7.05												
4/13/2017	13 U	5.3 J	460	6.1 J	13 U	99	1.3	5.4	490	13 U	13 U	13 U			7.42												
10/10/2017	10 U	4.4 J	240	10 U	10 U	48	1.5	9.9	77	10 U	10 U	10 U			6.92												
4/2/2018	10 U	3.3 J	220	10 U	10 U	37	1.0 U	2.7	550	10 U	10 U	10 U			7.46												
9/14/2020	4.0 U	1.2 J	97	4.0 U	4.0 U	32	4.9	10	1300	4.0 U	4.0 U	4.0 U	1.9		6.53												

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-11D

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloroethane (µg/L)		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHbt (cells/ml)	DHC (cells/ml)	TCer (cells/ml)	VCR (cells/ml)	
			DCE (µg/L)	DCE (µg/L)	DCE (µg/L)	DCE (µg/L)					1,1,1-Trichloroethane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)															
7/3/2002		30									240 D	9.5																
10/1/2002		15									110	2.8 J																
11/4/2002		9.4									110 D	3																
9/22/2003		29					2.6 J				360 D	4.5 J																
10/29/2003		14					4.2 J				130	4.5 J																
5/18/2004		50 U					50 U				120	50 U																
6/22/2004		1400 B					50 U				1700 D	41 J																
8/29/2005		5	113	0.48 J	1.6	2.6	6.16	0.10 U	44.8	239	6	1.0 U							3.2	1260								
9/20/2006	5 U	69	257	5 U	5 U	5 U	12 U	17 U	24.3	315	9	10 U							3.8	1660								
5/28/2008	8.4 J	260 J	190 J	5 U	7.3 J	9.3 J	76 J	5 U	460 J	200 J	4.6 J								4	1490 J								
5/28/2009	21 J	1200	3500	100 U	19 J	640	46	13	280	220	48 J	100 U	0.0616 J						1030	3								
10/8/2009	10 J	280	2100	5.2 J	16 J	250	45	5.0 U	240	430	33 J	100 U							4									
7/8/2010	3.4 J	130	1300	3.6 J	12	310	60	7.4	320	140	33	5 U	0.2 U						1290	11.9								
6/22/2011	310	5900	3100	250 U	490	250 U	18	1.4 J	95	25000	280	250 U								7.72								
8/24/2011	17	100	1300	2.8 J	44	30	250 J	5 UJ	1000 J	2300	69	10 U								6.93								
11/1/2011	5.8 J	21	550	10 U	17	30	170	5 U	1400	1700	33	10 U								6.87								
3/26/2012	2.8 J	9.8	380	1.3 J	12	38	100	5 U	430	990	37	5 U							1.4		6.52							
6/20/2012	1.2 J	10	150	5 U	4.2 J	53	110	1.9 J	750	430 J	21	5 U								7.31								
9/26/2012	5 U	9.1	150	5 U	6.9	67	67	2.1 J	280	320	26	5 U								6.59								
12/7/2012	5 U	7.2	120	5 U	3.7 J	47	81	1.3 J	350	270	26	5 UJ								6.72								
4/9/2013	1.1 J	9.6	210	1.3 J	9.6	160	9.6	6.9	59	630	55	5 U								7.42								
7/11/2013	5 U	5.3	99	5 U	4.3 J	69	24	2.3 J	110	290 J	35	5 U								7.33								
10/16/2013	5 U	8.2	170	1.2 J	7.7	140	10	5.1	63	500	60	5 U								6.77								
12/3/2013	5 U	7.9	170	1.5 J	6.6	140	4.6 J	13	110	480	66	1.9 J								7.51								
4/15/2014	0.54 J	6.3	140	1.3	14	110	1.7 J	21	260	340	62	1.9								7.48								
8/14/2014	1 U	4.3	53	0.87 J	4.8	100	18	13	220	290	43	3								7.11								
12/5/2014	1 U	5.2	110	1.2	8.1	94	1.8 J	11	140	320	63	2.6								7.11								
4/2/2015	1 U	1.6	23	0.65 J	0.98 J	40	7.7	12	150	68	23	1.5								6.71								
10/15/2015	1 U	1.5	15	1 U	1.3	21	41	8.6	220	35	16	0.69 J								7.86								
5/13/2016	1.0 U	2.7	15	1.0 U	1.6	17	36	1.3 J	190	65	12	0.65 J								6.94								
9/27/2016	2.0 U	1.1 J	33	0.93 J	2.0 U	37	31	8	160	33	12	2.0 U								7.18								
4/11/2017	1.0 U	0.74 J	62	1.9	0.41 J	77	1.9	22	310	38	15	1.0 U								6.97								
10/9/2017	1.7 U	2.3	25	0.94 J	1.2 J	77	12	20	440	110 D	40	1.7 U								6.94								
4/3/2018	1.0 U	0.55 J	13	1.0 U	1.0 U	23	8	6.1	160	23	9.9	1.0 U								7.15								
9/10/2020	1.0 U	1.4	12	0.74 J	0.71 J	34	14	21	590	57	29	1.4								7.06								

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-11S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl		1,1,1-		1,1-		Dissolved										
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
9/15/2005		103	609	7.5	3.2	91.4	0.95	1.6	68	13.9	25.9	1.0 U		2.2	2260							
9/20/2006	5 U	31	735	11	6	158	12 U	17 U	85.8	33	49	10 U		2.9	2880							
5/28/2008	5 U	240	920	26	14	140	2.3 J	1.9 J	140	110	67			2.7	2190 J							
5/28/2009	25 U	180	1700	59	13 J	240	1.5	1.0 U	97	65	88	25 U	0.238		1960	1.0 U						
7/8/2010	5 U	190	920	47	11	210	1.6 J	1.7 J	85	30	68	5 U	0.599		1850	0.16 U						
6/23/2011	50 U	93	4400	27 J	58	450	2.7 J	5 J	77	600	170	50 U					6.8					
8/24/2011	10 U	200	1300	20	21	210	2.9 J	3.6 J	110	210	81	10 U					6.79					
11/2/2011	5 U	150	2200	29	37	790	3.2 J	38	260	300	200	5 U					6.68					
3/22/2012	5 U	160	460	15	8.2	300	5.1	87	840	49	68	5 U					6.44					
6/21/2012	5 U	89	280	14	4.4 J	270	4 J	110	770	39 J	67	5 U					6.71					
9/26/2012	5 U	140	300	14	3.1 J	230	1.6 J	62	250	8.8	34	5 U					6.55					
12/10/2012	5 UJ	110	150	7.8	1.5 J	54	5 U	18	87	3.5 J	13	5 UJ					6.75					
4/12/2013	5 U	44	180	9.6	1.7 J	160	2 J	97	950	14	48	5 U					6.91					
7/18/2013	5 U	84	150	8.8	1.4 J	75	1.8 J	80	880	11	44	5 U					6.38					
10/17/2013	5 U	70	160	8.7	1.3 J	82	3.4 J	120	760	9.5	49	5 U					6.47					
12/3/2013	5 U	73	140	8.7	1.3 J	70	2.8 J	120	1200	11	58	1.3 J					6.87					
4/17/2014	1 U	60	120	7.1	1.1	53	2.1 J	91	770	6.8	41	0.97 J					7.16					
8/21/2014	1 U	87	160	8.4	1.2	50	4 J	98	1200	5.9	42	1					7.18					
12/3/2014	1 U	86	150	7.7	1.3	51	2.6 J	79	680	4.3	33	0.89 J					6.86					
3/25/2015	1 U	28	210	7.4	1.6	60	1.6 J	47	460	1.6	17	1 U					7.44					
10/15/2015	2 U	2.8	190	6.2	2 U	34	1.1 J	9	150	1.7 J	5	2 U					6.97					
5/11/2016	1.0 U	32	260	7.6	2	65	1.9 J	36	390	1.0 U	12	1.1					6.92					
9/27/2016	13 U	24	240	6.4 J	13 U	95	1.1	16	90	13 U	7 J	13 U					6.98					
4/11/2017	2.0 U	11	84	1.5 J	2.0 U	63	1.3	42	440	2.0 U	10	1.7 J					7.56					
10/10/2017	2.0 U	1.1 J	88	2.7	2.0 U	82	2.6	85	550	2.0 U	7	2.0 U					6.77					
3/30/2018	2.5 U	8.4	100	3	2.5 U	59	2.4	30	510	2.5 U	6.9	2.5 U					6.93					
9/10/2020	4.0 U	21	110	3.4 J	4.0 U	79	3.2	30	410	4.0 U	1.9 J	4.0 U					7.94					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-12D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl		1,1,1-			1,1-			Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroe thane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
9/23/2002		95								1.7 J	5.0 U												
10/1/2002		5.0 U								5.0 U	5.0 U												
11/4/2002		5.0 U								5.0 U	5.0 U												
9/19/2003		5.0 U				5.0 U				5.0 U	5.0 U												
10/30/2003		5.0 U				5.0 U				5.0 U	5.0 U												
5/17/2004		5 U				5 U				5 U	5 U												
6/21/2004		5.0 U				5.0 U				5.0 U	5.0 U												
8/30/2005		1.0 U	0.82 J	1.0 U	1.0 U	1.0 U				1.0 U	1.0 U	1.0 U											
9/20/2006	1 U	1 U	1 U	1 U	1 U	1 U				1 U	1 U	2 U											
5/29/2008	5 U	12	1.9 J	5 U	5 U	5 U				5 U	5 U												
5/28/2009	5.0 U	2.0 U	37	1.0 U	210	5.0 U	5.0 U	0.0286 J		1460	32.8												
7/9/2010	5 U	5 U	5 U	5 U	5 U	5 U	25	5 U	130	5 U	5 U	0.2 U		1520	31.4								
9/1/2011	5 U	5 U	5 U	5 U	5 U	5 U	24	5 U	130	5 U	5 U	0.0172 J	1.6	1790 J	47.2	6.38							
3/28/2012	5 U	5 U	1.6 J	5 U	5 U	5 U	27	5 U	130	5 U	5 U	0.2 U	1 U	1650	41.8	6.74							
6/19/2012	5 U	5 U	4.7 J	5 U	5 U	5 U	28	5 U	150	1.7 J	5 U	5 U	0.2 U	0.78 J	1780	36.7	6.83						
9/27/2012	5 U	1.9 J	3.7 J	5 U	5 U	5 U	39	5 U	200	5 U	5 U	0.2 U	1.7	1630	35.2	6.91							
12/13/2012	5 U	5 U	5 U	5 U	5 U	2 U	26	1.2 J	130	5 U	5 U	0.2 U	1 U	1330	28.8	6.39							
4/2/2013	5 U	5 U	16	5 U	5 U	7.9	29	5 U	160	5.1	5 U	5 U	0.2 U	1 U	1540	42.8	7.39						
7/15/2013	5 U	5 U	3.5 J	5 U	5 U	1.5 J	37	5 U	200	1.2 J	5 U	5 U	0.2 U	1 U	1500	41.2	7.14						
10/14/2013	5 U	5 U	5.5	5 U	5 U	2.7 J	42	5 U	200	1.3 J	5 U	5 U	0.4 U	0.88 J	1370	42.2	6.82						
12/10/2013	5 U	5 U	5 U	5 U	5 U	5 U	41	5 U	210	5 U	5 U	0.4 U	1.4	1250	41.5	6.74							
4/8/2014	1.1	39	570	2	13	130	5 U	4.2 J	21	370	16	1 U	0.195 J	3	600	0.32	7.22						
8/19/2014	1 U	1 U	7.5	1 U	1 U	2.2	39	5 U	210	1.9	1 U	1 U	0.4 U	1.6	1490	47.5	7.17						
12/12/2014	1 U	1 U	1 U	1 U	1 U	1 U	33	5 U	170	1 U	1 U	0.4 U	1 U	1520	42	6.75							
3/27/2015	1 U	1.6	170	0.59 J	2.1	70	26	2.8 J	140 J	24	4.8	1 U	0.4 U	1.5	1180	23.7	7.16						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-12S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloroethane (µg/L)		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCer (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)									
9/15/2005																										
9/21/2006	20 U	3050	2210	20 U	21	136	12 U	17 U	52.2	1420	140	40 U						16.7	1650							
5/28/2008	21 J	11000	6200	35 J	54	240	20	10	290	400	52															
5/29/2009	100 U	2500	3800	26 J	23 J	1300	9.2	19	170	200	110	100 U	0.253	10.9	630	25.4										
7/14/2010	25 U	2900	2800	27	15 J	1500	8.1	29	110	150	93	25 U	0.218		1140	9.7										
6/22/2011	81 J	7700	8300	250 U	360	200 J	9.2	5.4	110	18000	400	250 U														7.62
8/25/2011	18 J	5300	9300	33 J	170	370	7.2	3.8 J	86	9100	500	50 U														6.72
11/2/2011	10 J	3300	4500	20 J	78	510	5.9	25	240	3000	480	25 U														6.88
3/28/2012	25 U	4700	2900	26	15 J	230	20	150	2000	270	100	25 U														6.76
6/27/2012	25 U	7000	2900	38	8 J	190	16	150	2000	120	48	25 U														7.19
9/26/2012	50 U	4500	3000	29 J	50 U	450	13	210	2700	88	55	50 U														6.38
12/10/2012	5 UJ	740	1100	14	5.5	280	18	320	3200	74	53	1.3 J														7.97
4/11/2013	10 U	1800	960	22	2.6 J	210	27	400	6200	51	45	10 U														6.96
7/18/2013	25 U	2700	2900	41	6.7 J	510	27	320	6200	45	49	25 U														6.29
10/17/2013	5 U	980	2800	40	6.7	430	29	480	5600	24	28	5 U														6.58
12/13/2013	10 U	2100	1500	29	4.8 J	300	34	450	7800	27	38	10 U														6.69
4/17/2014	2 U	1300	610	22	2	130	20	370	4100	17	23	2 U														7.13
8/19/2014	1 U	1400	1500	48	3.7	740	43	570	9000	23	34	1 U														6.84
12/10/2014	5 U	3100	1700	35	2.7 J	430	24	380	5800	12	19	5 U														6.72
4/2/2015	2 U	850	730	30	1.9 J	520	33	500	5200	10	19	2 U														7.52
10/16/2015	5 U	1600	2000	42	3.8 J	770	30	690	6200	12	24	5 U														6.21
5/13/2016	5.0 U	2300 D	1600 D	44	3.8 J	420	29	820 D	4400 D	8.5	20	2.7 J														7.12
9/28/2016	100 U	1900	1400	30 J	100 U	920	19	480	2600	100 U	100 U	100 U														6.77
4/12/2017	50 U	2300	1200	38 J	50 U	470	9.8	270	1600	50 U	14 J	50 U														7.22
10/10/2017	40 U	130	780	37 J	40 U	660	43	820	4100 D	40 U	20 J	40 U														6.58
3/30/2018	50 U	970	1500	35 J	50 U	370	22	580	3700	50 U	13 J	50 U														6.75
9/14/2020	50 U	1100	1200	48 J	50 U	580	28 J	710	4600 D	50 U	15 J	50 U														7.15

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-13D

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-	Trans-1,2-	Vinyl	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-	1,1-	Dissolved	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCer (cells/ml)	VCR (cells/ml)	
			DCE (µg/L)	DCE (µg/L)	Chloride (µg/L)				Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)										
9/25/2002		51							6.1	3 J											
10/1/2002		38							3.3 J	2.7 J											
11/6/2002		36							5.3	3.8 J											
9/22/2003		24			120				3.7 J	4.6 J											
10/29/2003		20			71				3.8 J	4 J											
5/19/2004		14			76				2.3 J	3.1 J											
6/21/2004		33			110				25 U	25 U											
8/30/2005	16.3	234	1.9	1.5	150	0.48	8.6	17.7	2.2	7.9	1.0 U		2	1010							
9/21/2006	1 U	9	658	4	2	261	12 U	17 U	17.7	1 U	26	2 U		3.5							
10/25/2006														1160							
5/27/2008	5 U	30	660	4.9 J	4.2 J	250	1.4 J	12	41	2.1 J	29			2.8	971 J						
5/27/2009	50 U	50 U	1000	6.2 J	50 U	420	2.9	15	44	50 U	42 J	50 U	0.169		923	1.0 U					
7/8/2010	5 U	5 U	700	6	4.2 J	240	1.6 J	6.9	22	1.1 J	36	1.3 J	0.218		98.6 J	0.78					
8/30/2011	5 U	1.4 J	510	4.2 J	2.9 J	280	2.5 J	12	27	5.6	29	5 U	0.218	3.7	1100	0.84	7.14				
3/29/2012	5 U	3.1 J	370	3.7 J	2.2 J	290	9.9	8.5	20	5 U	28	5 U	0.217	2.7	907 J	4.3	6.38				
6/25/2012	5 U	5 U	270	2.8 J	1.9 J	150	9.1	10	29	5 U	14	5 U	0.242	2.9	1700	3.1	6.88				
9/26/2012	5 U	5 U	280	2.3 J	1.5 J	140	13	7.9	29	5 U	10	5 U	0.304	1.8	1400	2.6	6.48				
12/12/2012	5 U	1.1 J	230	2.7 J	1.6 J	120	16	13	40	5 U	11	5 UJ	0.158 J	2	1070	2.8	6.53				
4/2/2013	5 U	5 U	230	2.2 J	0.99 J	230	15	26	110	5 U	16	5 U	0.2 U	2.2	1030	27	6.92				
7/12/2013	5 U	5 U	250	2 J	0.97 J	170	13	32	370	5 U	11	5 U	0.0543 J	2.6	936	5	7.7				
10/17/2013	5 U	5 U	220	1.6 J	0.86 J	170	11	30	350	5 U	7.3	5 U	0.176 J	2.8	2350	5.9	6.25				
12/10/2013	5 U	1.3 J	180	5 U	5 U	81	9.7	21	310	5 U	4.9 J	5 U	0.072 J	4.1	673	4.9	6.91				
4/11/2014	1 UJ	1 U	150	1.1	0.59 J	130	8.9	28	840	1 U	4.8	1 U	0.4 U	5.1	783 J+	16	6.85				
8/15/2014	1 U	1 U	200	1.3	0.79 J	230	11	63	660	1 U	8.4	1 U	0.0838 J	5.4	855	7.1	6.58				
12/11/2014	1 U	1 U	170	0.96 J	1 U	190	16	51	1400	1 U	5.4	1 U	0.17 J	1.8	1070	8.7	6.79				
3/31/2015	1 U	0.68 J	180	1.1	0.68 J	160	11	62	1200	1 U	6.2	1 U	0.133 J	2.6	641	5.6	6.47				
10/14/2015	1 U	0.55 J	180	1	0.66 J	160	3.4 J	61	1400	1 U	4.9	1 U	0.232 J	3.2 J+			6.62				
5/11/2016	1.0 U	1.3	180	1.4	0.64 J	180	4.2 J	65	1100 D	1.0 U	9.6	1.0 U	0.0694 J	2.7	704	2.6	7.48				
9/27/2016	20 U	20 U	170	20 U	20 U	370	3.5	76	1400	20 U	11 J	20 U	0.100 U	3.1			6.88				
4/13/2017	5.0 U	5.0 U	120	5.0 U	5.0 U	160	2.8	26	460	5.0 U	5.2	5.0 U	0.079 J	3.1	640	2.2	7.47				
10/9/2017	13 U	13 U	240	13 U	13 U	650	9.8	160	2500	13 U	14	13 U	0.100 U	3.1			6.58				
4/2/2018	8.3 U	3.2 J	120	8.3 U	8.3 U	160	8.7	85	1300	8.3 U	5.5 J	8.3 U	0.21	2.8	800	2.4	6.95				
9/14/2020	5.0 U	19	130	1 J	5.0 U	260	7	110	1600	5.0 U	7.1	5.0 U	0.3	2.8	1200	2	6.8				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-13S

Date	Cis-1,2-		Trans-1,2-		Vinyl		1,1,1-		1,1-		Dissolved											
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
10/2/2020	100 U	100 U	3200	22 J	100 U	820	13	350	8400 D	100 U	100 U	100 U	1.3	6.4	2900	7	7.14					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-14D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					ethane (µg/L)	ethene (µg/L)	methane (µg/L)	ethane (µg/L)	ethene (µg/L)	chloro (µg/L)	iron (mg/L)	TOC (mg/L)	sulfate (mg/L)	sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
9/11/2003		5.0 U				5.0 U				5.0 U			5.0 U		5.0 U										
9/22/2003		5.0 U				5.0 U				5.0 U			5.0 U		5.0 U										
10/29/2003		5.0 U				5.0 U				5.0 U			5.0 U		5.0 U										
5/17/2004		5 U				5 U				5 U			5 U		5 U										
6/21/2004		5.0 U				5.0 U				5.0 U			5.0 U		5.0 U										
8/29/2005		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	11.9	0.10 U	32.4	1.0 U	1.0 U	1.0 U													
9/20/2006	1 U	1 U	1 U	1 U	1 U	1 U				1 U	1 U	2 U													
5/30/2008	5 U	5 U	5 U	5 U	5 U	5 U				5 U	5 U														
5/28/2009	5.0 U	2.0 U	37	1.0 U	99	5.0 U	5.0 U	5.0 U	0.155		1060	2.5													
7/8/2010	5 U	5 U	5 U	5 U	5 U	5 U	35	5 U	95	5 U	5 U	5 U	0.186 J		1150	7									
9/1/2011	5 U	5 U	5 U	5 U	5 U	5 U	34	5 U	95	5 U	5 U	5 U	0.0915 J	2.6	1150 J	9.2	6.67								
3/26/2012	5 U	5 U	5 U	5 U	5 U	5 U	30	5 U	77	5 U	5 U	5 U	0.0327 J	1.8	1150	6.2	7.04								
6/27/2012	5 U	5 U	5 U	5 U	5 U	5 U	28	5 U	82	5 U	5 U	5 U	0.0966 J	2	1160 J	7.4	6.99								
9/27/2012	5 U	5 U	5 U	5 U	5 U	5 U	27	5 U	81	5 U	5 U	5 U	0.075 J	1.7	891	5.8	6.89								
12/13/2012	5 U	5 U	5 U	5 U	5 U	5 U	12	5 U	51	5 UJ	5 UJ	5 U	0.2 U	1.6	764	2.2	6.64								
4/8/2013	5 U	5 U	5 U	5 U	5 U	5 U	15	5 U	45	5 U	5 U	5 U	0.2 U	1.8	1050	3.8	7.29								
7/12/2013	5 U	5 U	5 U	5 U	5 U	5 U	6.8	5 U	35	5 U	5 U	5 U	0.2 U	2	948	1.1	7.49								
10/9/2013	5 U	5 U	5 U	5 U	5 U	5 U	4.3 J	5 U	28	5 U	5 U	5 U	0.4 U	2	875	0.69	7.14								
12/6/2013	5 U	5 U	5 U	5 U	5 U	5 U	9.8	5 U	52	5 U	5 U	5 U	0.4 U	3.5	1030	1.8	7.18								

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-15D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl		1,1,1-		1,1-		Dissolved								
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
9/16/2003		0.73 J					1.0 U			1.0 U		1.0 U										
9/23/2003		4000 D				220 DJ				980 D	220 DJ											
10/29/2003		3900				260				1300	250											
5/19/2004		1400				360				960	260											
6/21/2004		1000				160 J				530	150 J											
8/30/2005		49.8	5360	58.3	27.8	298	0.5	2.4	19.7	165	65.8	20 U		2.6	1610							
9/20/2006	10 U	10 U	3000	11	18	233	12 U	17 U	10	92	38	20 U		3	924							
5/27/2008	10 U	3.1 J	1400	9.1 J	9.3 J	170	1 J	3.7 J	33	36	20			3	950 J							
5/27/2009	25 U	25 U	790	5.6 J	5.6 J	520	1.0 U	7.8	34	25	20 J	25 U	0.291	960	1.0 U							
7/7/2010	5 U	1.8 J	310	2.9 J	3.1 J	220	5 U	4.8 J	23	23	16	5 U	0.276	922	0.37							
8/31/2011	10 U	4.5 J	1700	4.8 J	11	540	5 U	2.5 J	18	30	20	10 U	0.164 J	4.2	740	3.5	7.66					
3/29/2012	5 U	2.9 J	720	3.6 J	6.1	260	5 U	1.1 J	7.5 J	34	14	5 U	0.16 J	0.93 J	420 J	0.37	7.12					
6/19/2012	5 U	2.9 J	560	3.7 J	4.3 J	220	5 U	1.1 J	10 J	41	14	5 U	0.15 J	1.5	52.1	0.47	7.24					
9/26/2012	5 U	23	820	5.8	6.3	390	5 U	2.9 J	21	40	25	5 U	0.309	2.1	958	1.5	6.57					
12/3/2012	5 U	10	940	6.2	6.6	360	5 U	2.9 J	20	53 J	37	5 U	0.184 J	2.7	499	2.4	6.08					
4/2/2013	5 U	2.7 J	480	4.5 J	4.2 J	240	5 U	3.3 J	15	49	25	5 U	0.169 J	1.1	506	1.8	7.59					
7/9/2013	5 U	1.9 J	290	3.1 J	2.5 J	260	5 U	2.7 J	17	37	23	5 U	0.332	3.1	511	1.7	7.83					
10/9/2013	5 U	1.8 J	290	3.1 J	2.3 J	320	1 J	10	67	44	27	5 U	0.267 J	2.1	726	7.4	5.95					
12/4/2013	5 U	3.2 J	420	4.2 J	4.3 J	350	5 U	4.9 J	42	99	46	5 U	0.214 J	3.7	530 J	4.8	7.24					
4/8/2014	1 U	2.9	290	4.1	3.2	260	5 U	5.6	45	59	36	1 U	0.145 J	1.8	458	3.5	7.58					
8/18/2014	1 U	2.9	270	3.6	2.9	300	5 U	3.6 J	27	63	31	1 U	0.111 J	3	389	1.2	7.32					
12/5/2014	1 U	4.1	470	6.4	5	460	1.4 J	17	170	110	58	1 U	0.124 J	2.5	69.4	7.1	7.94					
3/27/2015	1 U	7.6	870	8.2	8.2	740	1.4 J	22	220 J	280	97	1 U	0.098 J	2.3	763	12.5	7.22					
10/13/2015	1 U	4.5	370	5.3	6.1	370	5 U	6.8	46	160	51	1 U	0.125 J	1.8			7.21					
5/11/2016	1.0 U	4.1	290 D	4.7	5.4	280	5.0 U	3.4 J	32	140	37	1.0 U	0.154 J	2.1	364	1.9	7.52					
9/27/2016	33 U	7.8 J	660	33 U	18 J	580	0.67	8.5	65	590	92	33 U	0.26	2.2			7.28					
4/11/2017	10 U	5.8 J	410	3.9 J	5.3 J	520	0.48 J	7.5	65	260	51	10 U	0.22	1.8	440	2.7	7.17					
10/10/2017	10 U	10 U	190	3.1 J	10 U	350	0.2 J	4	45	54	22	10 U	0.25	2.4			7.09					
4/2/2018	13 U	13 U	330	4.3 J	13 U	310	1.0 U	6.1	44	120	32	13 U	0.19 J	1.9	510	1.0 U	7.24					
9/11/2020	4.0 U	1.2 J	150	2.5 J	1.1 J	400	1.5	29	260	29	21	4.0 U	0.37	2.9	840	0.93 J	6.93					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-16D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)					Chloro (µg/L)	Chloro (µg/L)	Chloro (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
9/15/2003		3.3						2				0.23 J		0.3 J									
9/23/2003		20						30				2.3 J		5.0 U									
10/29/2003		23 J						22 J				25 U		25 U									
5/18/2004		12 J						15 J				20 U		20 U									
6/21/2004		9.8 J						24 J				25 U		25 U									
8/30/2005		7.7	884	10.9	3 J	39.3						2.4 J	4.9 J	5.0 U									
9/22/2006	1 U	3	545	3	2	95	12 U	17 U	11.2	1 U	6	2 U											
5/27/2008	5 U	2.2 J	520	2.7 J	2.9 J	160	4.3 J	5.6	31	3.3 J	12												
5/27/2009	25 U	25 U	560	2.6 J	25 U	200	7	6.3	38	25 U	11 J	25 U	0.0723 J		1080	1.6							
7/7/2010	5 U	1.5 J	490	2.1 J	2.7 J	180	24	4.9 J	68	1.4 J	7.7	5 U	0.147 J		1090	3.6							
8/31/2011	5 U	2.4 J	420	2 J	2.8 J	170	10	5.4	35	15	11	5 U	0.249	4	1140	1.6	6.13						
3/26/2012	5 U	1.8 J	380	1.8 J	2.8 J	220	5.7	4.4 J	36	6.5	12	5 U	0.178 J	2.9	961	1.6	6.98						
6/22/2012	5 U	2.2 J	450	2 J	3 J	230	6.9	8.8	46	8.7 J	14	5 U	0.228	2.7	983 J	0.54	7.27						
9/26/2012	5 U	12	330	1.5 J	2.5 J	180	5.1	7.7	41	3.9 J	11	5 U	0.344	2.3	1040	1.3	6.53						
12/11/2012	5 U	1.5 J	290	1.1 J	1.6 J	130	9.9	10	72 J	2.5 J	11	5 U	0.327	2.5	1040	1.6	7.13						
4/2/2013	5 U	1.3 J	270	1.3 J	2 J	180	11	21	150	1.7 J	11	5 U	0.213	2.6	1020	1.8	7						
7/12/2013	5 U	1.2 J	250	1.4 J	1.6 J	140	8.1	16	150	0.98 J	9.3	5 U	0.213	2.8	974	1.9							
10/16/2013	5 U	1 J	230	1.3 J	1.6 J	190	5.5	17	180	5 U	8.1	5 U	0.162 J	2.3	1000	2.4	6.86						
12/10/2013	5 U	1.2 J	300	1.5 J	1.7 J	200	9.7	31	370	5 U	9.8	5 U	0.151 J	4.6	1060	3	6.81						
4/15/2014	1 U	0.89 J	250	1.2	1.3	190	10	29	260	1 U	7	1 U	0.0792 J	3.8	1010	1.9	7.1						
8/15/2014	1 U	0.95 J	250	1.2	1.4	190	8	18	220	1 U	6.5	1 U	0.156 J	4.9	972	2.4	6.77						
12/11/2014	1 U	0.8 J	200	0.86 J	1.1	150	9.6	17	190	1 U	4.9	1 U	0.13 J	1.3	902	1.9	7.05						
4/2/2015	1 U	0.77 J	220	1.4	1.1	260	16	37	390	1 U	6.7	1 U	0.117 J	2.5	1090	3.5	7.02						
10/13/2015	1 U	0.72 J	200	0.95 J	1.2	120	2.2 J	12	130	1 U	3.4	1 U	0.157 J	2.1			7.48						
5/11/2016	1.0 U	0.78 J	140	0.53 J	0.88 J	65	1.8 J	5.9	61	1.0 U	1.8	1.0 U	0.107 J	2	721	1.3	7.15						
4/13/2017	2.5 U	2.5 U	86	2.5 U	2.5 U	43	0.44 J	1.4	9.7	2.5 U	0.82 J	2.5 U	0.13	2.5	550	0.6 J	7.46						
4/2/2018	2.5 U	2.5 U	100	2.5 U	2.5 U	130 D	1.0 U	18	140	2.5 U	1.9 J	2.5 U	0.068 J	2.3	1200	1.0 U	7.34						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-17D

Date	PCE (µg/L)	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-				1,1-				Dissolved			
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)			
9/12/2003		6.3				30				24		8.4													
9/22/2003		5.0 U				3.2 J				21		1.9 J													
10/29/2003		1.7 J				5.1				23		2.3 J													
5/18/2004		1.1 J				2.4 J				9.6		1.1 J													
6/22/2004		18				5.0 U				14		1.6 J													
8/29/2005		0.69 J	3.7	1.0 U	1.0 U	1.0 U				5	0.67 J	1.0 U													
9/22/2006	1 U	1 U	4	1 U	1 U	1 U				4	1 U	2 U													
5/28/2008	5 U	57	700	1.4 J	14	34				260		33													
5/28/2009	50 U	50 U	1300	50 U	11 J	600	4.1	6	80	230	62	50 U	0.0078 J				875	18							
10/8/2009	50 U	12 J	1100	2.6 J	8.6 J	430	4.8	6.5	85	170	49 J	50 U				5									
7/8/2010	5 U	9.8	1000	3.6 J	11	490	5.7	7.8	77	150	64	5 U	0.2 U				1090	15.7							
6/22/2011	5 U	12	250	5 U	4.5 J	44	5.3	5 U	61	120	12	5 U											6.92		
8/24/2011	50 U	220	4400	50 U	86	100	15	1.2 J	94	7200	210	50 U											6.97		
11/2/2011	8.8 J	350	2200	5.5 J	74	52	7.2	5 U	70	5800	150	13 U											6.99		
3/22/2012	1.4 J	6.2	450	1.7 J	12	43	6.7	5 U	65	730	41	5 U											7		
3/26/2012																	3.4								
6/22/2012	1.2 J	6.1	350	1.6 J	16	85	6.9	5 U	68	660	41	5 U											6.92		
9/26/2012	5 U	6.4	240	1.2 J	7.9	110	6.2	1.4 J	51	420	37	5 U											6.76		
12/10/2012	5 UJ	5.9	170	1.1 J	4.6 J	79	6.7	1.6 J	61	330	35	5 UJ											6.97		
4/2/2013	5 U	3.4 J	75	5 U	2.8 J	50	4.1 J	1.4 J	59	210	29	1.7 J											7.41		
7/11/2013	5 U	2.6 J	47	5 U	2.3 J	47	3 J	2.5 J	55	130 J	31	1.3 J											7.04		
10/14/2013	5 U	2.3 J	39	5 U	1.5 J	50	4.2 J	11	110	110	31	2.8 J											7.04		
12/3/2013	5 U	2.2 J	33	5 U	1.2 J	39	3.4 J	4.3 J	72	83	29	3.6 J											6.96		
4/11/2014	1 UJ	1.7	19	1 U	1.5	30	2.6 J	17	280	50	29	4.2											6.68		
8/15/2014	1 U	1.6	18	1 U	1.1	35	3.2 J	6.9	100	45	26	3.2											6.8		
12/5/2014	1 U	1.3	13	1 U	0.93 J	28	2.7 J	13	95	39	22	4.3											6.98		
4/2/2015	1 U	0.9 J	9.9	1 U	1 U	22	3.3 J	8.2	130	23	15	3.9											6.8		
10/15/2015	1 U	0.67 J	7.2	1 U	1 U	12	2.9 J	6.5	75	11	11	2.5											8.12		
5/11/2016	1.0 U	1.0 U	4.6	1.0 U	1.0 U	4.7	2.2 J	1.5 J	65	5.5	7.5	2.1											7.36		
9/27/2016	1.0 U	0.33 J	5	1.0 U	1.0 U	8.1	1.2	2.7	38	1	7.8	3											7.18		
4/11/2017	1.0 U	1.0 U	6.7	1.0 U	1.0 U	15	0.94	5.3	82	0.59 J	5.7	1.8											6.86		
10/9/2017	1.3 U	1.8	24	0.81 J	1.3	70	2.7	23	460	78 D	28	1.6											6.9		
4/3/2018	1.0 U	1.0 U	4	1.0 U	1.0 U	4.6	1.0 U	2	65	1.0 U	3.7	1.0 U											7.02		
9/10/2020	1.0 U	0.39 J	7.1	0.35 J	0.24 J	29	3.6	21	510	22	14	1.0 U											7.89		

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-18D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)					1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)		
5/18/2004		5 U						5 U																				
6/22/2004		3.1 J						5.0 U																				
8/30/2005		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U																					
9/22/2006	1 U	1 U	1 U	1 U	1 U	1 U	1 U																					
5/28/2008	5 U	5 U	5 U	5 U	5 U	5 U	5 U																					
5/28/2009	5.0 U	2.0 U	2	1.0 U	50	5.0 U	5.0 U	5.0 U	0.0077 U							1540	2.1											
7/9/2010	5 U	5 U	5 U	5 U	5 U	5 U	1.7 J	5 U	36	5 U	5 U	5 U	0.2 U							1870	2.8							
8/30/2011	5 U	5 U	5 U	5 U	5 U	5 U	1.9 J	5 U	32	5 U	5 U	5 U	0.2 U	4.4	1740	2.4	6.54											
3/28/2012	5 U	5 U	5 U	5 U	5 U	5 U	1.6 J	5 U	43	5 U	5 U	5 U	0.2 U	4.2	1750	5.4	6.76											
6/19/2012	5 U	5 U	5 U	5 U	5 U	5 U	1.2 J	5 U	47	5 U	5 U	5 U	0.2 U	4.4	1630	4.1	7.01											
9/25/2012	5 U	5 U	5 U	5 U	5 U	5 U	1.6 J	5 U	24	5 U	5 U	5 U	0.2 U	2.4	1530 J	1.9	7.14											
12/3/2012	5 U	5 U	5 U	5 U	5 U	5 U	1.5 J	5 U	43	5 U	5 U	5 U	0.2 U	3.6	1310	3.6	7.52											
4/2/2013	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	29	5 U	5 U	5 U	0.2 U	3.2	1290	1.6	7.16											
7/19/2013	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	44	5 U	5 U	5 U	0.2 U	4.7	1420	5.1	6.63											
10/18/2013	5 U	5 U	1.1 J	5 U	5 U	5 U	5 U	5 U	9.2	5 U	5 U	5 U	0.4 U	3.4	976	0.54	7.03											
12/4/2013	5 U	5 U	1.3 J	5 U	5 U	5 U	5 U	5 U	15	5 U	5 U	5 U	0.4 U	4.3	860 J	0.52	7.16											
4/17/2014	1 U	1 U	0.93 J	1 U	1 U	1 U	1 U	5 U	5 U	20	1 U	1 U	1 U	0.4 U	4.6	1150	0.87	6.95										
8/15/2014	1 U	1 U	1.2	1 U	1 U	1 U	1 U	5 U	5 U	14	1 U	1 U	1 U	0.4 U	4.9	1070	0.45	6.91										
12/11/2014	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	26	1 U	1 U	1 U	0.4 U	2.6	1370	1.3	7										
3/31/2015	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	50	1 UJ	1 U	1 U	0.4 U	4	1470	2.5	6.82										
10/14/2015	1 U	1 U	1 U	1 U	1 U	1 U	1.7 J	5 U	57	1 U	1 U	1 U	0.4 U	4														
5/17/2016	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	39	1.0 U	1.0 U	1.0 U	0.400 U	5.1	1570	2.5	6.92													
4/12/2017	1.0 U	1.0 U	0.71	0.50 U	27	1.0 U	1.0 U	1.0 U	0.10 U	4.3	1600	1.0 U	7.25															
4/2/2018	1.0 U	1.0 U	0.31 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	37	1.0 U	1.0 U	1.0 U	0.2 U	4	1800	1.0 U	6.93											

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-19D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl		1,1,1-			1,1-			Dissolved								
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCER (cells/ml)	VCR (cells/ml)	
5/27/2004		5 U					4.6 J				5 U	5 U												
6/21/2004		1.3 J					3.1 J				5.0 U	5.0 U												
8/30/2005		1.0 U	10.3	1.0 U	1.0 U		7.6				1.0 U	0.61 J	1.0 U											
9/22/2006	1 U	1 U	23	1 U	1 U		14	12 U	17 U	10 U	1 U	1	2 U											
5/27/2008	5 U	5 U	42	5 U	5 U		6.5	5 U	5 U	21	5 U	1.3 J												
5/27/2009	5.0 U	5.0 U	58	5.0 U	5.0 U		10	1.0 U	1.0 U	23	5.0 U	1.7 J	5.0 U	3.01		3710	1.0 U							
7/7/2010	5 U	5 U	60	5 U	5 U		11	5 U	5 U	24	5 U	1.6 J	5 U	2.54		3170	0.16 U							
8/31/2011	5 U	5 U	39	5 U	5 U		3.5 J	5 U	5 U	19	5 U	5 U	5 U	2.72	8	3320	0.16 U	5.49						
3/23/2012	5 U	5 U	38	5 U	5 U		2.1 J	5 U	5 U	25	5 U	5 U	5 U	2.23	8.8	4060	0.16 U							
6/19/2012	5 U	5 U	34	5 U	5 U		1.4 J	5 U	5 U	19	5 U	5 U	5 U	2.26	8.7	3660	0.16 U	6.58						
9/21/2012	5 UU	5 U	32	5 U	5 U		1.3 J	5 U	5 U	25	5 U	5 U	5 U	2.42	6.9	2950 J	0.16 U							
12/3/2012	5 U	5 U	26	5 U	5 U		1.9 J	1.9 J	5 U	27	5 UJ	5 U	5 U	4.15	7.9	3020	0.16 U	6.69						
4/2/2013	5 U	5 U	22	5 U	5 U		5 U	5 U	23	5 U	5 U	5 U	2.31	8.1	3120	0.16 U	7							
7/9/2013	5 U	5 U	19	5 U	5 U		5 U	5 U	20	5 U	5 U	5 U	2.36	9.2	3130	0.16 U	7.32							
10/9/2013	5 U	5 U	17	5 U	5 U		5 U	5 U	24	5 U	5 U	5 U	2.31	8.1	2670	0.16 U	5.46							
12/6/2013	5 U	5 U	17	5 U	5 U		5 U	5 U	22	5 U	5 U	5 U	2.19	10.9	2890	0.16 U	6.42							
4/16/2014	1 U	1 U	8.5	0.64 J	1 U		0.82 J	5 U	5 U	14	1 U	1 U	1 U	0.116 J	9.6	1690	0.16 U	7.06						
8/15/2014	1 U	1 U	11	1.2	1 U		0.6 J	5 U	5 U	20	1 U	1 U	1 U	1.91	11.3	2890	0.16 U	6.28						
12/5/2014	1 U	1 U	9.9	0.89 J	1 U		0.62 J	5 U	5 U	19	1 U	1 U	1 U	1.98	9.3	2890	0.16 U	7.22						
3/27/2015	1 U	1 U	9.4	0.82 J	1 U		0.52 J	5 U	5 U	9.1 J	1 U	1 U	1 U	0.333 J	5.9	1960	0.16 U	6.8						
10/13/2015	1 U	1 U	9.9	1 U	1 U		1 U	5 U	1.9 J	20	1 U	1 U	1 U	2.02	8.8			6.51						
5/11/2016	1.0 U	1.0 U	7	0.66 J	1.0 U		0.51 J	5.0 U	5.0 U	17	1.0 U	1.0 U	1.0 U	0.579	6.2	2870	0.10 U	6.65						
9/27/2016	1.0 U	1.0 U	7.2	0.52 J	1.0 U		0.41 J	0.50 U	0.50 U	9.1	1.0 U	1.0 U	1.0 U	1.7	7.1			6.53						
4/11/2017	1.0 U	1.0 U	4.2	0.33 J	1.0 U		1.0 U	0.50 U	0.50 U	6.2	1.0 U	1.0 U	1.0 U	0.095 J	4.8	1500	1.0 U	7.36						
10/10/2017	1.0 U	1.0 U	6.8	0.45 J	1.0 U		1.0 U	0.25 J	1.0 U	22	1.0 U	1.0 U	1.0 U	2.1	5.8			6.43						
4/2/2018	1.0 U	1.0 U	4.3	1.0 U	1.0 U		1.0 U	1.0 U	1.0 U	15	1.0 U	1.0 U	1.0 U	0.43	5.5	2600	1.0 U	6.9						
9/11/2020	1.0 U	1.0 U	5.6	0.3 J	1.0 U		0.66 J	0.57 J	1.0 U	25	1.0 U	1.0 U	1.0 U	2	6.1	2800 J	1.0 U	7.68						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UU The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-20D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHbt (cells/ml)	DHC (cells/ml)	TCer (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					1,1,1-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	Chloro Iron (mg/L)	Dissolved													
9/15/2005		30.8	1670	9.4	23.1	74.9	1.2	0.22	8.97	1830	207	1.0 U		2.5	852											
9/20/2006	50 U	50 U	14800	50 U	108	648	12 U	17 U	27.5	885	177	100 U		2.8	1200											
5/28/2008	50 U	11 J	5900	12 J	47 J	380				210	73															
5/27/2009	100 U	26 J	3100	12 J	22 J	1300	1	6	31	93 J	66 J	100 U	0.0077 U	2.9	558	3.1										
10/8/2009	50 U	5.8 J	1300	8.7 J	11 J	710	1.0 U	5.6	19	54	40 J	50 U		3.5												
7/12/2010	5 U	2.9 J	960	5.6	7.9	930	5 U	13	20	42	43	5 U	0.2 U	2.9	695	3.4										
6/22/2011	100 U	1200	24000	35 J	170	610	1.3 J	6.8	34	2900	290	100 U														6.84
8/24/2011	100 U	160	24000	28 J	150	680	1.3 J	6.7	32	1900	260	100 U														7.15
11/1/2011	50 U	20 J	5800	13 J	36 J	1400	5 U	5.5	20	550	81	50 U														7.18
3/23/2012	130 U	850	13000	24 J	150	420	1.3 J	7.2	94	6200	1300	130 U		8.7												6.45
6/20/2012	15	590	5200	19	180	160				14000 J	860	10 U														7.41
6/26/2012							5 U	3.7 J	42																	
9/25/2012	16 J	390	3500	12 J	150	160	5 U	2.7 J	23	9800	620	50 U														
12/11/2012	9.5 J	100	2800	9.5 J	240	120	5 U	2.9 J	33 J	7700	410	50 U														6.88
4/11/2013	5.8 J	47	1700	8.6 J	53	330	1.4 J	22	190	3700	290	13 U														7.29
7/18/2013	4.2 J	37	2700	9.7 J	65	470	1.6 J	16	170	4000	490	25 U														6.5
10/16/2013	25 U	12 J	940	4.8 J	27	400	1.7 J	23	200	2000	170	25 U														6.92
12/10/2013	1.7 J	9.1 J	630	4.5 J	23	380	2 J	31	260	1600	150	10 U														7.13
4/15/2014	1.3	7.3	340	4.3	25	420	2.9 J	52	360	990	120	1 U														7.3
8/18/2014	1.9 J	12	700	5.6	43	800	1.5 J	16	150	2300	230	2 U														7.03
12/11/2014	1.9	9.4	220	3.5	13	500	2.1 J	31	210	890	96	1 U														7.06
4/3/2015	1.3 J	7.4	150	3.3	6.2	500	3.9 J	70	360	560 J	78	2 U														7.24
10/14/2015	1.9	9.4	170	3.7	20	390	2 J	49	230	970	110	1 U														6.95
5/12/2016	5.0 U	14	450	4.1 J	37	740	5.0 UJ	8 J	57 J	2000 D	170	5.0 U														7.44
9/27/2016	50 U	50 U	160	50 U	30 J	440	2.6	56	240	1100	100	50 U														6.97
4/12/2017	25 U	25 U	86	25 U	50	480	0.51	8.4	51	1000	93	25 U														7.51
10/9/2017	10 U	5.9 J	110	7.2 J	5.6 J	430	8.8	250	1600	550	75	10 U														6.71
4/4/2018	25 U	25 U	71	25 U	25 U	330	3.5	83	590	590	76	25 U														7.12
9/14/2020	5.0 U	2.9 J	48	2.4 J	1.8 J	330	6	130	1000	150	45	5.0 U														10.48 R

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-21D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
10/25/2006	20 U	20 U	3860	20 U	20 U	242	12 U	17 U	16.7	30	22	40 U	2.6	904								
5/28/2008	5 U	1.1 J	290	1.5 J	1.7 J	43	1.2 J	5.7	37	3.4 J	2.8 J		3.9	1040 J								
5/27/2009	5.0 U	0.67 J	110	0.63 J	0.67 J	48	1.0 U	4	40	2 J	2.1 J	5.0 U	0.623	4.8	1170	1.0 U						
7/12/2010	5 U	5 U	85	5 U	5 U	38	5 U	2.4 J	25	1.8 J	1.5 J	5 U	3.71	4.3	1140	0.057 J						
6/22/2011	25 U	25 U	2800	5 J	15 J	75	5 U	1.6 J	20	39	7.7 J	25 U									6.93	
8/24/2011	25 U	25 U	5100	8.2 J	21 J	530	5 U	5.3	28	140	19 J	25 U									7.04	
11/1/2011	25 U	6.6 J	4100	10 J	19 J	650	1.7 J	6.5	35	340	33	25 U									7.12	
3/23/2012	25 U	7.1 J	4800	8.4 J	17 J	610	5 U	6.4	40	290	34	25 U		0.88 J							6.59	
6/22/2012	25 U	15 J	3600	7.9 J	13 J	580	5 U	8	37	310 J	35	25 U									6.8	
9/18/2012	10 U	11	2600	9.8 J	15	580	2.3 J	9.7	50	180	32	10 U									7.26	
12/11/2012	10 U	3.1 J	2200	7.3 J	12	1000	3.8 J	12	46 J	240	35	10 U									7.36	
4/11/2013	5 U	5.4	780	5.3	7	730	5 U	11	36	260	41	5 U									7.15	
7/19/2013	5 U	2.8 J	380	3.3 J	8.1	600	5 U	12	30	160	29	5 U									8.49	
10/16/2013	5 U	4.3 J	660	4.7 J	6.4	690	1.4 J	23	120	160	36	5 U										
12/10/2013	5 U	4.2 J	680	3.4 J	5.6	550	1.5 J	19	64	130	29	5 U									7.13	
4/15/2014	1 U	4.6	530	3.9	13	450	1.7 J	34	200	290	35	1 U									7.53	
8/15/2014	1 U	3	590	3.7	7.5	460	5.3	15	190	160	32	1 U									7.8	
12/8/2014	1 U	4.6	1100	5.1	12	660	2.2 J	23	120	160	39	1 U									6.87	
4/3/2015	2 U	4.4	790	3.7	7.2	580	1.7 J	16	72	86 J	26	2 U									8.15	
10/14/2015	1 U	1.5	410	3	4.9	380	3.4 J	16	120	47	24	1 U									8.5	
5/12/2016	1.0 U	1.9	350 D	3.1	4.1	460 D	1.1 J	11	57	45	23	1.0 U									7.22	
9/27/2016	25 U	25 U	380	25 U	25 U	510	0.91	11	55	48	21 J	25 U									7.35	
4/12/2017	10 U	10 U	250	10 U	10 U	340	0.58	10	62	16	15	10 U									8.33	
10/9/2017	17 U	17 U	710	17 U	17 U	610	1.7	31	200	38	23	17 U									7.1	
4/4/2018	8.3 U	8.3 U	190	8.3 U	8.3 U	69	1.0 U	1.0 U	14	3.7 J	6.1 J	8.3 U									8.55	
9/14/2020	20 U	20 U	410	20 U	20 U	390	2.7	39	380	15 J	19 J	20 U									7.07	

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: MW-22D

Date	Cis-1,2-		Trans-1,2-		Vinyl		1,1,1-		1,1-		Dissolved												
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	ethane (µg/L)	thane (µg/L)	ethane (µg/L)	Chloro (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
10/2/2020	0.65 J	0.68 J	2	1.0 U	1.0 U	0.2 J	0.89 J	1.0 U	8.9	4.8	1.4	1.0 U	0.56	1.6	740	1.0 U	7.35						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR- 3SM

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
6/28/2011	25 U	9 J	7400	120	11 J	740	11 J	63 J	170 J	25 U	25 U	25 U	44.5	1030	11.3 J	0.84	5.99				
8/25/2011	10 U	10 U	4000	100	7 J	950	3.7 J	30	2300	10 U	10 U	10 U	131	2260	3.1 J	0.67	5.87				
11/8/2011	25 U	25 U	2300	80	25 U	1400	1.6 J	110	8800	25 U	25 U	25 U	146	1760	2.7 J	0.34	6.14				
3/23/2012	50 UJ	50 UJ	50 UJ	48 J	50 UJ	50 UJ	130	40	11000	50 UJ	50 UJ	14 J	86	39.3	5 U	0.16 J	6.52				
6/19/2012	5 U	5 U	0.81 J	48	5 U	1.8 J	42	5 U	13000	5 UJ	5 U	1.9 J	73.3	838	2 J	0.18	6.47				
9/21/2012	5 UJ	5 U	5 U	7	5 U	5 U	17	5 U	11000	5 U	5 U	5 U	48.7	293	5 UJ	0.14 J	6.38				
12/10/2012	5 UJ	5 UJ	99	1.2 J	15000	5 UJ	5 UJ	5 UJ	42.7	171	1.7 J	0.17	6.7								
4/4/2013	5 U	5 U	5 U	5 U	5 U	5 U	170	5 U	23000	5 U	5 U	5 U	37.7	69.4	276	0.39	6.5				
7/9/2013	50 U	50 U	120 J	5 U	20000	50 U	50 U	50 U	12.2	40.1	13.7	1.2	6.67								
10/9/2013	50 U	50 U	170	5 U	16000	50 U	50 U	50 U	22.3	53.8	5 U	0.66	5.38								
12/6/2013	5 U	5 U	5 U	5 U	5 U	5 U	180	5 U	15000	5 U	5 U	5 U	25.8	66.1	5 U	0.38	6.11				
4/11/2014	1 UJ	1 U	1 U	1 U	1 U	1 U	140	4.6 J	17000	1 U	1 U	1 U	11.3	21.8	27.1 J+	3.6	6.23				
8/20/2014	1 U	1 U	1 U	1 U	1 U	1 U	160	1.8 J	16000	1 U	1 U	1 U	20.2	26.1	5 U	0.64	6.37				
12/5/2014	1 U	1 U	1 U	1 U	1 U	1 U	130	5 U	16000	1 U	1 U	1 U	26.3	33.6	1.8 J	0.5	6.34				
3/26/2015	1 U	1 U	0.69 J	1 U	1 U	1 U	100	5 U	23000	1 U	1 U	1 U	22.7	24.6	148	0.71	6.08				
10/21/2015	1 U	1 U	1.3	1 U	1 U	0.83 J	58	5 U	10000	1 U	1 U	1 U	26.2	32.1			6.2				
5/6/2016	1.0 U	1.0 U	63	5.0 U	13000 D	1.0 U	1.0 U	1.0 U	31.8	32.3	2.2 J	0.34	6.25								
4/13/2017	1.0 U	1.0 U	6.9 J	1.0 UJ	3400 J	1.0 U	1.0 U	1.0 U	36	38	5.0 U	1.0 U	6.43								
3/29/2018	1.0 U	1.0 U	0.44 J	1.0 U	1.0 U	1.0 U	12	5.0 U	9800	1.0 U	1.0 U	1.0 U	10	4.8	38	2.9	6.72				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR- 4SM

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/28/2011	10 U	19	1100	11	5.5 J	81	2 J	5.4	1500	77	97	3.9 J	91.7	1560	17.1 J	1.6	6.01					
8/25/2011	50 U	50 U	1200	21 J	50 U	120	5 U	5 U	7800	50 U	50 U	50 U	73.1	993	1.8 J	0.34	6.3					
11/9/2011	25 U	25 U	25 U	17 J	25 U	25 U	3.5 J	15	12000	25 U	25 U	25 U	46.4	352	2.7 J	0.19	6.23					
3/23/2012	50 U	50 U	50 U	13 J	50 U	50 U	3.3 J	5 U	12000	50 U	50 U	50 U	42.6	98.6	1.6 J	0.21	6.12					
6/19/2012	5 U	5 U	5 U	13	5 U	5 U	2.2 J	5 U	12000	5 U	5 U	5 U	42.7	84.7	2.2 J	0.21	6.43					
9/21/2012	5 UJ	5 U	5 U	5.6	5 U	5 U	2.9 J	5 U	11000	5 U	5 U	5 U	41.8	79.7	5 UJ	0.18	6.64					
12/10/2012	5 UJ	5 U	5 U	1.5 J	5 U	5 U	2.6 J	5 U	3500	5 U	5 U	5 UJ	42	68.3	1.8 J	0.16 J	6.51					
4/4/2013	5 U	6.9	1 J	5 U	5 U	5 U	1.4 J	5 U	8100	5 U	5 U	5 U	48.2	54.6	2.8 J	0.15 J	6.39					
7/9/2013	50 U	50 U	50 U	50 U	50 U	50 U	2.5 J	5 U	12000	50 U	50 U	50 U	46.4	52	5.2	0.29						
10/14/2013	5 UJ	8.4 J	5 UJ	5 UJ	5 UJ	5 UJ	1.6 J	5 U	9200	5 UJ	5 UJ	5 UJ	43.7	62.8	14.7	0.21	6.5					
12/6/2013	5 U	2.3 J	5 U	5 U	5 U	5 U	1.9 J	5 U	14000	5 U	5 U	5 U	40.1	71.9	11.9	0.23	6.22					
4/11/2014	1 UJ	1 U	1 U	1 U	1 U	1 U	2.9 J	5 UJ	17000 J	1 U	1 U	1 U	27.7	58.3	165 J+	0.67	6.22					
8/20/2014	1 U	1 U	1 U	1 U	1 U	1 U	9.8 J	5 UJ	12000 J	1 U	1 U	1 U	34.3	56.1	5 U	0.34	6.16					
12/5/2014	1 U	1 U	1 U	1 U	1 U	1 U	2.4 J	5 UJ	13000 J	1 U	1 U	1 U	32.9	60.7	15.6	0.64	6.53					
3/27/2015	1 UJ	1 UJ	0.94 J	0.8 J	1 UJ	1.4 J	5 U	5 U	18000 J	1 UJ	1 UJ	1 UJ	17.9	42	122	3	6.2					
10/21/2015	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	2.3 J	5 U	7700	1 UJ	1 UJ	1 UJ	24.3	40.3			6.24					
5/6/2016	0 R	0 R	0 R	1.2 J	0 R	0 R	3.4 J	2 J	13000 D	0 R	0.52 J	0 R	16.9	36.1	36.4	2.4 J	6.43					
9/28/2016	1.0 UJ	1.0 UJ	1.0 UJ	0.85 J	1.0 UJ	1.0 UJ	1.5 J	2.5 UJ	3800 J	1.0 UJ	0.34 J	1.0 UJ	16	38			6.68					
4/13/2017	1.0 U	1.0 U	0.59 J	2.6	1.0 U	0.85 J	1.8 J	2.1 J	3400 J	1.0 U	0.87 J	1.0 U	15	38	82	3.8	6.7					
10/11/2017	1.0 U	1.0 U	1.0 U	1.9	1.0 U	1.0 U	2.1 J	5.0 UJ	6600 J	1.0 U	0.53 J	1.0 U	15	41			6.45					
3/29/2018	2.5 U	7	15	1.8 J	2.5 U	2.5 U	10 U	10 U	11000	2.5 U	0.87 J	2.5 U	11	34	120	1.0 U	6.73					
9/10/2020	1.0 U	1.0 U	0.46 J	2.1	1.0 U	0.55 J	3.3 J	0.93 J	10000 J	1.0 U	0.61 J	1.0 U	1.5	32	33	4.1	7.97					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR- 5SM

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/5/2011	25 U	25 U	3100	31	5.4 J	350	3.3 J	48	3200	25 UJ	25 U	2.53	281	15	26.3	5.82	5.8E+02	1.9E+04	4.3E+03	1.3E+03	6.6E+03	
8/29/2011	5 U	5 U	42	32	5 U	63	21	610	7600	5 U	2.4 J	5 U	0.676	203	12.4	49.6	6.54	5.4E+03	2.3E+03	1.7E+05	6.4E+03	7.6E+04
11/1/2011	5 U	5 U	2.9 J	28	5 U	9.4	220	440	14000	5 U	1.9 J	5 U	1.5	213	4.1 J	8.6	6.61	2.0E+03	1.6E+04	6.1E+04	2.5E+04	1.3E+05
3/21/2012	5 U	5 U	43	65	5 U	45	400	450	15000	5 U	2.3 J	1.8 J	12.1	258	2.4 J	4.2	5.87	2.2E+04	2.1E+03	3.8E+05	2.2E+04	3.7E+05
6/20/2012	5 U	5 U	5.3	56	5 U	11	130	76	12000	5 UJ	1.7 J	1.9 J	11.3	139	5 U	3.1	6.38	2.6E+03	1.0E+03	4.8E+04	2.8E+03	9.1E+04
9/19/2012	5 U	5 U	2.3 J	4.9 J	5 U	16	110	23 J	12000	5 U	1.2 J	2.1 J	5.4	36.4	5 UJ	1.3	6.4	2.5E+02	6.0E+02	2.0E+03	7.9E+02	7.1E+03
12/4/2012	5 U	5 U	2.6 J	5 U	5 U	13	190	20	15000	5 U	1.2 J	5 U	6.52	32.5	1.9 J	1.2	6.38	3.0E+02	4.6E+01	6.1E+03	3.6E+02	1.4E+02
4/3/2013	5 U	5 U	72	2.6 J	5 U	230	380	400	28000 J	5 U	5 U	1.6 J	11.5	12.8	276	1.7	6.68	1.3E+04	3.4E+02	1.1E+05	5.9E+03	8.7E+02
7/10/2013	5 U	5 U	5 U	5 U	5 U	1.8 J	350	9.5	18000	5 U	1.4 J	1.4 J	3.08	20.1	3.3 J	3.6	6.5	1.8E+03	1.4E+02	1.8E+04	2.0E+03	3.1E+03
10/10/2013	5 U	5 U	5 U	5 U	5 U	5 U	130	1.7 J	16000	5 U	1.6 J	5 U	7.77	21.7	5 U	1.7	6.16	2.0E+03	5.9E+02	3.2E+04	4.3E+03	6.0E+02
12/5/2013	5 U	5 U	1.3 J	5 U	5 U	2.3 J	180	6.6	16000	5 U	1.2 J	1 J	10.7	29.8	9.4	1.1	6.15	1.6E+03	7.9E+01	4.4E+03	8.0E+02	3.3E+02
4/9/2014	1 U	1 U	3.4	3.5	1 U	8	800	150	24000	1 U	1.1	1.2	7.01	12.9	174	2.4	6.08	3.4E+03	6.6E+01	7.8E+03	2.5E+01	8.3E+03
8/13/2014	1 U	1 U	1 U	1 U	1 U	220	2.9 J	19000	1 U	1.3	1.8	7.62	20.9	5 U	1.4	6.15	1.0E+04	6.0E+02	1.7E+05	1.3E+02	1.1E+04	
12/3/2014	1 U	1 U	1 U	1 U	1 U	130	1.8 J	18000	1 U	0.61 J	0.8 J	13	18.5	5 U	0.46	5.69	1.8E+04	3.3E+02	1.3E+05	3.5E+02	5.6E+03	
3/24/2015	1 U	1 U	4.5	0.93 J	1 U	13	200	42	10000 J	1 U	0.65 J	1 U	14.1	17	73.5	0.56	6.28	2.8E+03	1.1E+02	1.1E+04	2.6E+01	1.0E+03
10/20/2015	1 U	1 U	1 U	1 U	1 U	83	1.1 J	13000	1 U	1 U	1 U	9.74	21.2			5.89						
5/5/2016	1.0 U	1.0 U	1.0 U	0.52 J	1.0 U	1.0 U	190	19	19000 D	1.0 U	1.0 U	1.0 U	3.57	9	25	16.2	6.31	1.4E+03	5.5E+03	9.7E+04	7.0E+01	1.8E+04
4/17/2017	1.0 U	1.0 U	0.4 J	1.5	1.0 U	2.9	140	52	9000	1.0 U	0.31 J	1.0 U	0.10 U	4.7	24	25	6.89	3.1E+02	1.4E+02	5.8E+04	2.1E+02	7.1E+03
3/27/2018	1.0 U	1.0 U	0.73 J	1.3	1.0 U	8.3	260	69	14000 DJ	1.0 U	1.0 U	0.2 U	2.9	100	27	6.4	8.5E+01	12.2 U	2.1E+03	3.3E+01	1.5E+03	

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR- 6SM

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/5/2011	25 UJ	10 J	4500 J	62 J	8.2 J	530 J	3.4 J	810 J	25 UJ	22 J	25 UJ	97.7	1420	263	1.2	5.46	1.3E+01	1.0E+04	1.4E+01	5.3E+00	9.7E+00	
8/29/2011	25 U	25 U	2500	34	25 U	430	5 U	12	6600	25 U	7.3 J	10 J	143	1730	6.3	0.49	6.26	2.4E+03	1.5E+04	1.4E+04	1.3E+03	3.6E+03
11/1/2011	5 U	5 U	78	52	5 U	130	6.8	250	7000	5 U	5.2	16	97.7	982	4.7 J	0.9	6.73	1.1E+05	1.3E+04	5.5E+05	8.5E+04	1.6E+06
3/22/2012	50 UJ	50 UJ	530 J	56 J	50 UJ	420 J	49	140	13000	50 UJ	50 UJ	50 UJ	62.9	336	45	0.91	6.26	5.6E+04	1.0E+04	8.8E+05	2.8E+04	8.5E+05
6/21/2012	50 UJ	50 UJ	950 J	110 J	50 UJ	420 J	94 J	180 J	8000	50 UJ	50 UJ	19 J	45.4	243	6.5 J	3.4	6.43	2.6E+04	3.2E+03	8.5E+05	8.8E+03	6.3E+05
9/19/2012	5 U	5 U	3.8 J	12	5 U	4.4 J	42	5 U	8600	5 U	5 U	3.9 J	45.6	150	5 UJ	0.31	6.55	8.9E+02	5.0E+02	1.5E+04	7.1E+02	5.4E+04
12/4/2012	5 U	5 U	81	13	5 U	74	71	20	13000	5 U	5 U	2.7 J	38	91	53.6	1.4	6.5	1.0E+03	4.8E+02	2.9E+04	4.5E+02	3.0E+03
4/3/2013	5 U	3.6 J	8900	260	7.3	3000	1000	660	10000 J	3.6 J	12	5 U	15.2	64.9	254	18.4	6.8	3.8E+03	1.8E+03	5.1E+05	1.3E+04	4.9E+03
7/10/2013	13 U	9.3 J	10000	330	6.7 J	3100	900	670	9000	13 U	14	13	7.15	85	90.2	31.6	6.78	1.4E+03	1.8E+02	2.5E+04	7.0E+03	7.4E+03
10/10/2013	50 U	50 U	120	36 J	50 U	77	130 J	240 J	9500 J	50 U	50 U	7.04	88.3	4 J	10	6.52	1.4E+03	4.7E+02	1.1E+05	3.8E+04	1.3E+03	
12/5/2013	5 U	5 U	800	32	5 U	180	88	74	12000	5 U	2.3 J	3.1 J	7.06	62.9	43.5	6.3	6.47	3.2E+03	3.2E+02	5.6E+04	4.6E+04	1.1E+04
4/9/2014	5 U	5 U	3800	90	4.8 J	1200	220 J	220 J	8300 J	5 U	4.5 J	3.6 J	7.61	48.3	143	15.7	6.36	2.5E+03	2.4E+02	3.2E+04	1.0E+03	1.7E+04
8/14/2014	5 U	4.6 J	3900	120	5 U	870	240	310	8500	5 U	6.2	5 U	4.66	50.8	37.4	28.6	6.41	2.1E+04	7.7E+02	7.6E+05	1.6E+03	5.5E+04
12/3/2014	1 U	1.8	2400	64	1.5	590	220 J	330 J	14000 J	1 U	3	2.4	3.8	44.3	76.8	17.4	6.16	1.8E+04	1.3E+02	1.5E+05	8.8E+02	4.6E+03
3/24/2015	5 U	11	15000	250	14	3700	730	780	17000 J	5 U	9.1	5 U	1.53	33.2	259	32.3	6.42	9.3E+03	1.4E+02	3.1E+05	2.8E+03	2.9E+04
10/20/2015	5 UJ	1700 J	57 J	5 UJ	500 J	300	280	8700	5 UJ	2.7 J	5 UJ	1.48	40.7				6.11					
5/5/2016	0 R	2.8 J	4600 DJ	100 J	1.5 J	1100 DJ	410 D	280 D	12000 D	0 R	4.4 J	4.9 J	3.97	32.9	125	30.5	6.44	2.1E+04	3.9E+03	6.0E+05	1.4E+03	1.0E+05
9/26/2016	17 UJ	17 UJ	350 J	14 J	17 UJ	83 J	47	23	2100 D	17 UJ	17 UJ	17 UJ	1.7	38			6.51					
4/17/2017	20 U	20 U	680	17 J	20 U	280	60	35	6700	20 U	20 U	20 U	0.86	33	47	13	7.03	8.0E+02	8.5 U	5.8E+04	1.1E+03	3.5E+03
10/10/2017	4.0 UJ	4.0 UJ	93 J	9.5 J	4.0 UJ	24 J	59 J	96 J	4800 DJ	4.0 UJ	4.0 UJ	4.0 UJ	0.21	36			6.71					
3/27/2018	20 U	20 U	970	31	20 U	430	130 J	170 J	12000 DJ	20 U	20 U	20 U	0.44	26	170	26	6.63	7.3E+02	11.6 U	5.1E+03	6.3E+02	1.7E+03
9/10/2020	2.0 U	2.0 U	17	3.2	2.0 U	4.9	88 J	58 J	7700 J	2.0 U	1.9 J	2.0 U	0.11 J	24	67	26	8.07	3.1E+03	11.1 U	4.7E+04	1.8E+03	1.8E+04

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR- 9SM

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
6/28/2011	10 U	6.6 J	870	22	10 U	190	2.8 J	6.1	1700	10 U	10 U	10 U	9.48	830	24.6 J	18.6	5.8				
8/26/2011	25 U	95	8400	38	43	1100	2.7 J	58	4200	320	230	27	35.7	1290	66.5	6.4	5.71				
11/4/2011	5 U	5 U	26	10	5 U	18	16	78	11000	5.3	44	74	7.49	384	6.5	11.7	6.54				
3/23/2012	5 U	1.1 J	38	3.9 J	5 U	23	35	30	17000	4.4 J	6.5	13	0.0153 J	56.4	48.6	99.7	6.77				
6/27/2012	50 U	16 J	4000	19 J	12 J	910	14	170	13000	73	25 J	20 J	0.195 J	172	115 J	34.2	6.44				
9/21/2012	5 UU	1.1 J	300	5.2	2 J	150	8	46	12000	9.9	7.4	14	0.164 J	67.1	30.6 J	25.8	6.22				
12/6/2012	5 U	1.7 J	350	3.3 J	2.2 J	130	6.6	29	14000	17	7.1	14	0.2 U	26.6	82.4	42.7	6.42				
4/5/2013	5 U	1.5 J	530	3.8 J	2.3 J	290	50	160	16000 J	13	6.7	4 J	0.2 U	13.9	172	104	7.07				
7/17/2013	5 U	4.1 J	1900	11	8.3	560	9.8	66	17000	29	13	4.1 J	0.2 U	19.4	97.6	60.9	6.67				
10/17/2013	5 U	5 U	5 U	5 U	1.6 J	8.1	6.8	13000	5 U	5 U	2.6 J	0.462	13.9	30.8	28.3	6.5					
12/10/2013	5 U	5 U	2.1 J	5 U	5 U	5.3	25	9.8	22000	5 U	5 U	1.6 J	0.4 U	10.1	32.2	37.6	6.84				
4/14/2014	1 U	1 U	1.6	1 U	1 U	3.2	15	7.3	4700	1 U	1 U	1 U	0.212 J	6.1	219	7.9	7.25				
8/20/2014	1 U	1 U	3.4	0.78 J	1 U	4.2	20	16	18000	1 U	1.3	1 U	0.4 U	15.7	27.1	74.5	6.71				
12/8/2014	1 U	1 U	1 U	1 U	1 U	1.4	20	8.8	19000	1 U	1 U	2.1	0.0716 J	10.1	57.2 J	29.6	6.53				
3/27/2015	1 U	1 U	3.2	0.54 J	1 U	8.1	40	26	14000 J	1 U	0.77 J	1 U	0.67 J	9.4	304	12.5	6.86				
10/20/2015	1 U	1 U	7.3 J	0.82 J	1 U	6.1 J	6.1	18	11000 J	1 U	1.2	2.1 J	0.143 J	14.7			5.79				
5/6/2016	1.0 U	1.0 U	2.8	1.0 U	1.0 U	3.2	17	7.2	8500 D	1.0 U	0.53 J	1.0 U	0.400 U	4.8	185	28.9	7.51				
4/13/2017	1.0 U	2.8	5.8	4.6	1900	1.0 U	0.32 J	1.0 U	0.065 J	2.8	180	11	7.27								
3/30/2018	1.0 U	1.0 U	0.7 J	1.0 U	1.0 U	1.7	9.9 J	7.2 J	6700 J	1.0 U	0.38 J	1.0 U	0.2 U	2.1	190	12	7.14				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UU The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR-10SM

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
6/25/2011																						6.08
6/28/2011	5 UJ	3.1 J	270 J	3.6 J	2.6 J	37 J	1.5 J	3.5 J	690 J	14 J	42 J	1.9 J	98.2	1650	287 J	1.7						
8/26/2011	50 U	50 U	940	11 J	50 U	210	1.2 J	13	5200	28 J	73	15 J	113	1690	17.6	0.62	4.79					
11/4/2011	5 U	5 U	3.2 J	5.9	5 U	5.1	11	18	13000	5 U	9.5	39	62.6	616	4 J	0.14 J	6.86					
3/23/2012	50 UJ	50 UJ	9.5	5 U	9500	50 UJ	50 UJ	28 J	25.8	154	38.5	1.2	6.32									
6/27/2012	5 UJ	5 UJ	5 UJ	2.5 J	5 UJ	5 UJ	6.3 J	5 UJ	11000	5 UJ	5 UJ	12 J	14.6	102	27.8 J	3.1	6.9					
9/21/2012	5 UJ	5 U	5 U	2.8 J	5 U	5 U	14	5 U	7000	5 U	5 U	15	12	83.8	5 UJ	1	6.93					
12/7/2012	5 U	5 U	3.4 J	5 U	5 U	13	11	16 J	12000	5 U	5 U	5.2 J	8.93	39.5	34.1	1.6	6.47					
4/5/2013	5 U	5 U	5 U	0.84 J	5 U	5 U	30	1.2 J	18000 J	5 U	5 U	12	4	31.2	226	13.5	6.48					
7/17/2013	5 U	5 U	5 U	0.84 J	5 U	5 U	11	5 U	10000	5 U	1.1 J	5.5	1.96	33.7	107	25.6	6.66					
10/8/2013	50 U	50 U	55	50 U	50 U	170	19	130	16000	50 U	50 U	50 U	1.94	30.8	16.1	16.9	6.5					
12/10/2013	5 U	5 U	5 U	5 U	5 U	5 U	15	5 U	17000	5 U	5 U	2.5 J	4.63	28.1	73.3	6.7	6.56					
4/16/2014	1 U	1 U	1 U	3.3	1 U	1.5	65	200	21000	1 U	3	5	0.655	14.6	70.8	100	6.83					
8/20/2014	1 U	1 U	1 U	2.6	1 U	1.2	34	46	10000	1 U	0.94 J	3.9	1.17	32.8	32.9	23.4	6.65					
12/8/2014	1 U	1 U	1 U	1 U	1 U	1 U	8.3	5 U	12000	1 U	1 U	1 U	3.7	12.4	42.5	1.8	6.64					
3/27/2015	1 U	1 U	290	3	1.3	290	30	120	15000 J	1.1	6.3	1.3	14.2	18	363	7	7.19					
10/16/2015	1 U	1 U	1 U	1 U	1 U	1 U	4.8 J	2.5 J	6600	1 U	1 U	1 U	2.63	16.1			7.11					
5/6/2016	1.0 U	1.0 U	77	3.9	1.0 U	65	55	200	18000 D	1.0 U	5.3	6.4	2.25	13.4	153	64	7.33					
9/28/2016	50 U	50 U	1100	50 U	50 U	450	13	57	4100	50 U	50 U	50 U	0.79	15			6.72					
4/14/2017	1.0 U	1.0 U	1.2	0.93 J	1.0 U	3.1	12	27	5000	1.0 U	0.44 J	2.4	1.5	14	160	45	6.77					
10/10/2017	4.0 U	4.0 U	91	3.5 J	4.0 U	120	34	120	6900 D	4.0 U	2.7 J	4.0 U	0.44	15			6.51					
4/2/2018	1.0 U	1.0 U	1	1.1	1.0 U	4.5	23 J	44 J	11000 DJ	1.0 U	1.1	1.9	0.2	14	260	30	7.07					
9/11/2020	2.0 U	2.0 U	1.1 J	1.5 J	2.0 U	1.7 J	8	25	8100	2.0 U	0.82 J	2.0 U	13	120	28	4.9	6.8					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR-13SM

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/30/2011	10 U	14	900	10	7.8 J	210	1.7 J	12	240	35	150	2.8 J	121	1710	357 J	1.4 J	5.49	3.7 U	22.2 U	3.7 U	3.7 U	3.7 U
8/29/2011	50 U	50 U	460	8.6 J	50 U	160	5 U	23	4500	50 U	95	47 J	135	1830	17	0.67	6.27	3.3E+02	1.0E+04	1.6E+04	1.5E+04	1.3E+04
11/2/2011	25 U	25 U	66	6.3 J	25 U	59	1.3 J	23	8300	25 U	25	43	102	1020	2.5 J	0.42	6.7	1.5E+02	1.2E+03	4.3E+04	9.2E+04	6.4E+04
3/22/2012	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	8.6	21	6800	50 UJ	50 UJ	62 J	70.6	233	19	1.3	6.27	3.6E+02	7.6E+03	7.0E+05	4.9E+04	3.2E+05	
6/21/2012	5 U	5 U	0.91 J	11	5 U	5 U	7.4	6.8	7700	5 UJ	6.9	44	51	192	14.2 J	0.63	6.49	1.4E+02	3.0E+03	1.0E+05	7.1E+03	8.0E+04
9/20/2012	25 U	25 U	25 U	25 U	25 U	3.3 J	5 U	6800	25 U	25 U	18 J	53.3	146	5 U	0.21	6.39	2.0E+01	6.4E+02	1.2E+04	1.4E+03	1.3E+04	
12/4/2012	5 U	5 U	5 U	2.2 J	5 U	5 U	4.3 J	5 U	13000	5 U	5 U	16	37	95.4	14.6	0.79	6.93	7.0E+00	1.2E+02	1.1E+03	5.2E+01	8.2E+00
4/4/2013	5 U	5 U	5 U	1.8 J	5 U	5 U	7.7	5.2	15000	5 U	1.9 J	17	25.5	54.9	50	11.4	6.58	2.5E+01	1.6E+03	6.1E+03	7.0E+02	1.6E+01
7/15/2013	5 U	1.2 J	5 U	1.1 J	5 U	5 U	1.9 J	1.1 J	8200	5 U	5 U	13	18.7	54.8	3.5 J	6	6.6	1.4E+02	3.7E+02	1.3E+02	4.7E+01	5.9E+00
10/10/2013	50 U	50 U	50 U	50 U	50 U	2.7 J	1.9 J	12000	50 U	50 U	50 U	20.1	51.3	13.4	4.5	6.4	5.7E+00	1.0E+03	1.1E+03	2.8E+02	8.2E+00	
12/4/2013	25 U	25 U	25 U	25 U	25 U	3.1 J	5 U	12000	25 U	25 U	6.7 J	23.1	56.9	2.5 J	1.6	6.58	1.4E+00	3.0E+02	5.3E+02	2.2E+01	4.3E+01	
4/8/2014	1 U	1 U	1 U	0.94 J	1 U	0.86 J	17	17	17000	1 U	2	6.8	13	32.1	176	10	6.45	1.4E+01	4.3E+02	5.2E+02	6.5E+00	4.6E+02
8/13/2014	1 U	1 U	1 U	0.79 J	1 U	0.53 J	14	3.4 J	16000	1 U	1 U	7.4	8.12	45.9	28.3	17.7	6.25	2.8E+01	4.3E+02	1.3E+04	1.8E+01	5.2E+02
12/8/2014	1 U	1 U	1 U	1 U	1 U	6	5 U	14000	1 U	1 U	3.2	14.7	41.1	211	1.4	6.26	1.6E+01	6.7E+02	2.9E+03	2.3E+01	1.9E+01	
3/24/2015	1 U	1 U	1.3	0.84 J	1 U	2.5	30	17	18000 J	1 U	1.3	4.3	10.5	26.9	211	6.1	6.35	7.8E+01	8.1E+02	1.5E+04	1.2E+02	7.4E+02
10/16/2015	20 U	20 U	20 U	20 U	20 U	2 J	1.7 J	10000	20 U	20 U	20 U	13.4	34.1				6.24					
5/5/2016	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.5	1.4 J	18000 D	1.0 U	1.0 U	1.3	8.01	24.3	8.1	13.8	6.65	1.4E+01	3.4E+03	1.6E+04	3.6E+01	1.6E+03	
4/17/2017	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.63 J	1.3	0.4 J	6400	1.0 U	0.28 J	0.73 J	7.5	22	69	6.5	6.79	2.9E+00	4.9 U	7.3E+02	2.9E+01	2.2E+02
3/27/2018	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 UJ	1.9 J	12000 DJ	1.0 U	0.25 J	0.89 J	8.4	19	36	5.1	6.46	0.3 J	5.1 U	4.8E+03	4.0E+00	3.9E+03	

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR-14SM

Date	Cis-1,2-		Trans-1,2-		Vinyl		1,1,1-		1,1-		Dissolved											
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethane (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
6/30/2011 8/23/2011	10 U	10 U	450	2.9 J	10 U	17	1.5 J	2.4 J	6300	10 U	10 U	10 U	136	2030 J	11 J	0.52 J	5.28	7.4E+00	5.3E+03	4.1 J	4.3 U	4.3 U
																		6.43				
8/25/2011	50 U	50 U	350	50 U	50 U	50 U	5 UJ	5 UJ	5500 J	50 U	50 U	50 U	122	1870	2.1 J	0.15 J	1.9E+02	1.1E+04	9.7E+02	3.2E+02	4.1E+03	
11/2/2011	25 U	25 U	5 UJ	1.9 J	9300	25 U	25 U	25 U	76.5	426	3.1 J	0.12 J	6.97	5.3E+02	2.4E+03	5.0E+04	1.4E+04	2.0E+05				
3/21/2012	50 U	50 U	1.2 J	5 U	8500	50 U	50 U	50 U	68.2	193	33.3 J	0.11 J	6.07	1.1E+03	1.5E+04	1.8E+05	2.6E+04	3.1E+05				
6/25/2012	50 UU	50 UU	4.1 J	2.3 J	13000	50 UU	50 UU	50 UU	52.6	171	240	1.4	6.67	4.1E+01	1.9E+03	1.7E+04	9.9E+02	3.0E+04				
9/20/2012	50 U	50 U	2.6 J	5 U	7700	50 U	50 U	50 U	40.1	162	51.9	2.7	6.8	1.1E+01	5.0E+02	3.9E+03	2.5E+02	4.3E+03				
12/5/2012	25 U	25 U	2.5 J	2.6 J	12000	25 U	25 U	25 U	38.3	143	197	4.8	6.24	9.7E+01	2.7E+02	2.5E+03	2.6E+02	1.7E+03				
4/4/2013	5 U	5 U	5 U	0.86 J	5 U	5 U	5.8	5.2	15000	5 U	5 U	5 U	17.9	68.1	231	7.4	6.6	7.4E+01	2.1E+03	1.1E+04	9.9E+02	5.1E+01
7/16/2013	25 U	25 U	5.8	6.9	13000	25 U	25 U	25 U	5.25	101	328	13.4	6.68	1.4E+02	5.3E+02	1.7E+03	1.4E+02	1.3E+02				
10/10/2013	50 UU	50 UU	14 J	14 J	12000 J	50 UU	50 UU	50 UU	5.14	79.8	19.6	8.4	6.58	3.3E+02	1.2E+03	6.2E+03	6.6E+02	1.0E+02				
12/4/2013	25 UU	25 UU	8.1	6.7	12000	25 U	25 U	25 U	3.63	83.1	265 J	33.5	6.61	1.6E+03	9.2E+02	7.8E+03	2.0E+02	1.4E+03				
4/9/2014	1 U	1 U	1 U	0.62 J	1 U	1.4	8.3 J	5.1 J	15000 J	1 U	1 U	1 U	2.84	81.8	48.9	37.5	6.62	5.7E+02	7.4E+03	7.1E+02	4.1E+01	5.1E+02
8/14/2014	1 U	1 U	3.9	1 U	1 U	14	9.7	19	18000	1 U	1 U	1 U	2.23	52	130	21.2	6.19	8.7E+02	2.8E+02	4.3E+04	2.0E+01	2.6E+03
12/3/2014	1 U	1 U	1 U	1 U	1 U	1.2	4.7 J	1.8 J	16000	1 U	1 U	1 U	4.45	16.5	277	32.9	6.43	1.4E+02	5.7E+02	1.5E+04	1.3E+01	3.5E+02
3/24/2015	1 U	1.3	14	1 U	1 U	10	33	16	16000 J	1 U	1 U	1 U	1.28	33.1	159	61.7	7.14	1.4E+02	3.9E+02	3.5E+03	1.5E+01	2.8E+02
10/19/2015	1 U	1 U	1 U	1 U	1 U	1 U	2.1 J	5 U	9800	1 U	1 U	1 U	2.04	14.3		5.94						
5/5/2016	1.0 U	1.0 U	2.1	1.0 U	1.0 U	4.1	2 J	5.8	16000 D	1.0 U	1.0 U	1.0 U	1.79	8.5	189	12.4	6.9	2.8E+01	1.6E+04	4.4E+03	9.7E+00	4.1E+02
9/26/2016	1.0 U	1.0 U	0.28 J	1.0 U	1.0 U	0.65 J	0.81	1.5	5800 D	1.0 U	1.0 U	1.0 U	1.6	13		6.65						
4/17/2017	1.0 U	1.0 U	16	1.0 U	1.0 U	30	1.1	6.9	3500	1.0 U	1.0 U	1.0 U	0.74	11	93	15	7.31	4.7E+00	5.3 U	1.4E+03	2.1E+01	1.2E+02
10/10/2017	1.0 U	1.0 U	0.79 J	1.0 U	1.0 U	1.8	4.5	11	4000	1.0 U	1.0 U	1.0 U	1.5	5.6		12.54						
3/27/2018	1.0 U	1.0 U	0.52 J	1.0 U	1.0 U	2.8	3.3 J	2.9 J	5700 DJ	1.0 U	1.0 U	1.0 U	1.9	2.5	340	25	6.8	0.3 J	10.6 U	2.5E+01	6.5E+00	1.8E+01
9/10/2020	1.0 U	0.5 J	40	0.86 J	1.0 U	15	14	79	11000	1.0 U	0.83 J	1.0 U	0.57	13	480	85	8.58	6.6E+00	5.4 U	4.5E+02	2.9E+01	2.1E+02

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR-15SM

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
6/28/2011	5 U	4.6 J	120	2.4 J	5 U	50	3 J	7.2 J	1900 J	5 U	5 U	167	2190	11 J	0.5	6.5					
8/26/2011	50 U	50 U	180	50 U	50 U	58	5 UJ	2.2 J	7200 J	50 U	50 U	167	2060	1.9 J	0.12 J	5.15					
11/7/2011	25 U	25 U	25 U	4.3 J	25 U	25 U	2.5 J	8.2 J	9000	25 U	25 U	106	682	5 U	0.16 U	6.75					
3/28/2012	50 U	50 U	50 U	50 U	50 U	50 U	3.6 J	5 U	8200	50 U	50 U	95.7	270	2.2 J	0.071 J	6.51					
6/19/2012	5 U	5 U	5 U	2 J	5 U	5 U	1.7 J	5 U	8300	5 U	5 U	67.3	267	5 U	0.16 U	6.64					
9/21/2012	5 UJ	5 U	5 U	5 U	5 U	5 U	2.3 J	5 U	11000	5 U	5 U	68.8	237	5 UJ	0.16 U	6.98					
12/11/2012	5 U	5 U	5 U	5 U	5 U	5 U	1.8 J	5 U	11000 J	5 U	5 U	76.3	250	5 U	0.16 U	6.98					
4/8/2013	5 U	5 U	5 U	5 U	5 U	5 U	2.3 J	5 U	17000	5 U	5 U	78.6	177	5 U	0.16 U	6.79					
7/19/2013	50 U	50 U	50 U	50 U	50 U	50 U	1.4 J	5 U	10000	50 U	50 U	71.4	173	5 U	0.055 J	6.54					
10/9/2013	250 UJ	250 UJ	250 UJ	250 UJ	250 UJ	250 UJ	1.1 J	5 U	14000	250 UJ	250 UJ	71.3	171	5 U	0.16 U	6.51					
12/9/2013	50 U	50 U	50 U	50 U	50 U	50 U	2.2 J	5 U	11000	50 U	50 U	72.7	170	5 U	0.16 U	6.75					
4/15/2014	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	10 UJ	1.9 J	5 UJ	15000 J	10 UJ	10 UJ	69.8	120	7.4	0.078 J	6.6					
8/20/2014	10 U	10 U	10 U	10 U	10 U	10 U	7.6 J	5 UJ	11000 J	10 U	10 U	66	136	5 U	0.069 J	6.34					
12/2/2014	1 U	1 U	1 U	1 U	1 U	1 U	2.5 J	5 UJ	11000 J	1 U	1 U	67.9	141	2.1 J	0.16 U	5.85					
3/27/2015	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	1 UJ	5 U	5 U	19000 J	1 UJ	1 UJ	62.7	93.1	5.1	0.12 J	7.22					
10/19/2015	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	5 UJ	1.3 J	5 U	9100	5 UJ	5 UJ	60.2	99			6.8					
5/13/2016	0 R	0 R	0 R	0 R	0 R	0 R	2.7 J	5.0 U	12000 D	0 R	0 R	55.5	83.6	3 J	0.13 J	6.8					
4/13/2017	1.0 U	1.0 U	0.38 J	1.0 U	1.0 U	1.0 U	0.72 J	0.15 J	4400 J	1.0 U	1.0 U	53	69	13	1.0 U	6.96					
3/29/2018	1.0 U	1.0 U	0.32 J	1.0 U	1.0 U	1.0 U	5.0 U	10000	1.0 U	1.0 U	1.0 U	42	55	35	1.0 U	6.79					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: OR-18SM

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-			1,1-			Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/28/2011	5 U	2.3 J	370	6.6	5 U	180	5.5	20	2800	5 U	1.3 J	5 U	21.2	549	968 J	27	6.84					
8/26/2011	50 U	50 U	390	50 U	50 U	150	2.2 J	14	7800	50 U	50 U	50 U	0.767	485	600	89.4	6.27					
11/8/2011	5 U	5 U	17	2.1 J	5 U	29	3.7 J	26	15000	5 U	5 U	5 U	0.0159 J	62.1	581 J	92.8	6.69					
3/20/2012	5 U	5 U	3.4 J	3.3 J	5 U	13	8.8	28	12000	5 U	5 U	5 U	0.0529 J	64.9	348 J	44.3	6.15					
6/19/2012	5 U	5 U	9.4	3.7 J	5 U	22	14	38	17000	5 U	5 U	5 U	0.0597 J	105	280		6.49					
9/21/2012	5 UJ	5 U	9.3	4.1 J	5 U	30	18	190	7900	5 U	5 U	5 U	0.2 U	88.1	255 J	81	6.26					
12/11/2012	5 U	5 U	160	7	5 U	210	12	340	14000 J	5 U	5 U	5 U	0.2 U	27.4	257	68.8	6.89					
4/8/2013	5 U	5 U	16	2.3 J	5 U	22	23	27	16000	5 U	5 U	5 U	0.2 U	22.3	226	29.6	6.9					
7/12/2013	5 U	5 U	5.7	1.4 J	5 U	14	18	26	11000	5 U	5 U	5 U	0.2 U	5.7	398	32.6	6.75					
10/9/2013	5 U	5 U	78	2.9 J	5 U	81	20	140	13000	5 U	5 U	5 U	0.4 U	14.6	213	67.5	6.42					
12/3/2013	5 U	5 U	16	1.5 J	5 U	33	15	52	17000	5 U	5 U	5 U	0.4 U	21.2 J	121	70.8	6.44					
4/8/2014	1 U	1 U	43	1.7	1 U	35	21	94	19000	1 U	1 U	1 U	0.4 U	11.5	274	46.9	6.84					
8/19/2014	1 U	1 U	11	0.8 J	1 U	12	18	38	14000	1 U	1 U	1 U	0.4 U	7.6	261	51.1	6.97					
12/9/2014	1 U	1 U	2.6	0.79 J	1 U	9.9	12	41	18000	1 U	1 U	1 U	0.4 U	13.2	85.9	53.8	6.63					
3/26/2015	1 U	1 U	18	0.99 J	1 U	19	40	36	16000 J	1 U	1 U	1 U	0.4 U	4.4	414	20.4	7.23					
10/15/2015	1 U	1 U	2.3	1 U	1 U	7.7	5.4	20	8100	1 U	1 U	1 U	0.4 U	7.3			6.78					
5/6/2016	1.0 U	1.0 U	5.1	1.5	1.0 U	1.0 U	16	40	14000 D	1.0 U	1.0 U	1.0 U	0.400 U	6.6	189	52	7.09					
9/26/2016	1.0 UJ	1.0 UJ	13 J	1.1 J	1.0 UJ	22 J	2.2 J	7.1 J	3700 DJ	1.0 UJ	1.0 UJ	1.0 UJ	0.100 U	5.1			6.47					
4/14/2017	2.5 U	2.5 U	140	3.8	2.5 U	130	6.9	39	5900	2.5 U	2.5 U	2.5 U	0.10 U	10	390	53	6.9					
10/11/2017	10 U	10 U	230	10 U	10 U	90	6.6	36	7500	10 U	10 U	10 U	0.100 U	5.6			6.81					
3/29/2018	1.0 U	1.0 U	6.2	1.8	1.0 U	14	18	130	10000	1.0 U	1.0 U	1.0 U	0.2 U	3.4	290	43	6.86					
9/11/2020	1.0 U	1.0 U	11	2.6	1.0 U	20	12	260	5000	1.0 U	0.3 J	1.0 U	0.2 U	3.2	460	21	6.79					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 1D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroe thane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
1/15/2008	930 J	180000	36000	5.0 U	5.0 U	2100	5.1	19	120	5.0 U	5.0 U	11.8	1460									
7/25/2008	280 J	17000 J	82000 J	200 J	260 J	3900 J	3.8 J	16 J	68 J	2500 UJ	2500 UJ	2500 UJ	22.4 J	2200 J								
10/1/2008	5000 U	38000	110000	1900 J	310 J	2200	14	23	230	5000 U	5000 U	5000 U	33.1	1210								
12/11/2008	5.0 U	14000	130000 J	1500 J	280 J	4800	18	25	200	5.0 U	5.0 U	5.0 U	44.5	1530								
6/2/2009	5000 U	53000	97000	5000 U	5000 U	3400	18	23	190	5000 U	5000 U	5000 U	0.0661 J	49.3	1380	63.9						
10/8/2009	5000 U	64000	100000	5000 U	5000 U	5200	23	30	210	5000 U	5000 U	5000 U	0.0317 U	22.9	1350	56.3						
7/13/2010	500 U	8800	78000	110 J	180 J	8800	26	54	170	500 U	500 U	500 U	0.2 U	10.4	1820 J	20.4						
6/23/2011	150 J	22000	42000	500 U	130 J	1900	5 J	26	64	230 J	500 U	500 U	0.606	7.9	1580	2.5	7.1					
8/23/2011	250 U	1100	49000	85 J	130 J	3300	10	80	890	55 J	250 U	250 U	0.086 J	26	1470 J	68.9	7.45					
11/9/2011	45 J	25000	22000	250 U	58 J	550	5	28	83	120 J	250 U	250 U	0.157 J	36.5	664	44.7	6.86					
3/28/2012	100 U	2100	19000	36 J	49 J	1200	3.9 J	34	160	150	48 J	100 U	0.2 U	6.2	900	36.9	6.95					
6/26/2012	100 U	1900	26000	60 J	71 J	2100	4.9 J	61	2200	240	43 J	100 U	0.2 U	6.2	1150	29	6.97					
9/25/2012	50 U	860	17000	36 J	41 J	2200	8.2 J	57 J	1100	200	43 J	50 U	0.036 J	6.4	700 J	21.2	7.02					
12/6/2012	100 U	180	36000	190	26 J	840	10	49	250	18 J	100 U	100 U	240	1550	6.8	3	5.75					
4/9/2013	250 U	230 J	43000	180 J	250 U	3100	36	140	2600	250 U	250 U	180	1380	5.5 J	14.4	5.89						
7/16/2013	0.86 J	12	750	4.7 J	0.93 J	60	1.5 J	20	3000	0.95 J	5 U	5 U	1.29	73.6	4.8 J	7.7	7.15					
10/11/2013	50 U	50 U	9500	18 J	50 U	3400	27	1500	11000	50 U	50 U	50 U	36.4	316	5 U	1.8	6.09					
12/11/2013	13 U	4.9 J	3300	15	6.2 J	3100	21	1500	8200	2.2 J	7.3 J	13 U	11.8	146	12.7	1.2	6.17					
8/21/2014	0.93 J	0.84 J	680	2.4	1.1	300	25	730	14000	1 U	3.3	1 U	63	233	5 U	0.14 J	7.07					
12/4/2014	1 U	1.1	50	7.6	1 U	200	15	3900	15000	1 U	15	2.9	84.5	354	5 U	0.33	6.28					
4/3/2015	1 U	1 U	3.6	9.2	1 U	22	88	5500	20000	1 U	15	1.7	113	442	3.3 J	0.1 J	8.34					
10/16/2015	50 U	50 U	21000	50 U	50 U	1700	330	3100	14000	50 U	50 U	50 U	78.7	341			6.97					
5/10/2016	1.0 U	3.1	67	1.8	1.0 U	36	850 D	450	19000 D	1.0 U	3.1	5.5	62.1	398	2.3 J	0.15	7.8					
9/26/2016	6.7 U	6.7 U	5.7 J	2.5 J	6.7 U	110	300	940	5200 D	6.7 U	4.8 J	6.7 U	45	380			7.43					
4/21/2017	1.0 U	1.0 U	1.8	0.5 J	1.0 U	18	290	92	11000	1.0 U	1.9	2.3	73	460	20 U	1.0 U	7.8					
10/12/2017	1.0 U	1.0 U	1.2	0.31 J	1.0 U	28	320	210	15000 D	1.0 U	0.74 J	2.9	64	460			7.1					
4/3/2018	1.0 U	1.0 U	0.51 J	1.0 U	1.0 U	10 J	720	140	19000 D	1.0 U	2.2	2.4	63	480	10 U	1.0 U	7.48					
9/15/2020	5000 U	7300	180000	5000 U	5000 U	12000	46	1500	2100	5000 U	5000 U	5000 U	0.058 J	230	190	80	6.57					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 1S

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/6/2011	50 U	13 J	6700	38 J	11 J	400	1.2 J	11	34	50 U	50 U	0.305	193	133	63.8	6.59	1.0E+03	1.4E+04	1.1E+03	1.6E+02	4.7E+02	
8/29/2011	25 U	25 U	4800	94	5.1 J	2600	8.6	690	3500	25 U	25 U	21.6	503	5 U	2	6.23	1.9E+04	4.3E+03	7.6E+05	2.2E+04	1.1E+05	
11/3/2011	5 U	5 U	150	81	5 U	320	270	2100	8100	5 U	2.9 J	1.8 J	30.6	561	3.1 J	2	6.3	7.3E+03	5.1E+02	3.1E+04	2.1E+04	3.4E+04
3/21/2012	5 U	5 U	390	74	4 J	660	1000	590	22000	5 U	2.6 J	2 J	5.24	88.3	4.9 J	1.6	6.51	2.3E+04	3.0E+03	1.8E+06	8.0E+04	1.4E+06
6/25/2012	5 U	1.4 J	200	27	1.1 J	160	1700	500	20000	5 U	1.1 J	5 U	1.63	29.3	14.7	8.9	6.57	4.4E+03	1.3E+03	7.9E+05	2.3E+04	6.0E+05
9/19/2012	5 U	1.9 J	290	8.7	1.7 J	310	1600	1000	15000	5 U	1.3 J	5 U	1.64	15.6	51.7 J	4.8	6.58	7.0E+04	1.7E+03	4.9E+04	5.3E+01	1.8E+02
12/5/2012	5 U	1.7 J	420	11	1.3 J	410	410	420	9600	5 U	1.4 J	5 U	0.414	7.2	95.9	2.4	7.23	6.5E+03	4.9E+01	1.3E+05	4.5E+03	8.0E+04
4/3/2013	1.3 J	110	710	16	3.5 J	380	240	340	15000 J	5 U	5.5	5 U	1.65	20.3	136	9.1	6.79	6.8E+03	1.2E+03	3.0E+05	1.7E+04	1.1E+03
7/10/2013	5 U	4.8 J	320	16	1.2 J	270	220	360	4500	5 U	7.1	5 U	0.2 U	37	46.4	20.1	7.41	3.4E+03	2.7E+01	3.6E+05	9.8E+03	3.4E+04
10/15/2013	5 U	2 J	1100	20	6.5	620	970	270	11000	5 U	7.3	5 U	0.0703 J	32.1	10.5	17.1	6.9	1.5E+03	1.1E+03	1.2E+05	5.4E+03	9.8E+03
12/5/2013	5 U	4.4 J	720	27	5.8	650	1000	500	20000	5 U	6.2	3.7 J	0.206 J	6	8.3	9.3		2.4E+05	7.8E+03	6.0E+06	4.4E+05	9.0E+05
4/9/2014	1 U	4.2	490	19	1.9	280	330	470	13000	1 U	3.8	1.4	0.656	7	35.2	13.6	6.8	3.4E+04	3.3E+03	1.4E+05	9.5E+02	8.4E+04
8/13/2014	1 U	1.3	250	14	0.61 J	210	390	440	7300	1 U	2.5	4.7	0.0419 J	5.8	9.9	14	7.4	1.6E+04	6.2E+02	1.7E+06	9.6E+02	2.4E+05
12/8/2014	1 U	1.6	150	7.9	1 U	120	550	260	6200	1 U	0.84 J	3.6	0.141 J	3	38.7	5.5	7.26	2.2E+04	5.0E+02	4.2E+05	5.0E+03	2.4E+04
3/25/2015	1 U	6.1	670	20	2	340	180	430	7700	1 U	2.4	2.7	0.787	28.6	79.5	0.77	7.25	2.6E+04	8.6E+01	3.5E+05	6.2E+02	8.6E+04
10/22/2015	1 U	0.97 J	100	9.6	1 U	130	350	240	15000	1 U	0.63 J	3.3	0.0424 J	4.5			7.14					
5/5/2016	1.0 U	1.2	560 D	19	1.5	280 D	130	250	3500 D	1.0 U	1.8	1.1	0.914	5.1	73.5	7.1	7.31	8.1E+03	1.5E+04	5.1E+05	4.5E+02	2.2E+05
9/26/2016	17 UJ	4 J	270 J	9.6 J	17 UJ	230 J	17	90	4100 D	17 UJ	17 UJ	17 UJ	0.059 J	8.9			6.61					
4/17/2017	10 U	4.6 J	330	10	10 U	270	17	160	700	10 U	10 U	10 U	0.65	2	59	1.0 U	7.6	1.7E+03	4.4E+03	1.3E+05	1.0E+03	2.0E+04
10/11/2017	5.0 U	1.9 J	110	8.2	5.0 U	140	28	280	7400	5.0 U	5.0 U	5.0 U	1	9.8			6.6					
3/27/2018	5.0 U	5.0 U	160	18	5.0 U	140	65	310	11000 DJ	5.0 U	5.0 U	5.0 U	0.56	2.1	96	15	6.53	5.0E+02	11.1 U	3.9E+03	1.4E+02	2.7E+03
9/9/2020	13 U	1.7 J	330	8.7 J	13 U	160	35	45	16000	13 U	13 U	13 U	3.7	15	41	2.9	6.39	9.7E+00	6.6 U	6.6E+02	5.1E+01	6.2E+02

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 2D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)		
1/16/2008	910 J	110000	27000	5.0 U	5.0 U	1600 J	6.9	19	87	5.0 U	5.0 U	5.0 U	7.62	1410									
7/23/2008	5000 U	1100 J	150000	580 J	380 J	1800 J	7.6	34	110	5000 U	5000 U	5000 U	1020	1250									
9/29/2008	5000 U	3200 J	120000	680 J	210 J	2600	5.8	16	89	5000 U	5000 U	5000 U	748	843									
12/11/2008	5.0 U	2300	76000	260 J	88 J	1600	6.6	9.3	39	5.0 U	40 J	5.0 U	194	270									
6/2/2009	2500 U	3600	61000	2500 U	2500 U	1400	14	50	390	2500 U	2500 U	2500 U	7.91	723	71.8								
10/8/2009	2500 U	3700	63000	140 J	2500 U	1400	9.3	26	110	2500 U	2500 U	2500 U	0.986	782	111	109							
7/15/2010	250 U	6900	100000	220 J	110 J	5000	11	200	660	250 U	63 J	250 U	0.105 J	442	69.6 J	165							
6/29/2011	1000 U	12000	97000	270 J	1000 U	1700	5.4	180	750	1000 U	1000 U	1000 U	0.0272 J	462	28.2 J	210	5.83	3.0E+02	1.4E+03	6.3E+02	4.3E+01	1.9E+02	
8/23/2011	500 U	15000	93000	250 J	140 J	2300	7.9	200	260	500 U	500 U	500 U	0.0279 J	471	241 J	207	6.77	2.1E+01	7.6E+01	9.0E+01	1.1E+01	1.6E+01	
11/3/2011	1000 U	30000	130000	250 J	1000 U	3000	4.3 J	98	330	1000 U	1000 U	1000 U	1.21	356	76	165	6.5	1.6E+04	1.4E+04	1.6E+05	9.1E+03	8.0E+03	
3/21/2012	310 J	49000	120000	210 J	180 J	2700	7.4	170	2000	500 U	500 U	500 U	0.0358 J	137	665 J	209	6.39	1.0E+04	2.2E+03	7.3E+03	4.0E+02	4.4E+03	
6/21/2012	160	27000	80000	160 J	130	1700	19	180	2600	40 J	34 J	50 U	0.2 U	148	202 J	150	6.68	8.2E+02	4.8E+02	2.5E+02	4.3E+03		
9/24/2012	73 J	16000	91000	190 J	160 J	2100	21	200	2200	250 U	250 U	250 U	0.2 U	215	118	171	6.31	2.5E+03	3.0E+03	2.7E+04	8.1E+02	2.1E+03	
12/6/2012	500 U	9500	150000	220 J	190 J	2500	14	160	2000	500 U	500 U	500 U	0.0569 J	790	99.5	106	6.3	6.5E+03	2.3E+03	1.2E+04	8.0E+03	9.6E+02	
4/4/2013	250 U	700	130000	160 J	71 J	1500	15	140	2900	250 U	56 J	250 U	0.2 U	821	41.6	206	1.8E+04	1.2E+04	4.6E+04	2.0E+03	9.2E+01		
7/11/2013	250 U	1100	76000	94 J	52 J	2300	5 J	120	1800	250 UJ	250 U	250 U	0.2 U	288	180	193	6.68	2.5E+03	7.3E+03	1.8E+03	6.8E+02	1.3E+02	
10/15/2013	1000 U	9000	150000	230 J	160 J	3600	10	170	4700	1000 U	1000 U	1000 U	0.4 U	485	81.6	223	4.6E+02	3.8E+02	8.9E+02	7.6E+02	1.7E+01		
12/12/2013	140 J	22000	110000	180 J	140 J	4600	12	240	2800	500 U	500 U	500 U	0.4 U	286	300	159	6.64	2.6E+04	1.8E+03	3.9E+04	1.4E+04	2.9E+03	
4/10/2014	120	8200	80000	160 J	120	8300	19	420	6700	100 U	100 U	100 U	0.4 U	163	206	141	6.73	4.5E+04	1.6E+03	1.8E+05	5.1E+02	9.9E+03	
8/15/2014	100 U	2200	79000	180 J	120	18000	14	1700	9600	100 U	100 U	100 U	0.219 J	367	95.1	115	6.33	1.2E+05	5.4E+02	6.7E+05	2.8E+03	2.1E+04	
12/3/2014	50 U	3800	89000	210	130	12000	17	3000	11000	50 U	37 J	50 U	0.0799 J	422	74.2	80.3	6.36	6.2E+05	5.6E+03	1.6E+06	1.1E+04	3.0E+04	
3/26/2015	35 J	3300	110000	220	130	17000	34	2800	11000 J	50 U	37 J	50 U	0.0409 J	220	51.5	120	6.38	3.5E+05	3.6E+02	1.1E+06	1.3E+04	3.2E+04	
10/15/2015	100 U	4100	110000	430	160	26000	22	8300	7500	100 U	86 J	100 U	0.412	382									
5/10/2016	5.0 U	50	28000 D	130	33	20000 D	28	3900 D	16000 D	5.0 U	21	5.0 U	0.0807 J	222	23.1	146	6.68	2.6E+05	3.6E+03	1.5E+06	5.3E+04	2.7E+04	
9/30/2016	250 U	140 J	7100	100 J	250 U	17000	13 J	2800 J	5200 J	250 U	250 U	250 U	0.33	470									
4/20/2017	1000 U	1000 U	47000	1000 U	1000 U	16000	20	2000	3500	1000 U	1000 U	1000 U	0.64	210	140	18	6.85	2.8E+04	3.0E+02	6.5E+05	9.9E+04	2.5E+04	
10/12/2017	1000 U	1200	65000 D	1000 U	1000 U	23000	120	7200	9100 D	1000 U	1000 U	1000 U	1.5	400									
3/29/2018	1300 U	780 J	74000	1300 U	1300 U	17000	110	3300	7400	1300 U	1300 U	1300 U	1.1	260	220	6.9	6.34	1.6E+04	6.8 U	2.4E+05	1.3E+05	9.6E+03	
9/16/2020	1000 U	410 J	36000	1000 U	1000 U	6900	150	4300	12000 D	1000 U	1000 U	1000 U	0.52	180	98	130	7	4.9E+03	6.7E+02	6.2E+05	8.9E+04	5.0E+04	

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 2S

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/6/2011	50 U	17 J	6000	66	9.2 J	710	2.5 J	19	370	50 U	50 U	1.54	292	87.2	45.8	6.18	7.4E+02	5.7E+03	1.0E+03	3.2E+02	5.9E+02	
8/29/2011	25 U	25 U	2800	100	25 U	1400	9.5	1200	5900	25 U	25 U	10.4	447	5 U	9.1	6.19	1.8E+04	3.4E+03	3.6E+05	3.5E+04	1.4E+05	
11/3/2011	5 U	5 U	630	88	1 J	680	150	1300	13000	5 U	2.8 J	5 U	23.9	437	2.6 J	1.7	6.12	1.5E+04	7.5E+02	5.3E+04	1.7E+04	1.4E+05
3/22/2012	10 U	10 U	1700	92	3.1 J	1300	300	390	14000	10 U	2.9 J	10 U	19.7	260	22.3	1.1	5.99	2.1E+05	7.3E+02	1.7E+06	8.8E+04	1.2E+06
6/20/2012	5 U	2.8 J	390	63	1.6 J	350	190	220	13000	5 UJ	2 J	5 U	21.6	234	1.8 J	1.1	6.54	1.2E+04	1.2E+03	4.2E+05	1.3E+04	3.5E+05
9/24/2012	10 U	2.7 J	550	31	10 U	490	220	130	14000	10 U	10 U	6.87	44.7	7.6	2.2	6.41	6.9E+03	1.2E+03	3.0E+05	2.9E+04	6.6E+04	
12/4/2012	5 U	88	270	13	5 U	220	300	110	13000	5 U	1.1 J	5 U	5.73	19.4	34.1	0.89	6.58	5.1E+03	2.0E+02	1.0E+05	2.6E+03	6.6E+03
4/3/2013	5 U	1.5 J	180	7.1	5 U	130	340	74	20000 J	5 U	1.2 J	5 U	1.61	6.6	319	4.9	6.72	6.9E+03	4.1E+03	2.1E+05	1.1E+04	1.5E+03
7/11/2013	5 U	1.1 J	51	6.5	5 U	58	230	100	17000	5 UJ	1.8 J	5 U	0.628	20.7	4 J	10.3	6.51	2.6E+03	1.6E+02	2.4E+04	0.9 U	8.6E+02
10/10/2013	5 U	5 U	100	9.1	5 U	130	380	300	16000	5 U	3.1 J	5 U	1.28	20.2	2.5 J	6.4	6.3	3.6E+03	5.9E+02	2.4E+05	1.2E+04	4.7E+03
12/5/2013	5 U	5 U	220	13	5 U	190	420	240	16000	5 U	2.8 J	1.3 J	5.6	26.1	1.6 J	1.5	8.2E+03	2.3E+02	5.1E+04	4.1E+03	7.2E+03	
4/9/2014	1 U	2.5	320	13	0.89 J	260	160	100	19000	1 U	1.2	1 U	0.487	10.9	47.4	15.4	6.29	7.8E+03	2.7E+02	1.7E+04	1.1E+02	1.2E+04
8/12/2014	1 U	2.2	35	6.3	1 U	37	290	170	10000	1 U	1.8	5.1	0.111 J	6.4	3.3 J	13.8	7.01	1.6E+04	5.1E+02	1.1E+06	3.8E+03	7.7E+04
12/3/2014	1 U	1 U	4.9	2.9	1 U	10	380	38	8700	1 U	0.59 J	2.6	0.677	5.7	3.4 J	3.8	6.72	2.3E+04	3.3E+02	3.7E+05	2.2E+03	3.5E+04
3/30/2015	1 U	2	230	16	1 U	290	160	200	18000	1 U	1.1	2.2	5.36	12	123	0.79	6.53	2.2E+04	1.1E+02	2.5E+05	7.1E+02	4.2E+04
10/21/2015	1 U	1 U	1.3	0.97 J	1 U	2.8	190	13	15000	1 U	1 U	1 U	1.45	9.5			6.82					
5/9/2016	1.0 U	0.55 J	38	3.9	1.0 U	35	130	73	20000 D	1.0 U	0.58 J	0.76 J	0.222 J	6.5	13.5	17.1	6.83	1.2E+03	2.6E+03	2.5E+04	2.5E+02	1.1E+04
4/17/2017	1.0 U	0.71 J	5.7	2.9	1.0 U	16	29	75	4500	1.0 U	0.57 J	1.0 U	0.63	2.9	39	8.1	7.04	6.0E+02	4.8 U	5.2E+04	1.1E+03	5.6E+03
3/27/2018	1.0 U	0.46 J	14	3.8	1.0 U	24	49 J	81 J	12000 DJ	1.0 U	0.33 J	1.0 U	0.2 U	2.3	66	27	6.44	7.2E+01	4.7E+02	1.6E+03	9.0E+01	9.5E+02

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 3D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved						
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)
1/15/2008	1400 J	240000	31000	5.0 U	5.0 U	640 J	9.6	20	82	5.0 U	5.0 U	5.0 U	11	987						
7/22/2008	2500 U	540 J	83000	210 J	2500 U	760 J	16	24	120	2500 U	2500 U	2500 U	1800	1170						
9/29/2008	13 J	1000	9000	50 J	15 J	99 J	35	4.7	160	16 J	250 U	250 U	558	1010						
12/11/2008	5.0 U	550	5600	26 J	5.0 U	130 J	6.4	8.7	36	5.0 U	5.0 U	5.0 U	204	750						
6/3/2009	250 U	1200	9900	29 J	250 U	250	16	33	280	250 U	250 U	250 U	0.0562 J	240	817	166				
10/12/2009	250 U	2100	11000	32 J	30 J	150	25	15	250	250 U	11 J	250 U	0.0317 U	141	858	184				
7/15/2010	33 J	12000	29000	53 J	51 J	240	20	23	880	130 U	130 U	130 U	0.2 U	153	972 J	156				
6/24/2011	57 J	19000	20000	46 J	55 J	540	16 J	13 J	2400 J	21 J	24 J	100 U	0.2 U	71.4	1060	182	7.14			
8/24/2011	7.7 J	2600	4300	9.3 J	9.6 J	63	35	26	3300	25 U	6.7 J	25 U	0.2 U	107	731	211	7.17			
11/9/2011	50 J	11000	15000	26 J	31 J	430	22	50	2900	100 U	100 U	100 U	0.2 U	44.1	987	207	6.95			
3/20/2012	13 J	3300	6600	14 J	17 J	150	18	19	5800	25 U	15 J	25 U	0.2 U	132	482 J	224	6.83			
6/27/2012	20 J	5000	8900	18 J	20 J	210	5.3	14	1900	22 J	27 J	50 U	0.2 U	167	505 J	173	6.67			
9/18/2012	38 J	5600	13000	25 J	31 J	290	29	58	4200	33 J	33 J	50 U	0.2 U	148	601	173	6.87			
12/5/2012	30	3000	16000	20 J	22 J	270	14	18	3200	11 J	26	25 U	0.2 U	345	752	323	6.36			
4/9/2013	250 U	1700	25000	250 U	250 U	350	12	28	5500	250 U	250 U	250 U	0.342	323	309 J	279	6.85			
7/16/2013	43 J	7400	66000	85 J	70 J	1100	15	72	5400	17 J	83 J	100 U	0.2 U	418	203	201	6.37			
10/11/2013	500 U	11000	57000	500 U	500 U	920	27	98	3300	500 U	500 U	500 U	0.4 U	351	326	252	6.45			
12/9/2013	250 U	6300	40000	56 J	51 J	630	26	76	2200	250 U	250 U	250 U	0.4 U	189	617	216	6.44			
4/9/2014	29 J	5100	77000	110	96	1700	24	270	4700	50 U	54	50 U	0.104 J	273	195	186	6.6			
8/22/2014	50 U	1200	61000	94	72	2000	33	340	8900	50 U	46 J	50 U	0.4 U	234	129	179	6.65			
12/9/2014	100 U	3700	67000	100	79 J	2500	24	550	5000	100 U	100 U	100 U	0.4 U	195	570	154	6.63			
3/30/2015	50 U	3800	60000	95	76	4100	19	840	8200	50 U	33 J	50 U	0.4 U	223	114	201	7.5			

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 3S

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
7/6/2011	250 U	250 U	45000	610	76 J	6800	22	100	720	250 U	250 U	1.33	212	332	46.3	5.9	8.7E+02	4.3E+03	1.3E+03	3.1E+02	3.3E+02	
8/25/2011	12 J	84	61000	1100	110	12000	32	810	4700	50 U	33 J	50 U	1.72	238	404 J	17.3	5.08	4.9E+04	5.8E+03	2.9E+05	1.8E+04	2.6E+05
11/3/2011	250 U	250 U	43000	960	65 J	27000	99	1700	9400	250 U	250 U	5.66	229	444	3.9	6.51	9.0E+04	1.7E+03	1.8E+05	2.5E+04	3.6E+05	
3/22/2012	500 U	610	99000	1600	190 J	19000	260	1300	9400	500 U	500 U	500 U	2.64	78.3	849	8.7	2.0E+05	8.3E+02	7.7E+05	1.9E+04	6.0E+05	
6/25/2012	500 U	660	65000	1200	150 J	13000	280	930	10000	500 U	500 U	500 U	4.3	84.8	1010	3.2	6.25	2.2E+05	9.3E+02	1.1E+06	1.1E+04	2.0E+05
9/24/2012	250 U	210 J	39000	760	60 J	8500	320	800	11000	250 U	250 U	250 U	3.4 J	31.2	228	2.5	6.2	2.9E+05	2.6E+02	4.8E+05	2.5E+04	8.7E+04
12/5/2012	250 U	600	85000	1300	150 J	13000	290	430	12000	250 U	250 U	250 U	4.56	12.8	883	0.37	6.08	6.6E+04	1.2E+01	1.2E+05	2.2E+03	1.5E+04
4/3/2013	23 J	330	29000	510	44 J	4900	660	1500	17000 J	100 U	24 J	100 U	0.502	13.7	950	17.2	6.56	1.7E+05	8.5E+02	1.4E+06	8.6E+04	1.9E+04
7/11/2013	500 U	310 J	45000	810	83 J	7600 J	260	1300	12000	500 UJ	500 U	500 U	0.628	15.9	648	21.2	6.56	3.6E+04	1.0E+02	6.1E+04	3.6E+03	7.6E+03
10/15/2013	250 U	200 J	30000	610	59 J	5100	400	2100	9900	250 U	250 U	250 U	0.847	30.6	552	16.9	6.4	1.7E+04	2.3E+02	2.5E+04	1.2E+04	3.0E+03
12/5/2013	5 J	86	13000	290	25 J	3100	310	900	9800	25 U	11 J	25 U	0.301 J	22.3	670	18.3	8.9E+04	3.1E+02	4.1E+05	1.4E+05	4.4E+04	
4/10/2014	20 U	27	14000	350	24	5800	380	1700	14000	20 U	12 J	20 U	1.32	13.9	547	22.3	6.2	5.9E+04	2.0E+02	8.1E+05	6.7E+02	1.2E+05
8/13/2014	20 U	110	26000	480	41	5000	320	1200	10000	20 U	16 J	20 U	0.214 J	18.5	347	23.4	6.36	1.1E+05	1.1E+02	9.2E+05	1.2E+03	7.7E+04
12/4/2014	10 U	60	15000	270	27	2800	220	860	8400	10 U	9.9 J	10 U	0.205 J	11.3	731	13.9	6.47	6.8E+04	1.8E+02	5.1E+05	1.1E+03	6.1E+03
3/24/2015	5 U	28	13000	300	21	5300	440	1300	12000 J	5 U	9.8	5 U	0.709	20.7	503	16.5	6.28	1.9E+05	2.3E+02	5.0E+05	2.5E+03	5.4E+04
10/20/2015	10 U	63	13000	290	24	2400	170	1000	9500	10 U	11	10 U	0.39 J	12.5			6.64					
5/9/2016	2.0 U	13	5800	160	14	2100	200	600 D	15000 D	2.0 U	5.6	2.0 U	0.638	5.6	569	18.5	7.04	1.7E+04	3.3E+03	9.5E+04	2.8E+02	2.4E+04
9/30/2016	140 U	140 U	3800	74 J	140 U	820	24 J	100 J	2300 J	140 U	140 U	140 U	0.49	11			6.4					
4/19/2017	200 U	87 J	4200	86 J	200 U	1000	50	170	4800	200 U	200 U	200 U	0.65	2.7	510	9.3	6.79	3.6E+03	5.3E+02	1.4E+05	1.3E+02	5.4E+03
10/12/2017	200 U	200 U	4300	120 J	200 U	1500	56	460	9100 D	200 U	200 U	200 U	0.52	6.3			6.53					
3/28/2018	200 U	200 U	5400	89 J	200 U	1900	54	280	8900	200 U	200 U	200 U	0.21	1.8	460	18	6.89	1.5E+03	7.5 U	9.0E+03	1.2E+02	1.3E+03
9/17/2020	200 U	73 J	4500	72 J	200 U	1100	54 J	240 J	10000 DJ	200 U	200 U	200 U	0.41	9.3	570	2	6.6 J	2.4E+03	4.7 U	1.1E+04	6.7E+01	3.2E+03

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 4D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
1/16/2008	1100 J	220000	36000	5.0 U	5.0 U	690 J	10	17	94	5.0 U	5.0 U	12.2	1080								
7/22/2008	5000 U	3500 J	160000	510 J	350 J	1100 J	12	38	110	5000 U	5000 U	237	1520								
9/30/2008	1300 U	5900	91000	990 J	140 J	1400	9.1	10	77	1300 U	1300 U	227	108								
12/11/2008	5.0 U	1000	22000	140 J	5.0 U	680 J	17	14	120	5.0 U	5.0 U	113	635								
6/3/2009	1000 U	11000	65000	180 J	1000 U	1100	4.1	14	47	1000 U	1000 U	105	2000	173							
6/4/2009				270 J	1.6 J	0.58 J	2.4 J			3	0.26 J	2.5 U									
10/12/2009	500 U	3200	16000	59 J	39 J	550	20	19	250	500 U	23 J	500 U	0.0317 U	63.2	1240	232					
7/15/2010	250 U	3500	22000	66 J	250 U	620	20	24	1600	250 U	250 U	0.2 U	89.1	1230 J	191						
6/24/2011	91 J	73000	69000	210 J	180 J	1300	11	48	2000	500 U	500 U	0.2 U	128	922	177	7.53					
8/23/2011	100 U	16000	21000	56 J	45 J	510	31	95	3900	100 U	22 J	100 U	0.2 U	113	652 J	175	7.3				
11/8/2011	31 J	13000	20000	58 J	49 J	640	16	120	3900	100 U	29 J	100 U	0.0183 J	95.5	460 J	224	6.39				
3/20/2012	9.9 J	4600	14000	50	47	730	17	160	3900	9.6 J	29	25 U	0.2 U	133	450 J	224	6.79				
6/27/2012	13	1900	1800	9.2 J	9.1 J	83	31	61	4200	7 J	4.3 J	10 U	0.0333 J	144	203 J	187	6.87				
9/25/2012	150	15000	30000	64 J	78 J	960	15	150	3800	130	71 J	100 U	0.2 U	120	256 J	215	6.77				
12/5/2012	24 J	930	51000	54 J	31 J	700	14	110	5000	61 J	96 J	100 U	0.2 U	1020	283	247	6.67				
4/12/2013	78 J	730	24000	90 J	45 J	2500	37	620	7700	250 U	61 J	250 U	0.2 U	85.5	895	157	6.69				
7/17/2013	18 J	470	39000	74 J	30 J	1200	16	210	6100	100 U	94 J	100 U	0.2 U	253	151	375	6.88				
10/11/2013	500 U	1100	53000	97 J	500 U	1400	28	360	5600	500 U	110 J	500 U	0.4 U	261	300	305	6.62				
12/3/2013	1000 U	730 J	74000	1000 U	1000 U	2100	27	360	6600	1000 U	1000 U	301 J	284	230	6.87						
4/8/2014	250 U	670	77000	250 U	250 U	2800	36	430	7700	250 U	250 U	280	106	188							
8/21/2014	100 U	370	71000	140	110	4100	36	660	9200	100 U	120	100 U	0.0601 J	196	281	197	6.83				
12/10/2014	100 U	130	57000	110	78 J	3000	26	800	8400	100 U	83 J	100 U	0.4 U	213	468	172	7.42				
3/31/2015	100 U	190	62000	130	91 J	6700	35	940	9400	100 UJ	80 J	100 U	0.4 U	238	103	197	6.46				
10/19/2015	20 U	700	50000	120	43	5700	21	1100	9200	20 U	89	20 U	0.4 U	269		6.91					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 4S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (s.u.)	pH	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (s.u.)	pH	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)			
6/28/2011	25 U	78	2000	63	25 U	68	16	2.2 J	47	25 U	25 U	25 U	0.2 U	12.5	467 J	0.16 U	7.38								
8/30/2011	4.4 J	130	3900	120	7.9 J	300	21	17	86	13 U	4.6 J	13 U	0.0149 J	16.2	604	0.16 U	6.77								
11/10/2011	50 U	250	8600	240	15 J	460	17	19	170	50 U	10 J	50 U	0.145 J	6.5	1310	0.16 U	6.39								
3/26/2012	9.7 J	340	14000	310	24 J	840	43	44	1600	50 U	14 J	50 U	0.151 J	3.5	1970	0.16 U	6.83								
6/20/2012	7.6 J	270	11000	280	20 J	660	38	110	2000	4.5 J	14 J	25 U	0.0155 J	3.8	1400	0.16 U	6.66								
9/24/2012	50 U	230	11000	270	20 J	1300	53	180	2500	50 U	12 J	50 U	2.24 J	5.8	1510	0.16 U	6.54								
12/11/2012	100 U	230	14000	350	22 J	860	68	53	6900 J	100 U	100 U	100 U	0.991	3.7	1980	0.16 U	6.65								
4/8/2013	3.2 J	270	13000	400	33	1100	110	48	11000	5 U	19	5 U	0.386	2.7	1770	0.16 U	6.64								
7/18/2013	50 U	180	12000	350	26 J	830	73	31	8200	50 U	14 J	50 U	1.69	3.4	1770	0.16 U	6.62								
10/14/2013	100 U	100	8500	240	17 J	560	220	49	9200	100 U	100 U	100 U	1.83	6.7	921	0.16 U	6.53								
12/9/2013	50 U	140	12000	320	25 J	750	130	48	7200	50 U	14 J	50 U	1.07	8.4	1530	0.16 U	6.18								
4/11/2014	10 U	130	7400	220	17	440	91	27	6000	10 U	8.9 J	10 U	2.22	5.8	1490 J+	0.16 U	6.61								
8/20/2014	5 U	39	6000	160	9.1	240	47	31	2900	5 U	7.2	5 U	3.58	23.9	820	0.078 J	6.45								
12/3/2014	10 U	83	8200	210	14	410	81	75	5700	10 U	9.3 J	10 U	0.162 J	6.1	121	0.16 U	5.82								
3/31/2015	2 U	76	3500	110	8	210	41	25	2300	2 UJ	5.2	2 U	0.23 J	8.6	519	0.16 U									
10/20/2015	2 U	9.2	1800	45	4.6	150	21	26	1600	2 U	2.6	2 U	0.414	8.2			6.99								
5/12/2016	1.0 U	12	500 D	18	1.3	25	2.8 J	5.1	230	1.0 U	0.77 J	1.0 U	0.583	5.4	129	0.10 U	7.05								
9/27/2016	6.7 U	14	160	10	6.7 U	28	21	46	2000 D	6.7 U	6.7 U	6.7 U	0.04 J	5			7.65								
4/18/2017	100 U	100 U	2200	63 J	100 U	100	13	14	1800	100 U	100 U	100 U	0.47	2	370	1.0 U	7.28								
10/10/2017	25 U	25 U	860	14 J	25 U	150	10	25	1000	25 U	25 U	25 U	1.3	7.4			7.08								
4/3/2018	250 U	250 U	6000	120 J	250 U	570	74	270	7800 D	250 U	250 U	250 U	5	1.9	1300	1.0 U	6.77								
9/17/2020	250 U	250 U	9000	200 J	250 U	2100	100	230	7200 D	250 U	250 U	250 U	4.3	2.3	980	1.0 U	6.7 J								

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 5D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
1/15/2008	1700 J	91000	11000	5.0 U	5.0 U	420 J	5.9	19	60	750 J	5.0 U	5.0 U	4.8	710							
7/22/2008	5000 U	950 J	100000	430 J	5000 U	1800 J	10	72	120	5000 U	5000 U	5000 U	332	982							
9/29/2008	2500 U	4800	92000	500 J	200 J	2400	8.8	18	85	2500 U	2500 U	2500 U	383	730							
12/11/2008	5.0 U	6900	71000	540 J	110 J	1300 J	15	21	100	5.0 U	100 J	5.0 U	196	352							
6/3/2009	1000 U	2100	27000	1000 U	1000 U	760	29	40	180	1000 U	1000 U	1000 U	0.0751 J	306	179	176					
10/13/2009	90 J	13000	73000	210 J	210 J	1900	20	35	200	1000 U	130 J	1000 U	0.032 J	351	490	237					
7/16/2010	1000 U	10000	94000	1000 U	1000 U	2300	17	130	290	1000 U	1000 U	1000 U	0.2 U	334	171	193					
8/31/2011	700	67000	69000	96 J	160 J	650	7.3	19	280	350	110 J	250 U	0.0212 J	441	152	241					
3/26/2012	500	47000	45000	56	120	580	24	140	1800	140	86	50 U	0.2 U	45.6	995	130					
6/22/2012	88 J	6800	8600	100 U	37 J	63 J	12	85	2400	44 J	100 U	100 U	0.2 U	57	246 J	146					
9/25/2012	680	34000	34000	59 J	94 J	3700	14	150	4200	410	68 J	130 U	0.2 U	111	107 J	146					
12/13/2012	80 J	1900	62000	250 U	250 U	1200	19	200 J	2900	140 J	100 J	250 U	0.329	1010	622	163					
4/8/2013	20 J	1200	45000	46	40	560	15	77	1500	99	85	25 U	0.0601 J	455	97.7	182					
7/17/2013	500 U	2700	52000	500 U	500 U	640	9.7	100	1300	500 U	500 U	500 U	0.2 U	293	83.3	188					
10/18/2013	90 J	8900	73000	91 J	81 J	2900	21	450	4600	44 J	97 J	250 U	0.4 U	254	326	184					
12/11/2013	250 J	21000	140000	150 J	210 J	4900	30	500	2600	500 UJ	140 J	500 U	0.4 U	307	150	161					
4/14/2014	520	25000	98000	190	170	4300	46	1100	6800	57	87	50 U	0.4 U	137	115	112					
8/14/2014	100 U	1300	88000	200	180	7400	41	1400	12000	100 U	59 J	100 U	0.4 U	142	413	137	7.02				
12/10/2014	100 U	1400	50000	110	60 J	3900	39	700	11000	100 U	54 J	100 U	0.4 U	111	565	172	7.72				
3/30/2015	61	8700	42000	100	100	3600	28	1000	8200	20 U	30	20 U	0.4 U	16.7	66.1	67.3	8.04				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 5S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
6/29/2011	500 U	2400	62000	1000	120 J	13000	42	250	300	81 J	500 U	500 U	7.2	6.7	1650 J	0.16 U	6.6				
8/26/2011	250 U	3000	53000	830	110 J	12000	47	280	360	250 U	250 U	250 U	0.642	5.2	2020	0.16 U	6.64				
11/9/2011	500 U	2600	59000	810	110 J	9300	31	200	250	500 U	500 U	500 U	0.278	5.8	1630	0.16 U	6.73				
3/27/2012	250 U	3000	48000	940	90 J	7800	53	230	680	250 U	250 U	250 U	0.0387 J	6.6	1540	0.16 U	6.83				
6/20/2012	50 U	3100	57000	1000	100	9800	68	450	800	50 U J	16 J	50 U	0.0551 J	5.8	1530	0.16 U	6.61				
9/20/2012	10 U	2400	56000	710	82	10000	51	360	810	9.3 J	13	10 U	0.623	5.3	1310	0.16 U	6.83				
12/11/2012	100 U	1600	29000	550	47 J	4900	33	180	930 J	100 U	100 U	100 U	0.0851 J	10.3	1000	0.16 U	6.7				
4/5/2013	25 U	2300	39000	720	69	7800	58	350	2100 J	25 U	11 J	25 U	0.258	5.9	1390	0.16 U					
7/9/2013	50 U	1900	37000	710	68	7200	39	230	2700	50 U	11 J	50 U	0.205	8	1440	0.16 U	6.89				
10/10/2013	250 U	2300	37000	790	76 J	7800	56	370	2600	250 U	250 U	250 U	0.17 J	6.9	1390	0.16 U					
12/6/2013	100 U	1700	27000	580	56 J	5100	45	250	3100	100 U	100 U	100 U	0.0705 J	8.2	1120	0.16 U	6.39				
4/11/2014	50 UJ	1800	26000	640	61	5100	46	350	5300	50 U	50 U	50 U	0.0849 J	9.1	1310 J+	0.16 U	6.84				
8/12/2014	50 U	1700	29000	570	43 J	3700	60	330	5800	50 U	50 U	50 U	0.427	7.1	2760 J-	0.16 U	6.83				
12/2/2014	20 U	1700	26000	560	48	4200	60	440	6700	20 U	20 U	20 U	0.196 J	8.6	1360	0.16 U	6.49				
4/1/2015	20 U	1100	25000	490	44	3900	69	420	5700	20 U	20 U	20 U	0.0805 J	6.3	1320	0.16 U					
10/21/2015	20 U	1300	22000	450	39	3100	100	340	5900	20 U	20 U	20 U	0.353 J	6.8			6.51				
5/18/2016	20 U	1200	19000 D	420	36	2500	110	340	9600 D	20 U	20 U	20 U	0.157 J	6.2	1390	0.10 U	6.73				
4/20/2017	500 U	980	11000	250 J	500 U	1900	28	51	3500	500 U	500 U	500 U	0.12	4.6	1300	1.0 U	6.8				
4/5/2018	560 U	1100	10000	210 J	560 U	1500	97 J	130 J	5100 DJ	560 U	560 U	560 U	0.11 J	3.2	1400	1.0 U	6.31				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 6D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
1/14/2008	1000 J	100000	17000	5.0 U	5.0 U	820 J	6.5	16	62	500 J	5.0 U	5.0 U	6.68	1030								
7/22/2008	5000 U	2200 J	140000	380 J	5000 U	1200 J	11	37	100	5000 U	5000 U	5000 U	627	1220								
9/29/2008	2500 U	2800	92000	540 J	160 J	1900 J	12	14	71	2500 U	2500 U	2500 U	565	610								
12/15/2008	5.0 U	310 J	17000	230 J	29 J	170 J	3.6	12	56	41 J	5.0 U	5.0 U	266	4.02								
6/4/2009	500 U	110 J	11000	53 J	500 U	650 J	8.9	53 J	23	34 J	500 U	500 U	0.0619 J	199	12.9	40.5						
10/12/2009	250 U	42 J	8200	57 J	250 U	2800	21	710	1900	30 J	14 J	250 U	1.59	701	36.7	43.8						
7/16/2010	100 U	300	8100	54 J	19 J	4000	33	650	4500	100 U	36 J	100 U	0.079 J	870	3.2 J	92						
6/29/2011	7.9	400	610	59	8.3	2000	16	1800	9400	8	59	5 U	0.0369 J	989	4.3 J	113	6.4	2.4E+03	3.9E+02	2.2E+05	1.0E+00	8.6E+04
8/23/2011	6.2 J	510	2100	48	13	1900	60	1800	8000	4.3 J	50	10 U	0.016 J	817	6.8 J	147	6.83	2.3E+02	5.6E+01	1.8E+04	0.7 U	5.4E+03
11/3/2011	4.1 J	100	89	4.7 J	1.4 J	35	1.8 J	63	1700	0.86 J	2.5 J	5 U	0.0203 J	28.8	21.6	6.3	11.77	4.4E+01	1.4E+01	3.0E+02	0.5 U	9.8E+02
11/9/2011	4.1 J	130	390	14	2.2 J	110	4.2 J	170	2700	5 U	10	5 U	0.0422 J	170	8	15.4						
3/22/2012	5 U	30	190	39	5 U	70	35	2200	14000	5 U	35	5 U	0.0256 J	762 J	17	81.6	6.88	6.8E+04	1.6E+04	3.2E+06	6.1E+02	2.4E+06
6/21/2012	8.6 J	2200	21000	83	26	1600	24	980	8000	25 UJ	75	25 U	0.0336 J	578	1050 J	84.4	6.99	2.1E+04	7.0E+03	1.9E+06	2.4E+02	1.2E+06
9/20/2012	2.1 J	660	5100	54	9.7	2100	7.2 J	1300 J	7200 J	3.8 J	46	5 U	0.2 U	563	2.1 J	111	6.79	1.3E+04	1.2E+03	2.2E+06	8.7E+04	1.1E+06
12/6/2012	100 U	850	38000	78 J	38 J	1800	20	330	8100	100 U	74 J	100 U	0.2 U	502	24.1	149	6.9	6.3E+03	2.2E+02	1.2E+05	6.6E+03	3.1E+04
4/9/2013	250 U	2400	44000	92 J	250 U	1000	9.7	99	2800	250 U	83 J	250 U	0.2 U	466	428 J	152		3.0E+04	5.2E+02	2.0E+05	1.7E+04	6.8E+03
7/16/2013	100 U	460	14000	42 J	100 U	480	21	210	2600	100 U	30 J	100 U	0.2 U	366	401	167	7	1.7E+04	1.4E+03	1.6E+05	1.2E+04	1.5E+02
10/10/2013	50 U	100	9000	28 J	11 J	280	9.7	300	3700	50 U	19 J	50 U	0.0858 J	108	8.1	3	7.13	4.1E+04	7.5E+03	1.0E+06	4.4E+05	7.5E+04
12/13/2013	4.6 J	3600	30000 J	70	40	1900	29	1000	4000	2.6 J	60	10 U	0.4 U	271	254	132		1.2E+05	1.4E+03	9.7E+05	6.4E+05	1.4E+05
4/15/2014	1 U	6.5	520	6.8	0.93 J	150	5 U	55	360	1 U	3.5	1 U	0.352 J	53.3	37.1	2.7		2.5E+04	2.0E+02	1.5E+05	1.3E+03	4.1E+04
8/19/2014	10 U	890	18000	45	19	3000	36	1800	10000	10 U	37	10 U	0.156 J	291	325	32.5		3.1E+04	3.3E+03	1.4E+06	6.2E+03	1.7E+04
12/4/2014	10 U	38	8300	49	6.2 J	4800	27	3400	6500	10 U	46	10 U	0.476	498	110	20.7	6.45	1.1E+04	8.6E+02	3.4E+05	6.2E+03	7.8E+03
3/26/2015	1 U	3.6	1800	55	1.5	4500	25	3700	6100	1 U	55	3.8	4.44	446	43.2	10		2.3E+04	5.7E+03	3.8E+06	6.9E+04	2.0E+05
10/21/2015	10 U	30	8100	77	10 U	6700	66	5600	6200	10 U	48	10 U	0.232 J	561			6.59					
5/10/2016	1.0 U	8.5	2400 D	68	1.4	410 D	33	4700 D	14000 D	1.0 U	43	3.7	0.821	482	92.7	12.6	6.9	8.2E+02	4.2E+04	1.6E+05	7.1E+03	2.3E+04
9/28/2016	250 UJ	250 UJ	3500 J	250 UJ	250 UJ	690 J	63 J	5100 J	13000 J	250 UJ	250 UJ	0.12	500			6.84						
4/20/2017	25 U	25 U	610	33	25 U	720	6 J	640 J	3000 J	25 U	27	25 U	0.082 J	310	61	22	7.24	4.9E+02	2.1E+04	3.1E+05	3.3E+04	3.1E+04
10/11/2017	400 U	130 J	9300	400 U	400 U	3600	25 J	1200 J	12000 J	400 U	400 U	400 U	0.100 U	260			6.71					
3/28/2018	400 U	290 J	16000	120 J	400 U	9800	29	2500	11000	400 U	400 U	400 U	0.2 U	180	630	100	5.73	3.9E+03	6.1 U	6.7E+04	1.2E+04	4.4E+03
9/9/2020	500 U	120 J	26000	140 J	500 U	4500	38 J	2400 J	15000 J	500 U	500 U	0.2 U	220	800	190	6.63	6.9E+03	3.2E+03	2.1E+05	1.8E+04	4.1E+04	

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 6S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)				Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
7/1/2011	100 U	28 J	10000	170	16 J	1400	13	59	1200	100 U	100 U	104	1400	244	1.3	5.59				
8/26/2011	25 U	22 J	8000	340	8.4 J	11000	30	630	4600	25 U	16 J	25 U	0.719	385	122	36.9	6.6			
11/7/2011	25 U	9.7 J	2700	270	25 U	3400	77	3900	8000	25 U	15 J	25 U	4.63	177	190	13.4	6.66			
3/23/2012	25 U	25 U	4300	220	8.2 J	3800	77	920	8700	25 U	8.4 J	25 U	29.6	48.3	372	0.35	6.58			
6/22/2012	50 U	50 U	3900	200	50 U	3100	78	510	11000	50 UJ	50 U	50 U	38.5	47.9	173 J	0.31	6.18			
9/19/2012	50 U	50 U	1500	88	50 U	2700	74	320	7900	50 U	50 U	50 U	35.7	56.3	140 J	0.26	6.76			
12/10/2012	10 UJ	4.1 J	3300	94	6.5 J	2400	68	360	10000	10 U	6.3 J	10 UJ	29.1	48.2	209	0.35	6.49			
4/9/2013	50 U	50 U	3300	110	50 U	1900	45	450	11000	50 U	50 U	50 U	27.8	39.8	184 J	0.68	6.38			
7/9/2013	5 U	2.1 J	1600	110	4 J	1600	22	220	6800	5 U	3.7 J	5 U	36.9	50.5	85.5	0.22	6.8			
10/14/2013	10 U	10 U	1000	57	1.9 J	1100	15	110	7400	10 U	10 U	10 U	32.3	55.8	88.2	0.25	6.37			
12/9/2013	10 U	4.5 J	2400	82	6.6 J	990	72	370	11000	10 U	4.1 J	10 U	27.5	45.7	137	0.32				
4/16/2014	1 U	14	8600	140	13	3600	110	520	11000	1 U	8.4	1 U	15.5	28.8	337	2.3	6.67			
8/20/2014	2 U	3.8	3300	93	5.5	1300	32 J	140 J	11000 J	2 U	3	2 U	24	42.9	134	0.22	6.19			
12/10/2014	1 U	2.1	1200	51	3.9	620	25 J	140 J	7600 J	1 U	2.4	1 U	34.5	39.9	113	0.14 J	6.39			
3/31/2015	1 UJ	2.6 J	400 J	12 J	1.2 J	160 J	30	60	15000	1 UJ	0.85 J	1 UJ	10.8	30.1	195	0.8	7.15			
10/21/2015	1 UJ	0.85 J	480 J	29 J	0.72 J	250 J	9	87	10000	1 UJ	1.9 J	1 UJ	0.423	32.7			6.45			
5/13/2016	10 U	13	5500 D	150	9.4 J	1600	42	270	12000 D	10 U	10 U	10 U	4.77	17.1	366	5.7	6.45			
9/27/2016	67 UJ	67 UJ	1300 J	54 J	67 UJ	610 J	2.4 J	21 J	2700 DJ	67 UJ	67 UJ	67 UJ	0.097 J	32			6.51			
4/14/2017	100 U	100 U	3500	89 J	100 U	1400	14	120	3400	100 U	100 U	100 U	5.4	12	320	1.0 U	6.82			
10/11/2017	100 U	100 U	1800	100	100 U	3700	15	180	5300	100 U	100 U	100 U	4	21			6.53			
4/2/2018	330 U	330 U	6500	150 J	330 U	2500	21	93	7700 D	330 U	330 U	330 U	10	14	530	1.0 U	6.9			
9/11/2020	100 U	100 U	3800	97 J	100 U	2400	16	260	7700	100 U	100 U	100 U	1.7	18	460	1.0 U	8.29			

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 7D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved					
	TCE PCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	1,1-DCE ($\mu\text{g/L}$)	Chloride ($\mu\text{g/L}$)	Ethane ($\mu\text{g/L}$)	Ethene ($\mu\text{g/L}$)	Methane ($\mu\text{g/L}$)	Trichloro ethane ($\mu\text{g/L}$)	Dichloroet hane ($\mu\text{g/L}$)	Chloro ethane ($\mu\text{g/L}$)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (s.u.)	pH	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
1/16/2008	950 J	160000	27000	5.0 U	5.0 U	860 J	7.2	18	80	5.0 U	5.0 U	5.0 U	8.94	1170						
7/24/2008	5000 UJ	5000 UJ	120000 J	5000 UJ	5000 UJ	940 J	7.4 J	37 J	76 J	5000 UJ	5000 UJ	5000 UJ	417 J	984 J						
9/30/2008	5000 U	2300 J	100000	840 J	280 J	1700 J	7.5	13	59	5000 U	5000 U	5000 U	531	724						
12/15/2008	5.0 U	2400	84000	400 J	110 J	2600	7.8 J	6.3 J	230 J	5.0 U	66 J	5.0 U	476	72.3						
6/4/2009	2500 U	2600	50000	2500 U	2500 U	6300 J	5.4	70	1100	2500 U	2500 U	2500 U	0.0703 J	483	42.4	268				
6/5/2009	2500 U	3500	73000	190 J	2500 U	3000	10 UJ	29 J	590 J	2500 U	130 J	2500 U								
10/13/2009	57 J	4500 J	58000	180 J	140 J	3900	10 U	420	4600 J	500 U	150 J	500 U	0.0461 J	506	86.2	178				
7/16/2010	24 J	1600	27000	63	66	790	33 U	150	7200	50 U	75	50 U	0.2 U	255	413	195				
6/24/2011	290	48000	63000	120 J	160 J	1500	6.2 J	28 J	1600 J	94 J	62 J	250 U	0.0354 J	58.1	1640	155	6.8			
8/23/2011	150	19000	26000	48 J	61 J	530	15	57	1300	25 J	36 J	100 U	0.0629 J	79.9	1890 J	214	7.56			
11/8/2011	290	25000	32000	72 J	83 J	1400	11	160	4200	46 J	54 J	250 U	0.0461 J	118	842 J	168	5.99			
3/20/2012	180	15000	19000	42 J	43 J	890	17	270	4000	60 J	42 J	100 U	0.0203 J	29.4	1020 J	284	7.17			
6/26/2012	350	25000	31000	52 J	91 J	520	11	87	2600	270	77 J	250 UJ	0.2 U	25.5	950	184	7.31			
9/25/2012	460	27000	32000	51 J	85 J	900	20	170	2900	260	81 J	130 U	0.2 U	29.1	358 J	73.2	6.88			
12/10/2012	49 J	1200	51000	56 J	250 U	650	15	280	3900	78 J	120 J	250 UJ	0.13 J	689	965	293	5.95			
4/4/2013	68	840	28000	58	35 J	1000	32	430	4400	140	190	50 U	0.2 U	60.5	1300	249	7.41			
7/12/2013	63 J	1400	21000	70 J	250 U	1300	34	340	4700	49 J	100 J	250 U	0.2 U	36.7	1150	220	7.34			
10/11/2013	86 J	830	31000	76 J	250 U	1800	30	400	8400	58 J	93 J	250 U	0.4 U	63.6	293	219	6.76			
12/12/2013	42 J	490	40000	66	49 J	1100	27	300	6200	89	270	50 U	0.4 U	72.9	927	228	6.99			
4/8/2014	60 J	1500	50000	94 J	76 J	2100	55	450	7100	100 U	69 J	100 U	0.4 U	81.3	1750	136	7.12			
8/21/2014	100 U	330	57000	110	78 J	2700	36	380	7300	100 U	97 J	100 U	0.4 U	90.4	942	168	6.82			
12/9/2014	25	450	34000	72	39	2400	27	410	8800	13 J	64	20 U	0.056 J	50.7	1170	161	6.86			
4/1/2015	19 J	230	32000	90	35	7500	34	1100	10000	20 U	46	20 U	0.0398 J	51.5	644	133	5.34			

$\mu\text{g/L}$ micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

$\mu\text{g/L}$ micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 7S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
7/1/2011	5 U	5 U	2 J	5 U	5 U	14	1.2 J	2.8 J	52 J	5 U	9.2	5 U	3.14	6.9	4820	0.16 U	6.53				
8/26/2011	5 U	5 U	13	5 U	5 U	11	5 U	1.2 J	18	5 U	140	5 U	0.45	7.6	4530	0.16 U	5.68				
11/10/2011	5 U	5 U	3 J	5 U	5 U	14	2 J	4.7 J	85	5 U	41	5 U	3.17	6	3840	0.16 U	6.66				
3/27/2012	5 U	5 U	11	5 U	5 U	1.7 J	5 U	5 U	7.4 J	5 U	84	5 U	0.0784 J	6.3	3990	0.16 U	6.66				
6/22/2012	5 U	5 U	3.7 J	5 U	5 U	2.8 J	5 U	5 U	10 J	5 UJ	54	5 U	0.473	6.3	4090 J	0.16 U	6.46				
9/27/2012	5 U	5 U	3.7 J	5 U	5 U	11	1 J	5 U	47	5 U	60	5 U	0.607	5.1	3900	0.16 U	6.77				
12/6/2012	5 U	5 U	9.8	5 U	5 U	5 U	5 U	5 U	4.9 J	5 U	150	5 U	0.306	3.5	2620	0.16 U	6.47				
4/5/2013	5 U	5 U	3.7 J	5 U	5 U	4.3 J	5 U	1.7 J	24 J	5 U	49	5 U	0.621	4	3300	0.16 U					
7/17/2013	5 U	5 U	5	5 U	5 U	1.3 J	5 U	5 U	6.9	5 U	78	5 U	1.36	4.5	3060	0.16 U	6.81				
10/17/2013	5 U	5 U	6.6	5 U	5 U	1.8 J	5 U	5 U	9.1	5 U	99	5 U	0.594	4.3	2900	0.16 U	6.55				
12/11/2013	5 U	5 U	4.9 J	5 U	5 U	1.2 J	5 U	5 U	3.9 J	5 U	83	5 U	2.76	5.3	2120	0.16 U					
4/16/2014	1 U	1 U	2	1 U	1 U	1.4	5 U	5 U	5.9	1 U	45	1 U	0.4 U	4	1140	0.16 U					
8/20/2014	1 U	1 U	5.6	1 U	1 U	1.6	5 U	5 U	4.3 J	1 U	120	2.1	2.35	16.7	1180	0.16 U					
12/12/2014	1 U	1 U	3.4	1 U	1 U	2.8	5 U	5 U	5.7	1 U	78	1.1	0.0418 J	4.9	1010	0.16 U	6.8				
3/31/2015	1 U	1 U	2.2	1 U	1 U	1.9	5 U	5 U	10	1 UJ	51	1 U	0.166 J	3.6	1590	0.16 U					
10/21/2015	1 U	1 U	5.1	1 U	1 U	10	1.1 J	2.4 J	61	1 U	76	1 U	0.963	4.5			6.72				
5/12/2016	1.0 U	0.58 J	8.1	1.0 U	1.0 U	3.8	5.0 U	5.0 U	5.0 U	1.0 U	100	1.0 U	0.400 U	5	3300	0.10 U	6.94				
4/13/2017	2.5 U	2.5 U	30	2.5 U	2.5 U	80	1.9	1.7	180	2.5 U	96	2.5 U	0.11	3	2800	1.0 U	6.95				
3/29/2018	5.0 U	5.0 U	45	5.0 U	5.0 U	20	1.2	1	110	5.0 U	140	5.0 U	0.027 J	3.4	3000	1.0 U	6.83				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 8D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
1/14/2008	1200 J	240000	28000	5.0 U	5.0 U	1100 J	5.1	17	78	5.0 U	5.0 U	5.0 U	10.6	1590								
7/23/2008	1000 U	2900 J	110000	300 J	240 J	1500 J	7.2	29	100	1000 U	1000 U	1000 U	551	1810								
9/29/2008	240 J	34000	76000	420 J	200 J	2100	5.9	16	92	2500 U	2500 U	2500 U	190	2410								
12/15/2008	600 J	66000	48000	310 J	95 J	2300	6.2	2	4.6	5.0 U	5.0 U	5.0 U	263	1210								
6/2/2009	400 J	26000	21000	1000 U	1000 U	1200	8	39	400	1000 U	1000 U	1000 U	0.0567 J	166	1810	191						
10/8/2009	260 J	35000	54000 J	150 J	130 J	1900	6.1	32	100	1000 U	1000 U	1000 U	0.0317 U	101	2110	132						
7/15/2010	200	45000	48000	120	98 J	1500	7.1	89	74	100 U	32 J	100 U	0.2 U	105	2300 J	170						
8/31/2011	170	27000	31000	82 J	77 J	2000	5.1	37	180	17 J	23 J	100 U	0.2 U	70.7	1720	249	7.03					
3/26/2012	400 J	24000	20000	73	74	1800 J	8.9	93	1800	110	45	5 U	0.2 U	57.1	1740	186	6.86					
6/22/2012	240	18000	15000	46 J	45 J	1000	6.6	82	1400	470 J	39 J	100 U	0.2 U	28.4	1700 J	131	6.95					
9/18/2012	170	12000	19000	67	63	1900	17	210	2100	120	30 J	50 U	0.2 U	38.4	1650	148	6.97					
12/13/2012	52 J	1600	15000	51 J	40 J	1900	9.4	190	2800	100 U	100 U	100 U	0.2 U	299	1480	258	6.06					
4/8/2013	33	3400	31000	73	43	1800	6	97	2700	18	34	10 U	0.2 U	209	1510	247	6.93					
7/19/2013	250 U	4600	33000	79 J	250 U	2300	8.3	130	1800	250 U	250 U	250 U	0.2 U	117	1790	157	6.65					
10/18/2013	52 J	9900	44000	250 U	250 U	3000	19	350	3000	250 U	250 U	250 U	0.4 U	129	1230	190	6.23					
12/6/2013	80 J	19000	50000	95 J	72 J	2700	24	310	3700	250 U	250 U	250 U	0.4 U	194	1340	126	6.65					
4/14/2014	26 J	3500	35000	79	43	2800	29	370	6400	20 U	23	20 U	0.0866 J	117	986	121	6.67					
8/22/2014	20 U	1800	23000	65	38	3100	19	270	3200	20 U	20	20 U	0.4 U	52.9	2010	142	6.93					
12/11/2014	50 U	5100	39000	99	66	4200	17	630	3300	50 U	29 J	50 U	0.4 U	76.4	1860	153	7.36					
4/1/2015	29 J	7100	37000	85	51	3800	28	590	5800	50 U	26 J	50 U	0.4 U	39.1	859	148	7.6					
10/16/2015	100 U	7000	34000	91 J	100 U	3400	9.4	400	2700	100 U	100 U	100 U	0.4 U	93.8		7.01						
5/10/2016	17	4400 D	27000 D	88	63	1700 DJ	14	550 D	3600 D	3.9 J	25	5.0 U	0.400 U	109	1690	154	6.93					
9/29/2016	2000 UJ	10000 J	42000 J	2000 UJ	2000 UJ	3100 J	10	280	2500	2000 UJ	2000 UJ	2000 UJ	0.100 U	120		6.99						
4/20/2017	1000 U	10000	44000	1000 U	1000 U	4900	15	520	3500	1000 U	1000 U	1000 U	0.10 U	130	1300	160	7.21					
10/12/2017	1000 U	12000	41000	1000 U	1000 U	4500	33	780	6800 D	1000 U	1000 U	1000 U	0.100 U	79		6.67						
4/4/2018	O R	8400 J	38000 J	O R	O R	2800 J	30 J	1100 J	9000 DJ	O R	O R	O R	0.2 U	130	1400	300	6.9					
9/18/2020	500 U	6900	38000	170 J	500 U	6300	61	2000	14000	500 U	500 U	500 U	0.2 U	150	1700	240	6.84					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-8S

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
6/28/2011	25 U	21 J	1800	13 J	18 J	140	2.3 J	6.6	86	260	110	25 U	19.1	608	1330 J	2.5	6.42				
8/25/2011	2.3 J	67	3500	18	16	380	2.6 J	23	310	240	89	13 U	0.379	291	1480 J	74.2	6.7				
11/10/2011	5 U	9.7	870	14	4.6 J	320	8.3	300	2300	83	67	4.8 J	0.158 J	41.3	1080	24.8	6.25				
3/27/2012	5 U	3.6 J	93	6.6	5 U	85	17	210	3300	24	27	3.2 J	0.986	16.7	1770	21.7	6.82				
6/22/2012	5 U	5 U	45	6.7	5 U	48	11	280	2500	25 J	29	1.5 J	0.652	16.6	2210 J	15.1	6.43				
9/26/2012	5 U	1.2 J	28	6.6	5 U	52	19	340	4100	24	30	14	0.68	52.4	823	22.9	6.76				
12/6/2012	5 U	4.4 J	310	4.5 J	1.6 J	210	13	160	5800	26	22	2.2 J	3.6	11	1460	8.6	6.56				
4/5/2013	5 U	2 J	63	1.6 J	5 U	150	18	280	4000 J	14	13	4.9 J	3.5	7.8	1670	13.6	6.61				
7/17/2013	5 U	3.3 J	150	2.2 J	5 U	200	17	320	5200	9.2	12	1.4 J	1.7	9.6	1790	15.6	6.8				
10/8/2013	5 U	2.6 J	60	2.7 J	5 U	89	11	130	11000	8.3	12	2.6 J	2	10.4	1110	17	6.59				
12/11/2013	5 U	4.1 J	39	3.8 J	5 U	50	24	310	12000	15	14	1.7 J	0.953	16.3	1100	16.5	6.78				
4/15/2014	1 U	1.7	12	0.72 J	1 U	12	13	32	4600	2.9	2.7	1 U	2.41	6.6	301	0.17	6.55				
8/19/2014	1 U	2.5	540	5.5	1.4	400	24	280	8400	5.5	6.2	1 U	0.0996 J	13.9	503	25.7					
12/2/2014	1 U	1 U	4.2	1 U	1 U	2.3	5 U	3.5 J	320	1 U	0.65 J	1 U	0.318 J	5.2	204	0.16 U	6.99				
3/27/2015	1 U	1.3	63	1.5	1 U	57	9.2	22	2700 J	3.8	3	1 U	0.857	10.1	356	0.17	7.95				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 9D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved							
	TCE PCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	DCE ($\mu\text{g/L}$)	1,1-DCE ($\mu\text{g/L}$)	Chloride ($\mu\text{g/L}$)	Ethane ($\mu\text{g/L}$)	Ethene ($\mu\text{g/L}$)	Methane ($\mu\text{g/L}$)	Trichloro ethane ($\mu\text{g/L}$)	Dichloroe thane ($\mu\text{g/L}$)	Chloro ethane ($\mu\text{g/L}$)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (s.u.)	pH	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)			
6/27/2011	2500	360000	57000	500 U	160 J	440 J	5.7	8.7	50	400 J	500 U	0.184 J	15.2	1070	4.5	7.08								
8/25/2011	1900	80000	130000	360 J	270 J	280 J	5.3	5.8	37	1600	500 U	1.08	1170	518 J	21.3	6.38								
11/7/2011	1900 J	190000	200000	2500 U	440 J	530 J	4.6 J	14	120	1200 J	2500 U	0.165 J	281	249	127	6.41								
3/28/2012	900 J	150000	170000	220 J	330 J	650 J	8.9	87	850	400 J	1000 U	0.2 U	118	361	99.1	6.41								
6/22/2012	600	77000	86000	120 J	170 J	610	23	110	3500	790 J	500 U	0.2 U	61.7	267 J	124	6.8								
9/26/2012	450 J	67000	120000	200 J	330 J	3500	29	120	1700	120 J	500 U	0.2 U	109	5.1	130	6.7								
12/7/2012	1900	73000	170000	290 J	190 J	810	64	100	820	200 J	500 U	5.94	4420	15.8	87.2	5.91								
4/8/2013	1000	52000	200000	330	160	1300	45	340	1200	100 U	51 J	100 U	116	2110	43.3	6	6.09							
7/9/2013	680	51000	190000	180 J	240 J	1700	70	1200	5700	250 U	250 U	113	1040	46.4	2.6	6.44								
10/16/2013	2500 U	7700	170000	2500 U	500 J	18000	70	1600	4900	1500 J	2500 U	153	830	26.8	0.82	6.16								
12/11/2013	650	75000	160000	210 J	420 J	31000	62	1900	4400	500 UJ	500 U	30.9	381	102	8.1	6.59								
4/9/2014	38	1600	47000	120	160	70000	39	3000	3000	20 U	20 J	20 U	123	397	12.4	0.34	7.41							
8/19/2014	85	16000	110000	160	210	18000	59	3300	8800	50 U	50 U	50 U	1.27	160	72.8	48	6.86							
12/9/2014	640	47000	90000	100	160	5000	33	11000	12000	100 U	100 U	100 U	17.6	255	49.2	5.1	6.72							
4/1/2015	270	30000	64000	110	170	10000	28	3600	6100	50 U	50 U	50 U	16.7	124	25.7	8.2	5.07							
10/15/2015	200 U	12000	76000	200 U	160 J	5400	89	10000	13000	200 U	200 U	200 U	69.7	226			7.52							
5/16/2016	5.0 U	120	4200 D	14	10	700	54	8700 D	13000 D	5.0 U	7	5.0 U	70.9	402	5.0 U	0.15	7.24							
9/29/2016	1000 UJ	2900	26000	1000 U	1000 U	19000	240 J	14000 J	9100 J	1000 UJ	1000 U	1000 U	59	300			7							
4/21/2017	130 U	130 U	4200	130 U	130 U	2700	72	3200	5000	130 U	130 U	130 U	19	320	7.6 J	1.0 U	7.89							
10/12/2017	2000 U	12000	62000	2000 U	2000 U	8900	220	3800	11000 D	2000 U	2000 U	2000 U	33	66			6.63							
4/4/2018	130 U	280	4300	130 U	130 U	1900	39	4100	5800 D	130 U	130 U	130 U	0.68	220	2900	8.3	8.65							
9/18/2020	1000 U	460 J	46000	1000 U	1000 U	21000	470	6500	19000	1000 U	1000 U	1000 U	42	200	40	1	7.08							

$\mu\text{g/L}$ micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

$\mu\text{g/L}$ micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW- 9S

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/30/2011	13 U	2000	1200	10 J	5.8 J	84	13	12	130 J	13 U	13 U	2.7 J	0.2 U	4.6 J	3070 J	0.16 U	6.55	4.8E+00	2.9 U	1.2E+01	0.5 U	0.2 J
8/23/2011	10 U	2900	1700	14	9.7 J	91	14	9.6	120 J	10 U	10 U	5.7 J	0.0324 J	4.9	3450 J	0.16 U	7.4	0.2 J	1.2E+02	2.1E+00	0.5 U	5.0E-01
11/2/2011	25 U	2800	1800	17 J	9.5 J	66	5.4	2.8 J	30	25 U	25 U	9.1 J	0.0898 J	3.4	5 U	0.16 U	6.51	0.4 U	1.0E+04	2.0E+01	0.4 J	0.1 J
3/22/2012	25 U	3400	3000	32	11 J	81	4.9 J	2.4 J	26	25 U	25 U	10 J	0.2 U	3.9	3780	0.16 U	6.51	6.8E+00	3.2E+03	1.5E+02	1.1E+01	0.3 J
6/21/2012	5 U	5100	2700	32	14	93	8.8	7.1	91	1.5 J	5 U	8.4	0.033 J	3.4	3010 J	0.16 U	6.75	1.0E+00	1.2E+02	4.1E+02	3.9E+01	1.8E+00
9/24/2012	10 U	2400	1300	15	5.3 J	49	6	10	88	10 U	10 U	10 U	0.262	4.7	3380	0.16 U	6.48	0.7 U	0.5 J	0.7 U	0.7 U	0.7 U
12/4/2012	50 U	4100	6500	62	12 J	12 J	2 J	5 U	50 U	50 U	50 U	0.0839 J	4.6	3420	0.16 U	7.07	0.5 U	3.2E+01	2.8E+00	0.5 U	0.5 U	
4/8/2013	5 U	4700	2500	27	11	49	3.8 J	2.7 J	51	1.6 J	5 U	5.2	0.2 U	2.7	2930	0.16 U	6.81	1.6E+00	4.9E+01	2.6E+00	4.3E+00	0.5 U
7/16/2013	25 U	5400	2500	21 J	8.9 J	40	3.1 J	2.3 J	53	25 UJ	25 U	25 U	0.2 U	2.7	3310	0.16 U	6.87	0.5 U	8.1E+01	5.4E+00	4.7E+00	0.5 U
10/15/2013	25 U	5700	3800	32	9.9 J	42	4.8 J	3.1 J	79	25 U	25 U	0.4 U	3.2	2870	0.16 U	6.63	0.5 U	2.4E+01	2.3E+00	9.0E-01	3.0E+02	1.1E+00
12/4/2013	50 U	3900	2100	18 J	50 U	30 J	3.5 J	1.7 J	43	50 U	50 U	50 U	0.0943 J	5	1990 J	0.16 U	6.84	1.1E+02	3.8E+01	3.3E+02	3.0E+02	1.1E+00
4/8/2014	10 U	4000	1700	14	6.5 J	43	6.9	4.5 J	140	10 U	10 U	10 U	0.4 U	5.1	2610	0.16 U	6.87	0.3 J	6.0E+01	1.5E+00	0.1 J	0.4 J
8/13/2014	10 U	5000	8900	85	13	110	13	13	720	10 U	10 U	10 U	0.0462 J	6	2630	0.16 U	6.58	1.7E+00	4.5E+01	9.9E+01	8.0E-01	0.2 J
12/2/2014	5 U	4200	4200	30	8.3	52	5.5	4.6 J	120	5 U	5 U	5 U	0.0462 J	4.6	1450	0.16 U	6.78	0.5 U	1.2E+02	8.6E+01	6.0E-01	0.1 J
3/24/2015	1 U	2300	2900	34	7.6	49	5.8	3.5 J	270 J	1 U	1 U	0.91 J	0.4 U	2.4	1870	0.16 U	7.1	3.1E+00	4.7E+01	8.0E+01	5.9E-01	7.0E-01
10/22/2015	10 U	5800	4200	31	11	110	5.9	9	91	10 U	10 U	10 U	0.055 J	2.6			6.65					
5/9/2016	1.0 U	2400 D	3400 D	28	7.6	11	1.3 J	5.0 U	17	1.0 U	1.0 U	0.64 J	0.400 U	6.1	1710	0.10 U	7.11	0.5 U	1.2E+03	9.5E+01	0.2 J	2.2E+01
4/19/2017	200 U	2800	3900	200 U	200 U	200 U	1.9	0.88	80	200 U	200 U	200 U	0.032 J	1.7	2200	1.0 U	7.37	7.0E-01	1.1E+03	2.0E+02	0.5 J	1.0E+02
3/28/2018	200 U	2900	5900	200 U	200 U	170 J	6.1 J	2.6 J	450 J	200 U	200 U	200 U	0.2 U	2.1	2900	1.0 U	6.81	0.4 J	9.9E+02	1.1E+01	0.5 U	5.2E+00

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-10D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved						
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
6/27/2011	170	5400	7300	15 J	82	260 J	1.3 J	48	1500	94	50 U	0.434	6.8	913	0.74	7.43					
8/25/2011	680	18000 J	12000	250 U	48 J	71 J	10	4.1 J	43	3300	250 U	250 U	6.28	8380	332 J	43.4	5.93				
11/4/2011	60	5800	14000	26 J	41 J	100	19	20	48	1800	130	50 U	14.2	637	41.7	110	6.2				
3/26/2012	68	12000	28000	47 J	53	220	33	75	170	410	190	50 U	52.1	648	44	30.9	5.87				
6/26/2012	250 U	750	30000	42 J	83 J	210 J	27	120	810	250	240 J	250 UJ	69.5	450	53.8	4.8	6.09				
9/24/2012	100 U	1000	24000	30 J	52 J	360	21	77	1600	130	200	100 U	46.1 J	310	27.4	2.8	6.39				
12/12/2012	350 J	52000	190000	1000 U	1000 U	520 J	9.1	35	980	370 J	1000 U	1000 UJ	42.4	878	6.7	4.7	5.79				
4/11/2013	170 J	7600	140000	1000 U	210 J	3300	15	280	1200	380 J	260 J	1000 U	124	652	22.9	7.9	5.98				
7/9/2013	21 J	860	91000	90 J	120	3400	12	360	2800	220	210	100 U	50.4	414	4.1 J	13.3	6.42				
10/14/2013	1000 U	740 J	99000	1000 U	190 J	23000	24	1700	7700	1000 U	230 J	1000 U	141	520	2.3 J	3.5	6.02				
12/12/2013	500 U	3100	87000	91 J	170 J	17000	18	2000	5600	160 J	240 J	500 U	63.2	452	19.1	11	6.21				
4/9/2014	20 U	360	37000	63	59	14000	27	8300	11000	68	150	20 U	82	325	5 U	1.8	7.03				
8/21/2014	100 U	800	87000	110	150	15000	28	6500	8300	160	360	100 U	13.1	434	7.7	11.2	6.37				
12/9/2014	50 U	3200	76000	95	110	11000	19	5600	9800	190	340	50 U	5.55	436	20	35.2	6.55				
4/1/2015	11 J	960	32000	55	49	7700	20	8900	8000	85	190	20 U	6.69	262	6.8	15.9	6.95				
10/13/2015	24	1100	30000	61	44	2500	23	12000	8500	180	370	2 U	19.6	387			7.23				
5/17/2016	15	1300 D	19000 D	55	42	4100 D	25	9600 D	9600 D	110	350	2.0 U	19.4	488	12.4	21.4	6.96				
9/29/2016	500 U	800	15000	500 U	500 U	3600	51 J	5800 J	5300 J	500 U	280 J	500 UJ	19	520			5.93				
4/21/2017	500 U	1100	18000	500 U	500 U	6600	74	4600	6400	500 U	310 J	500 U	23	590	12 J	10	6.52				
10/12/2017	500 U	1400	18000	500 U	500 U	6200	130	8400 D	10000 D	500 U	220 J	500 U	21	320			6.29				
4/3/2018	250 U	270	6000	250 U	250 U	2000	43	3700	5500 D	250 U	69 J	250 U	5	110	13	4.2	6.84				
9/17/2020	200 U	97 J	11000	72 J	200 U	5200	500	5200	17000 D	200 U	100 J	200 U	28	210	25 U	6.2	6.4 J				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-10S

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved				BVC	DHBt	DHC	TCEr	VCR
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	(cells/ml)	(cells/ml)	(cells/ml)	(cells/ml)			
6/30/2011	5 U	5 U	1.5 J	5 U	5 U	23	1.8 J	1.1 J	19	5 U	5 U	5 U	0.0776 J	6.2 J	2980 J	0.16 U	6.06	0.5 U	3.3E+01	4.6E+00	0.5 U	7.0E-01	
8/25/2011	5 U	5 U	5 U	5 U	5 U	1.9 J	5 U	5 U	6 J	5 U	5 U	5 U	0.152 J	5.5	3550 J	0.16 U	6.73	0.5 J	3.3E+02	1.9E+00	0.3 J	0.3 J	
11/3/2011	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	6.4 J	5 U	5 U	5 U	0.245	2.7	3080	0.16 U	7.04	0.7 U	1.2E+02	0.7 U	0.7 U	0.7 U	
3/22/2012	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5.2 J	5 U	5 U	5 U	0.2 U	2.5	3150	0.16 U	6.94	5.8E+00	4.2E+01	1.6E+01	0.5 U	5.0E+00	
6/25/2012	5 U	5 U	5 U	5 U	5 U	2.7 J	5 U	5 U	13 J	5 U	5 U	5 U	0.2 U	2.4	2820	0.16 U	6.87	0.5 U	3.8E+01	1.9E+00	0.5 U	0.2 J	
9/24/2012	5 U	2.6 J	1.7 J	5 U	5 U	5 U	5 U	5 U	6.8 J	5 U	5 U	5 U	0.2 U	2.8	2980	0.16 U	0.5 J	1.6E+01	3.3E+00	1.0E+00	0.5 U		
12/4/2012	5 U	1.4 J	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.2 U	2.6	2930	0.16 U	7.15	0.5 U	3.3E+00	0.5 J	0.5 U	0.5 U	
4/4/2013	5 U	5 U	5 U	5 U	5 U	3.2 J	1 J	5 U	44	5 U	5 U	5 U	0.2 U	2	2770	0.16 U	0.5 U	1.9E+02	4.1E+00	0.5 U	0.5 U		
7/16/2013	5 U	7.6	0.96 J	5 U	5 U	1.3 J	5 U	5 U	7.6	5 UJ	5 U	5 U	0.2 U	1.9	2840	0.16 U	7	0.5 U	2.4 J	4.5E+00	4.2E+00	0.5 U	
10/10/2013	5 U	1.3 J	5 U	5 U	5 U	4.3 J	1.4 J	5 U	72	5 U	5 U	5 U	0.4 U	2.8	2710	0.16 U	0.5 U	1.1E+01	2.6E+00	8.0E-01	0.5 U		
12/4/2013	5 U	5 U	5 U	5 U	5 U	4.2 J	1.3 J	5 U	50	5 U	5 U	5 U	0.4 U	5.3	2550 J	0.16 U	8.0E-01	4 J	6.3E+00	4.7E+00	0.1 J		
4/10/2014	1 U	1 U	1 U	1 U	1 U	2.9	5 U	5 U	33	1 U	1 U	1 U	0.4 U	3.8	2690	0.16 U	6.53	2.2E+00	8.2E+00	4.1E+00	0.1 J	0.2 J	
8/12/2014	1 U	0.87 J	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1 U	1 U	1 U	0.4 U	3.2	2190	0.16 U	6.98	1.9E+00	1.2E+03	3.8E+01	7.0E-01	0.1 J	
12/9/2014	1 U	1 U	1 U	1 U	1 U	2.8	5 U	5 U	18	1 U	1 U	1 U	0.4 U	1.3	2760	0.16 U	1.1E+00	4.1E+01	1.3E+01	0.5 U	0.5 U		
3/26/2015	1 U	1 U	1 U	1 U	1 U	3	5 U	1.1 J	20	1 U	1 U	1 U	0.4 U	1.9	2180	0.16 U	0.50 U	3.0E+00	1.3E+01	6.9E+01	0.1 J	6.0E-01	
9/10/2020	1.0 U	0.13 J	1.0 U	1.0 U	1.0 U	26	4.3	0.64 J	210	1.0 U	1.0 U	1.0 U	0.1 U	3.5	2700	1.0 U	6.84						
9/11/2020	1.0 U	0.13 J	1.0 U	1.0 U	1.0 U	26	4.3	0.64 J	210	1.0 U	1.0 U	1.0 U	0.1 U	3.5	2700	1.0 U	6.84						

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-11D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/29/2011	560	11000	2200	250 U	1000	78 J	2.3 J	2.5 J	16	78000	680	250 U	0.445	3.5	797 J	0.67	6.67	6.9E+01	1.8E+01	3.7E+01	3.3E+00	3.1E+00
8/25/2011	500	7600	2400	250 U	490	250 U	5 U	5 U	8.3 J	48000	270	250 U	0.495	11	833 J	10	5.36	2.7E+01	1.4E+03	7.1E+02	1.2E+02	1.2E+02
11/1/2011	46 J	570	1800	50 U	45 J	56	9	1.7 J	25	6600	110	50 U	0.562	129	425	39.1	6.65	1.1E+02	3.9E+03	5.7E+02	4.2E+02	2.6E+02
3/21/2012	200 J	4000	7200	250 U	400	64 J	47	7.8	79	46000	680	250 U	12.9	115	583 J	11.7	5.45	2.8E+02	2.0E+03	1.5E+03	1.2E+02	1.1E+03
6/21/2012	330	3900	7800	23 J	620	29	25	3.1 J	21	72000	520	25 U	3.46	26.8	752	12	6.31	8.6E+01	1.6E+03	7.1E+02	2.0E+01	2.2E+03
9/20/2012	440	2400	3600	15	310	11	7.4	5 U	9.3 J	43000	310	10 U	0.692	8.6	542	5.2	6.72	5.3E+00	1.7E+02	3.1E+01	2.1E+00	3.0E+01
12/6/2012	81 J	1300	7100	22 J	960	64 J	19	3.8 J	35	29000	460	100 U	0.26	268	309	73.9	6.3	4.8E+00	1.1E+01	1.1E+02	1.3E+02	1.5E+01
4/8/2013	120	670	5800	31	1900	240	4.1 J	18	190	32000	470	25 U	0.753	32.6	520	34.9	6.73	1.9E+03	1.6E+03	3.3E+02	1.9E+02	2.5E+01
7/10/2013	110	760	8200	31 J	370	1000	15	48	470	30000	800	50 U	0.215	21.6	409	63.6	7.12	7.1E+02	2.3E+02	1.3E+03	7.0E+02	7.7E+02
10/16/2013	83 J	480	5600	20 J	240	700	6.7	25	260	22000	480	100 U	0.254 J	9.9	492	33.2	6.65	4.3E+04	9.9E+04	4.2E+04	5.5E+01	
12/4/2013	130 J	650	3300	250 U	170 J	370	5.5	16	190	15000	360	250 U	0.163 J	11.6	532 J	22.1	7.2	1.1E+05	1.7E+03	2.8E+05	2.8E+05	2.0E+03
4/10/2014	79	330	2800	10	310	180	3.5 J	11	120	14000	310	10 U	0.194 J	7.5	630	11.9	7.21	7.1E+04	7.5E+02	2.9E+05	2.0E+03	3.5E+04
8/13/2014	54	340	5100	22	340	570	5.7	39	410	17000	800	20 U	0.0829 J	11.3	472	70.4	7.02	2.1E+05	3.0E+03	7.6E+05	9.1E+03	4.7E+04
12/3/2014	40	180	3800	15	340	450	2.8 J	27	230	13000	530	5 U	0.144 J	4.8	498	40.7	7.02	3.3E+04	1.4E+03	7.2E+04	1.6E+03	1.1E+03
3/25/2015	26	130	2600	14	180	300	17	13	480	6600	730	1.7	0.177 J	60.6	245	27.3	6.83	2.3E+04	1.2E+03	6.2E+04	1.4E+03	1.9E+03
10/14/2015	46	300	3700	15	340	360	8.2	33	490	15000	680	2 U	0.129 J	9.8		7.43						
5/5/2016	36 D	240 D	3100 D	15 D	250 D	540 D	4.9 J	42	1100 D	10000	730 D	10 U	0.037 J	5.4	440	73.1	7.6	5.6E+04	9.3E+03	3.2E+05	4.3E+03	5.9E+03
9/28/2016	830 U	250 J	3300	830 U	690 J	440 J	2.2	18	390	17000	790 J	830 UJ	0.066 J	4.1		7.16						
4/19/2017	400 U	400 U	4900	400 U	320 J	1000	2.3	34	300	16000	520	400 U	0.096 J	4.4	450	17	7.37	1.6E+04	2.2E+03	9.6E+04	1.0E+04	1.2E+03
10/11/2017	30 J	490	4500	100 U	270	430	2.6	21	230	13000 D	310	100 U	0.13	2.8		7.06						
3/27/2018	200 U	200 U	2900	200 U	140 J	620	17 J	48 J	710 J	9200	480	200 U	0.65	51	420	10	7.16	9.8E+03	2.3E+03	1.8E+04	1.0E+04	5.1E+02
9/9/2020	200 U	48 J	870	200 U	66 J	120 J	4.9 J	22	210 J	3700	160 J	200 U	1.8	7.2	530	4.1	8.51	5.0E+03	9.3E+02	1.9E+04	5.1E+03	1.2E+03

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-11S

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-		1,1-		Dissolved							
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
6/27/2011	5 U	320	11000	210	31	2300 J	19	110	150	1.7 J	42	5 U	0.0568 J	5.2	2230	0.16 U	6.94				
8/26/2011	50 U	270	17000	210	38 J	3600	29	140	280	50 U	38 J	50 U	0.356	4.9	2110	0.16 U	6.66				
11/9/2011	50 U	170	8600	140	18 J	760	21	59	160	50 U	32 J	50 U	0.0367 J	2.3	2330	0.16 U	6.77				
3/20/2012	100 U	170	9100	170	27 J	2000	25	100	1900	100 U	41 J	100 U	0.11 J	2.2	1800 J	0.16 U	6.32				
6/20/2012	25 U	320	13000	230	32	2600	32	170	1800	25 UJ	47	25 U	0.27	2.1	1880	0.16 U	6.95				
9/25/2012	100 U	390	17000	270	42 J	3600	40	300	1100	100 U	46 J	100 U	0.814	1.9	1960 J	0.16 U	6.84				
12/6/2012	50 U	340	16000	220	31 J	2400	27	180	1200	50 U	43 J	50 U	0.552	2	1960	0.16 U	6.67				
4/4/2013	25 U	310	15000	220	33	3100	40	390	5000	25 U	42	25 U	0.714	2.5	1650	0.16 U	7.01				
7/18/2013	50 U	230	12000	200	25 J	2200	26	220	5700	50 U	36 J	50 U	0.593	2.7	1470	0.16 U	6.63				
10/9/2013	130 U	250	16000	210	33 J	3000	43	400	2500	130 U	42 J	130 U	1.08	2.7	1690	0.16 U	6.51				
12/9/2013	50 U	170	12000	180	27 J	2100	30	210	3500	50 U	38 J	50 U	0.768	4.3	1850	0.16 U	6.48				
4/8/2014	5 U	220	10000	170	28	2200	32	280	4300	5 U	30	5 U	0.926	8.2	1450	0.16 U	6.45				
8/19/2014	10 U	230	15000	220	31	2900	35	270	5000	10 U	41	10 U	1.36	3.3	1610	0.16 U	6.82				
12/2/2014	1 U	290	13000	260	37	2300	35	270	4100	1.1	48	1 U	1.19	4.8	1830	0.16 U	6.59				
3/26/2015	5 U	130	9700	150	18	1800	24	110	4200 J	5 U	29	5 U	0.355 J	2.6	1720	0.16 U	7.42				
10/22/2015	20 U	75	7700	130	16 J	2700	26	420	4400	20 U	35	20 U	3.1	3.8			6.35				
5/13/2016	20 U	150	11000 D	190	22	1800	24	150	6500 D	20 U	33	20 U	0.736	2.6	2120	0.10 U	6.5				
4/18/2017	400 U	400 U	8000	140 J	400 U	1600	7	30	4900	400 U	400 U	400 U	2.4	3.6	2200	1.0 U	6.9				
3/30/2018	330 U	330 U	10000	130 J	330 U	2400	22 J	97 J	7900 J	330 U	330 U	330 U	2	3.1	2200	1.0 U	6.85				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-12D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/27/2011	2900	29000	19000	1000 U	460 J	740 J	9.7	41	85	660 J	1000 U	1000 U	2.25	47.7	792	16.2	7.6					
8/24/2011	6000	270000	95000	120 J	260 J	950	140 J	1900 J	180 J	140 J	500 U	500 U	22.7	818	645	1.8	6.6					
11/7/2011	1800 J	140000	250000	2500 U	570 J	910 J	100	1100	180	2500 U	2500 U	2500 U	26.1	242	780	3.6	6.88					
3/29/2012	2500 U	2500 U	370000	2500 U	1100 J	2500 U	49	210	86	2500 U	2500 U	2500 U	85.1	221	459 J	0.079 J	7.04					
6/26/2012	1000 U	850 J	350000	1000 U	910 J	210 J	38	140	110	1000 U	1000 U	1000 U	59.8	169	291	0.16 U	7.17					
9/25/2012	190 J	5600	250000	1000 U	600 J	280 J	36	120	120	200 J	1000 U	1000 U	1.65	87.8	6.5 J	16.2	7.67					
12/10/2012	380	1100	98000	140 J	92 J	460	28	77	210	76 J	90 J	250 UJ	120	3900	3.9 J	6.3	5.18					
4/10/2013	35	1300	19000	53 J	14	120	7.7	8.9	19	8.6 J	16	2.7 J	17.6	92.3	6.8	0.16 U	5.91					
7/18/2013	1000 U	1600	230000	1000 U	340 J	4800	46	440	2100	1000 U	1000 U	1000 U	166	1150	9.4	3	6.31					
10/16/2013	1000 U	6600	160000	1000 U	300 J	33000	33	1200	1900	1000 U	200 J	1000 U	278	1200	16.1	0.53	5.79					
12/12/2013	500 U	5100	200000	160 J	470 J	40000	35	2200	2700	500 U	160 J	500 U	158	799	14.1	2.3	6.6					
4/9/2014	52 J	3800	82000	130	180	70000	28	5100	2400	100 U	99 J	100 U	184	526	5.2	0.65	7.06					
8/18/2014	150 J	19000	120000	230	260	40000	41	12000	7200	200 U	100 J	200 U	25.9	395	10.2	14.6	6.35					
12/10/2014	500 U	36000	150000	500 U	260 J	16000	28	8000	7200	500 U	500 U	500 U	2.23	270	69.1	38.4	6.35					
4/1/2015	350	61000	140000	220	330	17000	19	6800	5900	100 U	72 J	100 U	16.7	207	11.8	12.8	6.26					
10/13/2015	240	43000	120000	220	190	18000	5 U	12000	8700	17	75	2 U	6.83	480			6.64					
5/17/2016	340	52000 D	220000 D	560 D	390	38000 D	24	12000 D	5900 D	12	140	2.0 U	0.435	365	23.8	118	6.83					
4/21/2017	5000 U	19000	190000	5000 U	5000 U	36000	87	4300	4600	5000 U	5000 U	5000 U	1.6	350	67 J	60	6.68					
4/5/2018	5000 U	24000	97000	5000 U	5000 U	17000	200 J	11000 DJ	10000 DJ	5000 U	5000 U	5000 U	25	280	18	6.1	6.53					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-13D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/27/2011	950 J	100000	18000	1000 U	1000 U	500 J	1.5 J	17	66	1100	1000 U	1000 U	1.11	8.9	959	5.7	7.08					
8/24/2011	85 J	5700	45000	81 J	98 J	110 J	4.8 J	7.9	40	1300	81 J	250 U	2.45	953	143	127	6.02					
11/7/2011	2100	170000	73000	110 J	250 J	240 J	24	19	29	750	120 J	500 U	157	4320	139	20.8	5.56					
3/29/2012	1100	190000	99000	140 J	270 J	180 J	15	43	46	470 J	140 J	500 U	8.13	360	179 J	115	5.48					
6/26/2012	370	38000	30000	60 J	150 J	100 J	37	230	37	350	99 J	250 U	69.5	618	104	10.6	6.12					
9/25/2012	570	66000	110000	500 U	480 J	350 J	49	380	80	500 U	120 J	500 U	20.1	367	87.3 J	35.1	6.13					
12/12/2012	3200	280000	120000	500 U	240 J	340 J	14	33	120	280 J	160 J	500 UJ	7.17	25 U	93	69.3	5.78					
4/9/2013	590 J	85000	120000	2500 U	2500 U	520 J	40	200	160	2500 U	2500 U	2500 U	266	1500	46.4 J	2.7	6.21					
7/18/2013	720 J	90000	210000	1000 U	440 J	2800	55	330	950	1000 U	290 J	1000 U	238	1020	45.3	1.6	6.31					
10/16/2013	780 J	98000	250000	2500 U	760 J	6400	69	560	1000	2500 U	2500 U	2500 U	134	715	59.1	6.4	5.87					
12/12/2013	850	130000	230000	100 J	700	25000	57	640	1600	210 J	400 J	500 U	49.5	578	73.9	23.5	6.17					
4/10/2014	150 J	11000	68000	200 U	310	8600	7.9	280	720	200 U	200 U	200 U	11.3	179	33.1	18.3	6.55					
8/22/2014	55 J	8900	82000	83 J	280	15000	24	3900	7000	82 J	130	100 U	14.7	304	13.7	15.5	6.38					
12/10/2014	200 U	16000	120000	110 J	220	14000	18	4600	11000	200 U	130 J	200 U	22.8	314	20.3	11.9	6.13					
3/25/2015	76 J	16000	84000	85 J	220	16000	14	5700	9000	100	120	100 U	8.38	252	22.1	11	5.97					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-14D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro (µg/L)		Dissolved					
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					ethane (µg/L)	thane (µg/L)	ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)
6/27/2011	190	7900	12000	16 J	120	240 J	4.2 J	14	57	3300	150	25 U	2.93	4.7	885	0.43	8.02				
8/24/2011	72	1800	13000	36 J	22 J	64	6.7	5 U	23	2000	80	50 U	1.37	826	227	124	6.15				
11/8/2011	670	5400	29000	99 J	170	540	76	12	30	3500	340	100 U	1.85	2950	40.7 J	134	5.35				
3/29/2012	40 J	4700 J	25000 J	39 J	62 J	530 J	38 J	170 J	91 J	560 J	310 J	25 UJ	77.5	1740	26.6 J	50.1	5.54				
6/27/2012	500 U	19000	57000	500 U	110 J	580	29	140	94	270 J	440 J	500 U	55.6	987	55.3 J	30.3	5.63				
9/27/2012	85 J	23000	65000	82 J	180 J	800	34	310	160	240 J	480	250 U	6.84	826	21.8	65.4	5.57				
11/1/2012														556							
11/19/2012														970							
12/11/2012	130 J	16000	77000	72 J	89 J	570	9.1	92	230 J	500	420	250 U	7.37	1450	76.6	79.9	5.9				
4/9/2013	99 J	2100	95000	500 U	130 J	1100	14	460	1700	740	770	500 U	16.6	765	11.7 J	72.7	5.95				
7/17/2013	500 U	1000	74000	500 U	500 U	1100	12	300	4400	300 J	730	500 U	43	838	2.7 J	88.6	5.88				
10/18/2013	500 U	670	75000	500 U	120 J	1500	22	830	7700	1300	1100	500 U	73.1	719	1.7 J	23.7	5.93				
12/13/2013	500 U	2500	57000	87 J	140 J	9100	37	4100	22000	2100	1300	500 U	38.3	600	8.7	24.5	6.08				
4/8/2014	86 J	9800	120000	120	210	5600	21	2000	3300	1600	1100	100 U	6.2	595	15	80.4	5.97				
8/18/2014	10 U	76 J	6200 J	56	8.9 J	2600	64	15000	19000	44	790	13 J	90.5	682	1.6 J	3.9	7.37				
12/11/2014	150	41000	99000	110	140	5800	29	5500	7500	460	740	50 U	4.18	493	28.8	45.6	6.98				
4/1/2015	74	3400	38000	81	62	6500	37	5400	9300	540	570	50 U	22.6	426	5.8	40.7	6.01				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-15D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved									
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	ethane (µg/L)	thane (µg/L)	Dichloro	Chloro	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/30/2011	69	2200	7900	17 J	69	210	3.1 J	9.8	59	2400	100	50 U	1.32 J	3.3 J	823 J	0.25 J	2.3E+03	4.1E+01	1.1E+03	6.6E+00	4.0E+01			
8/29/2011	48 J	780	17000	43 J	90 J	370	6.4	6.6	32	4600	530	100 U	1.08	563	281	84.5	5.93	9.5E+02	3.1E+03	3.5E+02	1.3E+02	4.5E+01		
11/1/2011	44 J	1900	15000	47 J	140	510	24	9	44	11000	990	100 U	21	303	56	103	6.27	1.6E+03	1.2E+04	1.3E+03	8.0E+01	5.1E+02		
3/22/2012	12 J	760	5100	30	79	5100	54	45	1300	5000	1100	25 U	11.4	307	26.4	15.8	6.23							
6/21/2012	48	2900	10000	44	320	1500	19	66	900	49000 J	3000	25 U	0.0574 J	134	133 J	127	6.94	3.6E+05	3.3E+04	1.5E+06	8.1E+03	4.4E+04		
9/20/2012	67	2900	14000	50	530	970	12	22	260	58000	3800	10 U	0.137 J	108	106	153	6.94	5.3E+04	7.4E+03	3.7E+05	2.9E+04	1.5E+05		
11/1/2012																	94.8							
11/19/2012																		2090						
12/4/2012	18 J	540	19000	33 J	210	550	3.8 J	10	76	7700	1600	100 U	0.15 J	739	44.3	238	6.24	1.7E+01	2.5E+02	1.1E+02	7.9E+01	1.1E+01		
4/10/2013	60 J	3200	14000	27 J	620	370	17	19	270	48000	3100	100 U	0.85	421	139	125	6.34	3.1E+04	1.6E+04	4.6E+04	7.8E+02			
7/10/2013	22 J	1100	10000	33	480	4100	280	140	1600	16000	7400	17 J	40.8	480	3.2 J	84.6	7.29	1.2E+05	1.6E+05	7.5E+04	3.6E+05	1.0E+02		
10/16/2013	71	1400	2200	59	200	11000	380	210	1100	10000	9200	29 J	33.3	319	3.1 J	0.58	6.22	3.2E+05	1.7E+04	1.1E+06	9.2E+05	2.4E+01		
12/4/2013	140	840	1800	73 J	150	9700	980	260	820	3400	13000	100	1.27	223	3.7 J	124	6.88	6.8E+04	8.7E+04	2.3E+05	2.1E+05	4.4E+02		
4/10/2014	600	5400	7700	50 U	690	720	32	100	1000	42000	3000	50 U	0.114 J	194	46.5	139	4.4E+04	1.5E+04	1.0E+05	1.5E+03	1.8E+03			
8/12/2014	620	5200	9400	100 U	970	2200	76	210	1900	51000	4000	100 U	0.234 J	158	32.9	139	7.13	4.2E+05	1.5E+04	2.1E+06	3.5E+04	4.7E+03		
12/4/2014	3.3	2.5	5.6	9.7	0.65 J	340	250	850	3700	28	2300	64	4.87	36.4	5 U	0.16 U	7.43	5.2E+05	1.7E+04	2.3E+06	4.7E+04	1.9E+04		
3/24/2015	110	470	4500	15	230	2000	230	130	1500 J	4000	5300	32	14.3	127	5 U	0.075 J	7.11	9.1E+04	9.2E+03	1.4E+05	6.7E+03	8.5E+02		
10/15/2015	67	550	3100	18 J	230	1100	15	220	6400	10000	1600	20 U	0.464	101										
5/9/2016	40	50	1400 D	11	140	830 D	160	110	1300 D	1700 D	3100 D	35	0.206 J	115	16.5	57.2	7.78	1.4E+05	1.6E+05	3.3E+05	1.0E+04	8.4E+03		
4/19/2017	500 U	320 J	1100	500 U	240 J	1500	9.4	170	2500	13000	1700	500 U	0.10 U	65	210	73	8.29	9.8E+04	2.5E+04	4.5E+05	6.0E+04	1.6E+03		
3/28/2018	40 U	17 J	440	40 U	40	720	48	30	550	1200	1000	40 U	0.23	39	2.2	1.0 U	8.02	6.2E+00	4.8 U	2.0E+01	9.5E+00	0.5 U		

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-15S

Date	Cis-1,2-		Trans-1,2-		Vinyl		1,1,1-		1,1-		Dissolved																									
	PCE	(µg/L)	DCE	(µg/L)	1,1-DCE	(µg/L)	Chloride	(µg/L)	Ethane	(µg/L)	Methane	(µg/L)	Trichloro ethane	(µg/L)	Dichloroe thane	(µg/L)	Chloro ethane	(µg/L)	Iron	(mg/L)	TOC	(mg/L)	Sulfate	(mg/L)	Sulfide	(mg/L)	pH	BVC	(cells/ml)	DHBt	(cells/ml)	DHC	(cells/ml)	TCEr	(cells/ml)	VCR
3/22/2012																												8.7E+05	7.8E+03	3.3E+06	7.2E+02	1.4E+04				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-16D

Date	Cis-1,2-				Trans-1,2-				Vinyl		1,1,1-		1,1-		Dissolved							
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/24/2011	610	41000	24000	250 U	140 J	390	1.4 J	13	53	1800	120 J	250 U	0.661	7.1	801	3.4	7.36					
8/24/2011	70	5200	2100	7.5 J	4.4 J	13 J	2.8 J	5 U	13 J	15 J	25 U	25 U	0.054 J	33.8	39.4	1.1	12.19					
11/8/2011	110	9900	5700	14 J	13 J	43 J	7.5	1.2 J	27	59	18 J	50 U	0.0976 J	80.5	91.5 J	7.2	12.65					
3/28/2012	13	110	110	5 U	5 U	3.3 J	5 U	5 U	15	5 U	5 U	5 U	0.2 U	2.5	30.3	0.16 U	10.48					
6/27/2012	30	1200	3000	9.8 J	7.1 J	530	3 J	7.1	57	39	17 J	25 U	0.244	20.9	44.4 J	2.6	11.59					
9/25/2012	16	240	220	0.81 J	5 U	56	5 U	5 U	10 J	4.8 J	1.2 J	5 U	0.2 U	7.3	27.4 J	0.28	11.14					
12/11/2012	130 J	5500	67000	47 J	56 J	470	5.6	45	330 J	770	430	250 U	0.107 J	728	219	182	6.14					
4/10/2013	160 J	5300	47000	41 J	92 J	1500	11	730	1500	1500	950	250 U	0.988	370	28.7	103	6.29					
7/18/2013	330 J	12000	64000	500 U	220 J	1000	6.8	170	940	8900	2000	500 U	0.111 J	294	16.5	172	6.34					
10/18/2013	380	12000	40000	42 J	300	640	5.7	59	290	18000	2000	250 U	0.4 U	183	91.1	191	6.16					
12/12/2013	430	15000	52000	60 J	320	810	9.9	140	700	15000	1900	100 U	0.4 U	214	32.7	182	6.27					
4/10/2014	290	23000	87000	88 J	260	2700	15	490	1800	4300	830	100 U	0.822	262	17.4	104	6.48					
8/18/2014	520	35000	170000	170 J	400	6100	22	810	3200	6300	1200	200 U	0.216 J	347	19.7	132	6.55					
12/9/2014	350	19000	160000	200 J	350	7200	18	1600	6500	2000	550	200 U	0.373 J	335	7.6	99.3	6.27					
3/31/2015	510	26000	110000	130	200	4900	32	1600	5900	820 J	460	100 U	0.593	214	11	102	6.03					
10/14/2015	84	1400	52000	100	160	2800	13	790	4500	1800	660	5 U	0.116 J	105			9.04					
5/18/2016	21	83	26000 D	82	150	2200	4.2 J	350	1100 D	3500	360	20 U	0.400 U	42.8	165	98.5	7.24					
9/30/2016	1700 U	700 J	36000	1700 U	1700 U	4000	5.5 J	290 J	600 J	7900	800 J	1700 U	0.078 J	51			7.11					
4/21/2017	630 U	630 U	28000	630 U	630 U	4600	3	130	930	5000	680	630 U	0.10 U	28	140	74	7.56					
10/13/2017	1000 U	950 J	37000	1000 U	1000 U	7600	34	840	2800	5300	610 J	1000 U	0.100 U	41			7.04					
4/5/2018	1700 U	5700	40000	1700 U	1700 U	5500	23 J	620 J	2100 J	4600	590 J	1700 U	0.2 U	35	320	100	7.16					
9/18/2020	500 U	3900	32000	200 J	500 U	32000	95	3800	12000	1900	440 J	500 U	0.031 J	100	48	100	7.3					

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: PMW-17D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
6/30/2011	330	18000	15000	100 U	80 J	210	1.6 J	11	50	1600	100	100 U	0.445	3.7 J	775 J	1.3	6.25	1.6E+03	5.7E+01	4.9E+02	3.9E+00	1.5E+01
8/25/2011	40 J	780	18000	34 J	110	100	3.4 J	2.2 J	27	7300	130	50 U	0.657	193	551 J	96.9	5.24	1.7E+02	6.9E+03	3.4E+02	1.0E+02	2.3E+02
11/1/2011	42 J	890	16000	39 J	66 J	130	19	6	53	6900	240	100 U	9.03	501	193	96.9	6.21	2.7E+02	1.9E+03	6.4E+02	3.4E+02	1.8E+02
3/27/2012	11 J	720	13000	37 J	26 J	120	28	7.5	75	450	330	50 U	22.9	335	62.7	35.4	7.6E+00	2.5E+02	2.8E+01	7.4E+01	2.9E+00	
6/20/2012	190	11000	13000	26	63	140	11	4.7 J	79	3900 J	610	25 U	0.216	94.5	201	157	6.55	7.8E+02	1.6E+03	2.6E+03	2.6E+02	1.6E+03
9/20/2012	200	6400	6700	17	65	190	9.8	7.6	380	3000	420	5 U	0.0686 J	43.8	210	137	6.89	6.5E+02	2.8E+02	5.3E+03	2.5E+02	2.8E+03
12/4/2012	97 J	5100	23000	23 J	54 J	280	5.6	6	120	1300	520	100 U	0.178 J	547	21.2	235	6.22	1.5E+01	3.8E+01	4.4E+02	2.7E+02	8.0E+00
4/9/2013	22 J	370	10000	16 J	93	360	9.1	10	6400	5600	860	50 U	2.43	230	21 J	47.3	6.35	3.4E+04	2.4E+03	1.3E+04	6.8E+04	2.8E+01
7/10/2013	65	1500	15000	30 J	380	790	12	140	1300	29000	2300	50 U	0.2 U	181	40.4	71	7.86	4.9E+04	4.9E+02	9.3E+04	1.8E+05	2.3E+03
10/15/2013	5.1	30	100	5.6	6	510	23	40	3900	470	160	5 U	0.0954 J	57.5	3.5 J	212	7.46	2.5E+04	1.7E+03	5.3E+04	8.8E+04	7.7E+02
12/5/2013	78	1100	10000	26 J	180	370	12	35	600	15000	1500	50 U	0.4 U	103	49.1	200	6.86	4.5E+04	7.4E+02	8.1E+04	4.4E+04	1.4E+03
4/8/2014	35	890	9200	15 J	150	700	28	38	840	5700	1200	20 U	0.21 J	124	4.9 J	66.3	6.99	2.4E+04	1.9E+03	3.0E+04	2.0E+03	4.5E+03
8/12/2014	2.5	92	310	0.64 J	3.3	75	17	15	740	29	72	1	0.0558 J	67.5	8.8	105	8.05	4.6E+05	5.5E+03	3.0E+06	2.8E+04	3.2E+04
12/4/2014	35 J	4700	12000 J	17 J	41 J	530 J	9.3 J	51 J	2900	380 J	370 J	10 U	0.0489 J	108	5.8	76.3	9.86	1.1E+05	4.3E+03	5.2E+05	6.6E+03	2.0E+03
3/24/2015	26	400	6200	13	70	860	27	92	2200 J	2700	700	2 U	0.233 J	97.9	56.2	50	6.7	5.5E+04	2.4E+03	8.7E+04	3.3E+03	1.9E+03
10/14/2015	1 U	5	30	1 U	1 U	9.5	2.8 J	3.9 J	890	6.8	3.9	1 U	0.509	13			8.68					
5/9/2016	19	1700	8500	25	68	1200	7.6	97	930 D	1400	350	2.0 U	0.0478 J	56.6	16.3	52.4	9.16	1.4E+05	1.1E+05	4.5E+05	1.3E+04	3.7E+04
9/28/2016	1000 U	590 J	9300	1000 U	1000 U	2100	7.1	75	1200	13000	1700	1000 U	0.100 U	66			6.96					
4/19/2017	83 U	83 U	1300	83 U	83 U	1100	1.5	78	1400	1500	250	83 U	0.32	33	91	20	7.65	2.5E+04	4.4E+03	1.6E+05	1.8E+04	1.3E+03
10/11/2017	1.0 U	0.81 J	7.4	1.0 U	1.0 U	15	0.62 J	7	360	14	3	1.0 U	1.1	9.7			7.84					
3/28/2018	250 U	96 J	3100	250 U	250 U	3100	7.6	260	2400	8400	1100	250 U	0.2 U	19	180	52	7.32	1.4E+04	1.5E+03	3.8E+04	1.9E+04	7.0E+02
9/16/2020	20 U	3.2 J	350	5.4 J	3.8 J	1600	14	760	4700 D	380	150	20 U	0.074 J	34	18	7	7.9	1.2E+02	5.0 U	1.4E+03	8.5E+02	2.0E+03

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: RMW- 1D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloroethane (µg/L)		Dissolved		TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					1,1,1-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)				
10/29/2003						3.8 J				5.0 U				2.6 J	5.0 U											
5/17/2004						5 U				5 U				5 U	5 U											
6/21/2004						5.0 U				5.0 U				5.0 U	5.0 U											
8/29/2005						1.3	234	1.4	1.1	5	11.2	0.10 U	52.2	0.38 J	1.0 U	1.0 U		2	1030							
9/18/2006						1 U	1 U	6	1 U	1 U	69.9	17 U	204	1 U	1 U	2 U		1.3	1570							
5/27/2008						5 U	5 U	1 J	5 U	5 U	28	5 U	110	5 U	5 U			2.3	768 J							
6/2/2009						5.0 U	3.2 J	7.4	5.0 U	5.0 U	0.86 J	8.1	0.014	40	5.0 U	5.0 U	5.0 U	0.66	3.3	758	1.69					
7/16/2010						5 U	5 U	0.96 J	5 U	5 U	49	5 U	160	5 U	5 U	5 U	0.332	2.6	1070	13.3						
9/1/2011						3.8 J	100	290	1.3 J	5.2	8.8	15	5 U	65	270	6.4	5 U	0.316	3.2	1070 J	8.2					
3/27/2012						3.2 J	66	380	1.3 J	7.1	2.8 J	12	5 U	53	390	7.5	5 U	0.227	2	904	4.5					
6/19/2012						2.2 J	24	380	1.4 J	6.1	5.8	12	5 U	54	500 J	9.4	5 U	0.273	1.9	934	5.2					
9/26/2012						5 U	4.9 J	300	1 J	4.8 J	2.9 J	16	5 U	61	290	6.2	5 U	0.27	1.4	867	6.3					
12/12/2012						5.6	61	370	1.3 J	8.1	4 J	3.2 J	5 U	26	850	11	5 UJ	0.264	2.4	601	0.44					
4/2/2013						1.3 J	10	330	1 J	6.5	5.5	14	5 U	58	440	8.3	5 U	0.21	1.7	759	4.4					
7/16/2013						5 U	6.5	290	0.95 J	3.4 J	7	14	5 U	63	280 J	7	5 U	0.246	1.9	844	6.4					
10/16/2013						5 U	12	280	0.98 J	4.3 J	7.6	17	5 U	76	270	6.4	5 U	0.26 J	1.6	780	7.6					
12/3/2013						5 U	11	270	1 J	3.4 J	5.7	12	5 U	64	230	6.8	5 U	0.299 J	2.6 J	716	4.7					
4/15/2014						5.1	57	420	1.5	21	14	6.7	5 U	39	460	13	1 U	0.303 J	3.1	720	1.7	7.17				
8/15/2014						2.2	15	450	1.6	6.9	14	15	5 U	72	210	9.7	1 U	0.403	4	819	5.2	7.63				
12/12/2014						1 U	3.3	280	0.71 J	2.9	6.5	36	5 U	160	110	6.2	1 U	0.23 J	1 U	864	11.8	6.87				
3/26/2015						1 U	11	390	1.2	3.9	19	4.4 J	1 J	24 J	60	7.2	1 U	0.297 J	2	679	0.94	7.22				
10/13/2015						1 U	2.3	290	0.92 J	2.4	8.6	27	5 U	120	27	4.1	1 U	0.265 J	1.5							
5/12/2016						1.0 U	0.83 J	160	1.0 U	1.2	7.5	31	5.0 U	130	11	2.6	1.0 U	0.272 J	1.7	934	7.8	7.4				
4/12/2017						8.3 U	8.3 U	230	8.3 U	8.3 U	9.2	2.2	0.27 J	15	14	3.7 J	8.3 U	0.23	2.6	560	1.0 U	7.58				
3/30/2018						10 U	5.7 J	270	10 U	10 U	6.7 J	2.1 J	0.6 J	25 J	23	5.6 J	10 U	0.29	2.1	720	1.0 U	7.2				

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: RMW- 2D

Date	Cis-1,2-				Trans-1,2-				Vinyl				1,1,1-		1,1-		Dissolved					
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	Trichloro ethane (µg/L)	Dichloroethane (µg/L)	Chloro ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
5/19/2004	100000				5000 U				5400	5000 U												
9/1/2005	23900	2890	50 U	24.8 J	51.3	0.46	0.87	8.85	1830	25.4 J	50 U		2.4	854								
9/18/2006	159	10900	8660	50 U	65	688	20.5	38.4	111	355	112	100 U		2.6	1500							
5/30/2008	1100	140000	21000	500 U	110 J	1500	22	86	160	300 J	100 J			6	1120							
6/1/2009	1600 J	180000	49000	5000 U	5000 U	2000 U	83	12	390	5000 U	5000 U	0.0416 J	29.7	1190	53.8							
7/13/2010	780	99000	52000	500 U	110 J	200 J	89	5.1	340	500 U	500 U	0.2 U	15.1	1480 J	51.7							
6/29/2011	920 J	210000	36000	1000 U	160 J	310 J	11	8.2	63	1200	1000 U	1000 U	0.269	12.1	969 J	4.8	6.26	4.4E+02	3.7E+01	1.8E+02	8.0E+01	9.5E+01
8/23/2011	680 J	56000	110000	1000 U	430 J	1000 U	28	5.3	89	1100	1000 U	1000 U	0.162 J	377	759 J	58.4	6.6E+01	4.8E+02	5.3E+01	7.1E+01	2.5E+01	
11/2/2011	1100	110000	110000	85 J	390 J	110 J	32 J	3.3 J	120 J	600	500 U	500 U	0.0368 J	267	466	125	6.78	2.0E+02	3.1E+04	1.1E+03	1.1E+03	1.5E+03
3/21/2012	1300	140000	78000	500 U	230 J	500 U	60	5.1	210	320 J	100 J	500 U	0.0518 J	129	813 J	138	6.78	1.1E+03	4.9E+03	2.1E+03	2.5E+02	1.9E+02
6/20/2012	800	69000	16000	24 J	68 J	52 J	18	1.2 J	80	860 J	66 J	100 U	0.2 U	43.2	485	94.9	6.82	6.1E+02	3.4E+03	1.6E+03	1.9E+01	9.8E+01
9/19/2012	1100	130000	39000	500 U	130 J	200 J	23	4.3 J	250	480 J	110 J	500 U	0.2 U	128	264 J	141	6.7	3.5E+03	1.4E+03	3.2E+03	6.3E+01	1.7E+03
12/4/2012	3200	410000	62000	250 U	99 J	240 J	28	12	160	160 J	84 J	250 U	39.5	1620	395	27.2	6.25	6.8E+02	9.5E+02	7.2E+05	9.2E+05	5.4E+04
4/4/2013	1500	300000	150000	500 U	210 J	450 J	35	54	250	210 J	160 J	500 U	58.2	1170	266	6.8	6.46	1.1E+04	2.7E+03	8.6E+04	7.6E+04	4.6E+02
7/15/2013	1200 J	240000	170000	5000 U	5000 U	5000 U	23	240	290	5000 U	5000 U	5000 U	46	758	217	6.2	6.4	2.4E+03	5.9E+02	4.5E+03	2.3E+03	1.8E+01
10/15/2013	1200 J	290000	250000	2500 U	500 J	860 J	31	230	330	2500 U	2500 U	2500 U	26.8	578	317	14.2	5.96	1.6E+04	8.3E+03	4.2E+04	3.5E+04	2.2E+03
12/3/2013	1500 J	320000	260000	2500 U	610 J	1200 J	34	200	470	2500 U	2500 U	2500 U	16.3	508 J	177	25.9	6.32	2.4E+04	5.3E+03	3.5E+05	9.8E+04	1.5E+04
4/15/2014	1200	200000	260000	500 U	510	520	44	130	320	500 U	500 U	500 U	8.16	464	249	40.2	6.38	2.3E+04	4.2E+02	3.3E+04	6.0E+02	6.1E+03
8/14/2014	1500	310000	310000	500 U	610	1600	36	440	860	500 U	500 U	500 U	5.86	410	221	35.7	5.95	3.8E+05	4.5E+03	2.0E+06	1.0E+04	7.2E+04
12/4/2014	1800	230000	190000	140	320	990	42	420	1500	100 U	160	100 U	4.26	313	295	42	6.07	4.0E+05	6.7E+03	1.2E+06	4.7E+03	5.8E+03
3/25/2015	1500	210000	190000	160	370	1100	35	420	2000	100 U	150	100 U	3.92	328	269	40.4	7.11	1.1E+05	1.7E+03	7.4E+05	4.3E+03	3.7E+04
10/16/2015	1300	130000	250000	500 U	350 J	1000	64	380	930	500 U	500 U	500 U	2.2	374			7.17					
5/10/2016	1100	140000 D	160000 D	100	240	630	68	380	510 D	17 J	120	20 U	0.0719 J	259	400	172	7.32	1.1E+04	1.4E+05	1.2E+05	2.6E+03	1.3E+04
9/30/2016	1000 J	130000 J	110000 J	1300 UJ	1300 UJ	690 J	37 J	85 J	2900 J	1300 UJ	1300 UJ	0.100 U	270				6.62					
4/19/2017	5000 U	130000	110000	5000 U	5000 U	5000 U	28 J	85 J	270 J	5000 U	5000 U	5000 U	0.03 J	280	460	190	6.85	4.3E+03	5.4E+04	7.3E+04	1.6E+03	2.0E+03
10/13/2017	5000 U	120000	95000	5000 U	5000 U	5000 U	60	180	430	5000 U	5000 U	5000 U	0.100 U	190				6.74				
3/29/2018	5000 U	120000	150000	5000 U	5000 U	5000 U	57	160	440	5000 U	5000 U	5000 U	0.2 U	130	190	210	6.53	1.7E+03	2.0E+04	7.3E+03	9.0E+02	1.3E+03
9/17/2020	2000 U	21000	350000 D	820 J	2000 U	4300	110	980	2500	2000 U	2000 U	2000 U	0.043 J	270	270	160	6.62	5.9E+03	3.2E+04	8.6E+04	6.9E+03	1.3E+04

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: RMW- 3D

Date	PCE (µg/L)	Cis-1,2-			Trans-1,2-			Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)	1,1-DCE (µg/L)					ethane (µg/L)	thane (µg/L)	ethane (µg/L)	ethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)		
10/29/2003		810						250 U				6200	72 J														
5/19/2004		170						100 U				3900	40 J														
6/22/2004		1200						250 U				9900	130 J														
8/30/2005		381	571	22.8	25.1	5.0 U	1.6	0.10 U	10.6	4080	77.2	5.0 U		2	767												
9/19/2006	28	117	281	10 U	22	10 U	12 U	17 U	31.3	2500	34	20 U		2.8	1220												
6/1/2009	13 U	3.2 J	300	13 U	3.2 J	21	1.0 U	1.1	12	110	8 J	13 U	0.485	3.3	802	1.0 U											
7/12/2010	5 U	3.9 J	760	2.2 J	11	70 J	5 U	3 J	27	280	15	5 U	0.474	3	882	0.46											
6/23/2011	770 J	14000	1900	1000 U	1200	1000 U	2.7 J	1.1 J	19	96000	700 J	1000 U	0.414	3.1	781	0.49	7.37										
8/24/2011	1400	14000	14000	73 J	1100	250 U	9.2	1.7 J	33	64000	620	250 U	0.866	10500	529	21.4	6.1										
11/9/2011	130 J	1500	9300	500 U	570	500 U	4 J	5 U	25	53000	340 J	500 U	0.0541 J	7.4	614		6.97										
3/28/2012	90 J	620	5900	250 U	260	250 U	4.7 J	5 U	26	33000	190 J	250 U	0.0326 J	8.6	710	36.4	6.88										
6/26/2012	100	460	3800	100 U	210	100 U	5.7	5 U	27	25000	130	100 U	0.0697 J	9	978	15.2	6.96										
9/25/2012	45 J	170	3100	100 U	160	27 J	3.6 J	5 UJ	22 J	18000	130	100 U	0.0954 J	8.2	552 J	19.4	7.09										
12/6/2012	39 J	200	4100	12 J	790	14 J	3.5 J	5 U	21	19000	150	50 U	0.063 J	23.6	435	48.6	6.91										
4/8/2013	19	99	3500	20	810	51	2.6 J	3.4 J	41	17000	210	10 U	0.2 U	21.2	471	63	7.46										
7/19/2013	9.7 J	42 J	2800	12 J	750	61	2.4 J	2.8 J	38	17000	160	50 U	0.2 U	3.8	574	30	6.99										
10/11/2013	11 J	32 J	2600	8.1 J	140	59	1 J	3.9 J	36	10000	150	50 U	0.0701 J	21.1	462	22.7	6.97										
12/4/2013	100 U	45 J	1600	100 U	71 J	33 J	14	1.5 J	70	7000	96 J	100 U	0.0701 J	5.8	590 J	22.3	7.1										
4/14/2014	8.7	49	1800	5.3	190	45	5 U	2.9 J	43	8000	120	5 U	0.0485 J	8.6	461	11.8	7.21										
8/21/2014	6.3 J	39	2100	6.8 J	86	71	3.3 J	3.8 J	60	9100	180	10 U	0.0382 J	3.9	637	21.5	7.34										
12/9/2014	5.7	17	1700	5.7	130	82	4.5 J	5.9	66	7400	160	5 U	0.0466 J	1.5	554	22.2	7.67										
3/31/2015	10 U	25	1900	5.2 J	110	120	1.7 J	7.9	200	7100 J	180	10 U	0.4 U	4.5	358	27.7	7.24										
10/15/2015	10 U	16	2400	9.3 J	210	96	2.5 J	4.6 J	150	8700	170	10 U	0.0712 J	5.3			6.52										
5/12/2016	10 U	32	2700	10	310	180	8.1	7.3	260	12000 D	230	10 U	0.400 U	2.4	630	27.9	7.19										
9/28/2016	1300 U	1300 U	2300	1300 U	1300 U	1300 U	1.4	1	28	15000	1300 U	1300 U	0.072 J	2.4		7.1											
4/14/2017	200 U	200 U	1700	200 U	100 J	180 J	0.65	5.2	120	8000	190 J	200 U	0.07 J	2.9	440	110	7.51										
10/10/2017	200 U	200 U	1200	200 U	200 U	200	0.84 J	3	40	4100	100 J	200 U	0.17	3.3			7.16										
4/3/2018	63 U	63 U	660	63 U	63 U	55 J	1.0 U	1.0 U	24	2200	44 J	63 U	0.19 J	2.2	610	2.2	7.18										
9/15/2020	100 U	100 U	440	100 U	72 J	130	4.6	9.9	130	2200	120	100 U	0.11	2.3	540	10	7.2										

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: RMW- 3S

Date	Cis-1,2-		Trans-1,2-		Vinyl		1,1,1-		1,1-		Dissolved													
	PCE (µg/L)	TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)	Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	ethane (µg/L)	thane (µg/L)	ethane (µg/L)	Chloro (mg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)	
9/19/2006	1 U	1 U	9	1 U	1 U	1 U	12 U	17 U	10 U	1 U	1 U	2 U		3.5	2590									

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: RMW- 4D

Date	PCE (µg/L)	Cis-1,2-		Trans-1,2-		Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)		1,1-Dichloroethane (µg/L)		Chloro Iron (mg/L)		Dissolved TOC (mg/L)		Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)	1,1-DCE (µg/L)					Trichloroethane (µg/L)	Dichloroethane (µg/L)	Chloroethane (µg/L)	Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)			
10/29/2003		72000 D				1000 U				2800	1000 U														
5/19/2004		29000				360 J				4500	1000 U														
8/31/2005		19200	11300	14.8 J	43	475	2.5	2.7	32.7	701	38.1	25 U		2.8	1140										
9/19/2006	514	20800	17400	68 J	88	526	12 U	25.3	65.9	308	105	100 U		3.2	1210										
1/15/2008	570 J	130000	18000	5.0 U	5.0 U	430 J	19	14	110	5.0 U	5.0 U	5.0 U		7.67	1340										
5/29/2008	600	67000	21000	500 U	500 U	610	16	12	95	500 U	500 U			4.9	1370 J										
7/24/2008	5000 UJ	450 J	100000 J	5000 UJ	5000 UJ	1100 J	15 J	46 J	110 J	5000 UJ	5000 UJ	5000 UJ		387 J	1060 J										
9/30/2008	1300 UJ	3700 J	38000 J	370 J	75 J	680 J	23	7.1	130	1300 UJ	1300 UJ	1300 UJ		294	810										
12/11/2008	5.0 U	660	5400	28 J	5.0 U	79 J	28	2.1	130	5.0 U	5.0 U	5.0 U		168	130										
6/3/2009	9.4 J	620	2800	12 J	100 U	95	21	7.4	330	12 J	100 U	100 U	0.0723 J	160	572	247									
6/4/2009	250 U	1300	4900	16 J	250 U	110	27	19 J	270	250 U	250 U	250 U													
6/5/2009	250 U	1200	5200	16 J	250 U	82 J	31 J	9.7 J	240 J	250 U	250 U	250 U													
10/12/2009	11 J	1100	3800	10 J	8.4 J	74	35	7.6	210	8.4 J	8 J	100 U	0.0317 U	149	569										
7/16/2010	6.1	380	900	6.9	2.8 J	73	36	160	3800	5.5	5.1	5 U	0.2 U	140	803	189									
6/24/2011	130 J	54000	32000	81 J	89 J	880	19	52	1900	250 U	250 U	250 U	0.2 U	133	843	173	7.41								
8/23/2011	50 J	26000	19000	42 J	42 J	470	39	97	4800	100 U	25 J	100 U	0.0153 J	124	395 J	172	7.11								
11/8/2011	68 J	20000	17000	36 J	38 J	510	39 J	230 J	3900	100 U	23 J	100 U	0.0208 J	109	342 J	157	7.29								
3/20/2012	50 U	800	1700	50 U	50 U	300	12	210	8800	50 U	50 U	50 U	0.0271 J	80.1	94.9 J	176	7.12								
6/27/2012	87 J	18000	24000	40 J	59 J	830	19	400	5600	180	49 J	130 U	0.2 U	55.9	241 J	192	6.96								
9/25/2012	82	11000	18000	33 J	51	1000	21	350	6000	96	45 J	50 U	0.2 U	82.8	111 J	209	6.7								
12/10/2012	50 J	4300	48000	55 J	32 J	950	22	360	5500	72 J	94 J	100 UJ	0.0681 J	754	496	247	5.85								
4/10/2013	19 J	2100	31000	57 J	38 J	1300	24	420	6500	22 J	66 J	100 U	0.2 U	197	1090	209	6.62								
7/12/2013	250 U	3200	31000	62 J	250 U	1400	34	390	6500	250 U	71 J	250 U	0.2 U	368	51.7	241	6.85								
10/14/2013	500 U	8500	55000	97 J	500 U	1400	33	300	2800	500 U	500 U	500 U	0.4 U	390	189	276	6.46								
12/12/2013	20 J	2500	61000	87 J	75 J	1400	36	390	4100	21 J	120	100 U	0.4 U	208	313	250	6.73								
4/9/2014	50 U	2500	67000	100	91	1800	25	560	9600	50 U	88	50 U	0.283 J	294	17	198	6.51								
8/21/2014	100 U	1500	57000	93 J	80 J	3500	38	740	10000	100 U	70 J	100 U	0.0512 J	226	131	154	6.77								
12/8/2014	50 U	1400	61000	100	94	3500	32	700	9700	50 U	69	50 U	0.4 U	247	248	190	6.35								
3/31/2015	50 U	1400	44000	91	55	4500	50	830	10000	50 UJ	59	50 U	0.4 U	233	133	236	6.52								
5/17/2016	20 U	2100	17000 D	57	27	4900	23	2000 D	9800 D	20 U	32	20 U	0.400 U	117	547	60.2	6.74								
9/29/2016	500 UJ	1100	15000	500 U	500 U	5400	27 J	1600 J	5200 J	500 UJ	500 U	500 U	0.100 U	150			6.88								
4/20/2017	10 U	23	3000	26	7.7 J	2900	8.6	670	5200	10 U	8.5 J	10 U	0.10 U	78	260	74	7.33								
10/13/2017	100 U	93 J	4500	55 J	100 U	5800	43	2000	8800 D	100 U	100 U	100 U	0.100 U	77			6.64								
4/5/2018	250 U	110 J	6700	250 U	250 U	5000	31 J	1300 J	10000 DJ	250 U	250 U	250 U	0.2 U	140	410	260	7.01								
9/15/2020	500 U	500 U	10000	500 U	500 U	3200	22	2600	9500 D	500 U	500 U	500 U	0.1 U	180	820	210	7								

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: TP- 1

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-	Trans-1,2-	Vinyl	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-	1,1-	Dissolved	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBT (cells/ml)	DHC (cells/ml)	TCER (cells/ml)	VCR (cells/ml)	
			DCE (µg/L)	DCE (µg/L)	Chloride (µg/L)				Trichloro ethane (µg/L)	Dichloro ethane (µg/L)	Chloro ethane (µg/L)										
12/5/2014	1 U	1 U	1 U	1 U	1 U				1 U	1 U	1 U										

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: TP- 2

Date	PCE (µg/L)	Cis-1,2-	Trans-1,2-	Vinyl	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-	1,1-	Dissolved	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBT (cells/ml)	DHC (cells/ml)	TCER (cells/ml)	VCR (cells/ml)
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)				Chloride (µg/L)	Trichloro ethane (µg/L)	Dichloro ethane (µg/L)									
3/28/2011	0.14	0.14	1.3	0.11	0.013	0.68			0.0057										

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

MONITORING WELL GROUNDWATER ANALYTICAL RESULT SUMMARY
EKONOL FACILITY
TOWN OF WHEATFIELD, NEW YORK

Well ID: TP- 3

Date	PCE (µg/L)	Cis-1,2-	Trans-1,2-	Vinyl	Ethane	Ethene	Methane	1,1,1-	1,1-	Dissolved	TOC	Sulfate	Sulfide	pH	BVC	DHBT	DHC	TCER	VCR
		TCE (µg/L)	DCE (µg/L)	DCE (µg/L)				Chloride (µg/L)	Ethane (µg/L)										
3/28/2011	0.0015	0.0015	0.11	0.0016					0.05										

µg/L micrograms per liter

mg/L milligrams per liter

J Indicates an estimated value.

U Analyte was not detected above the reporting limit.

UJ The analyte was not detected. The reporting limit is an approximate value.

J- Indicates estimated value, biased low.

J+ Indicates estimated value, biased high.

D Result reported from a secondary dilution analysis.

R The sample results are rejected.

µg/L micrograms per liter

mg/L milligrams per liter

cells/ml cells per milliliter

s.u. standard units

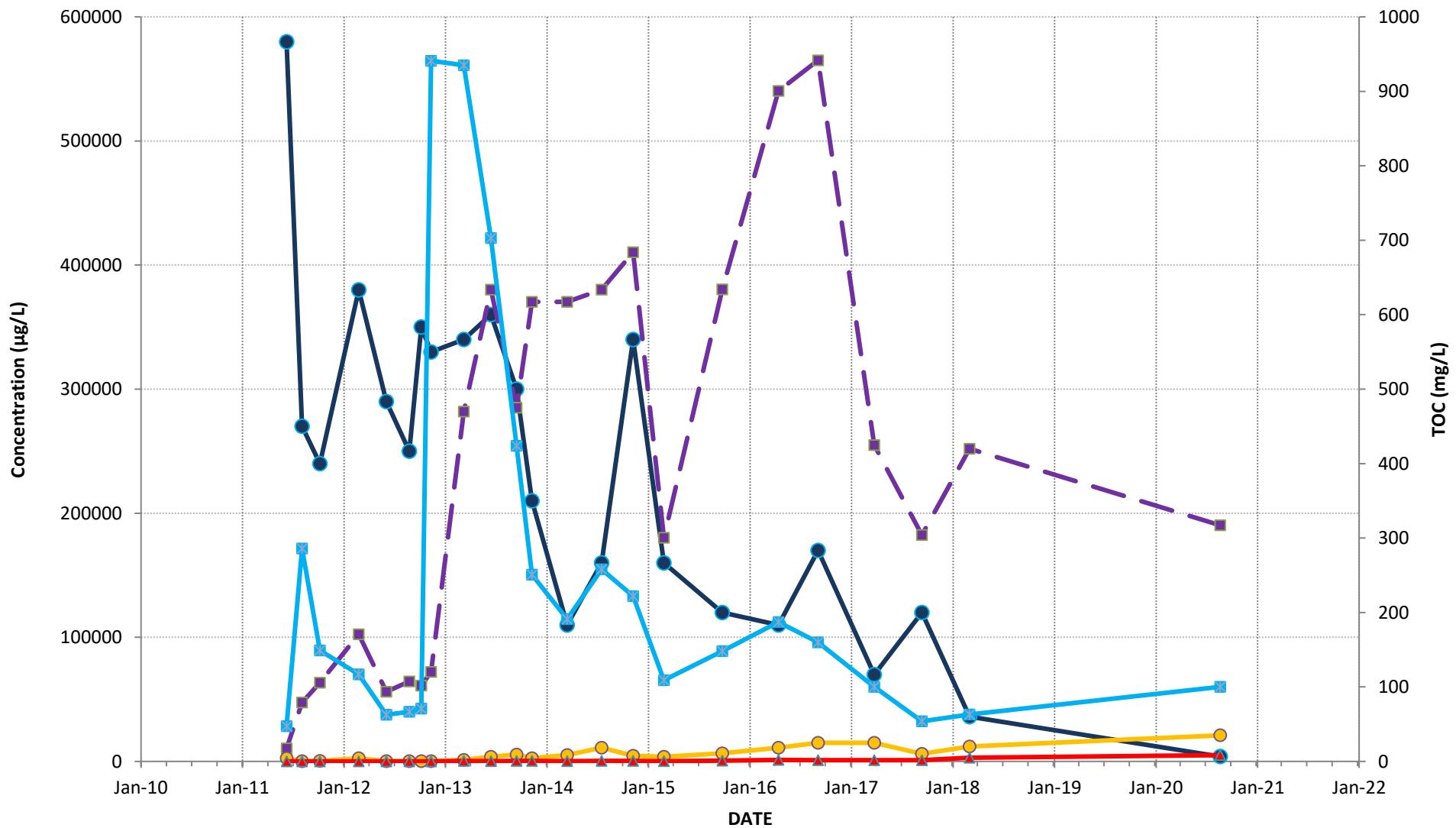
Appendix A

A2

Concentrations of Chloroethenes

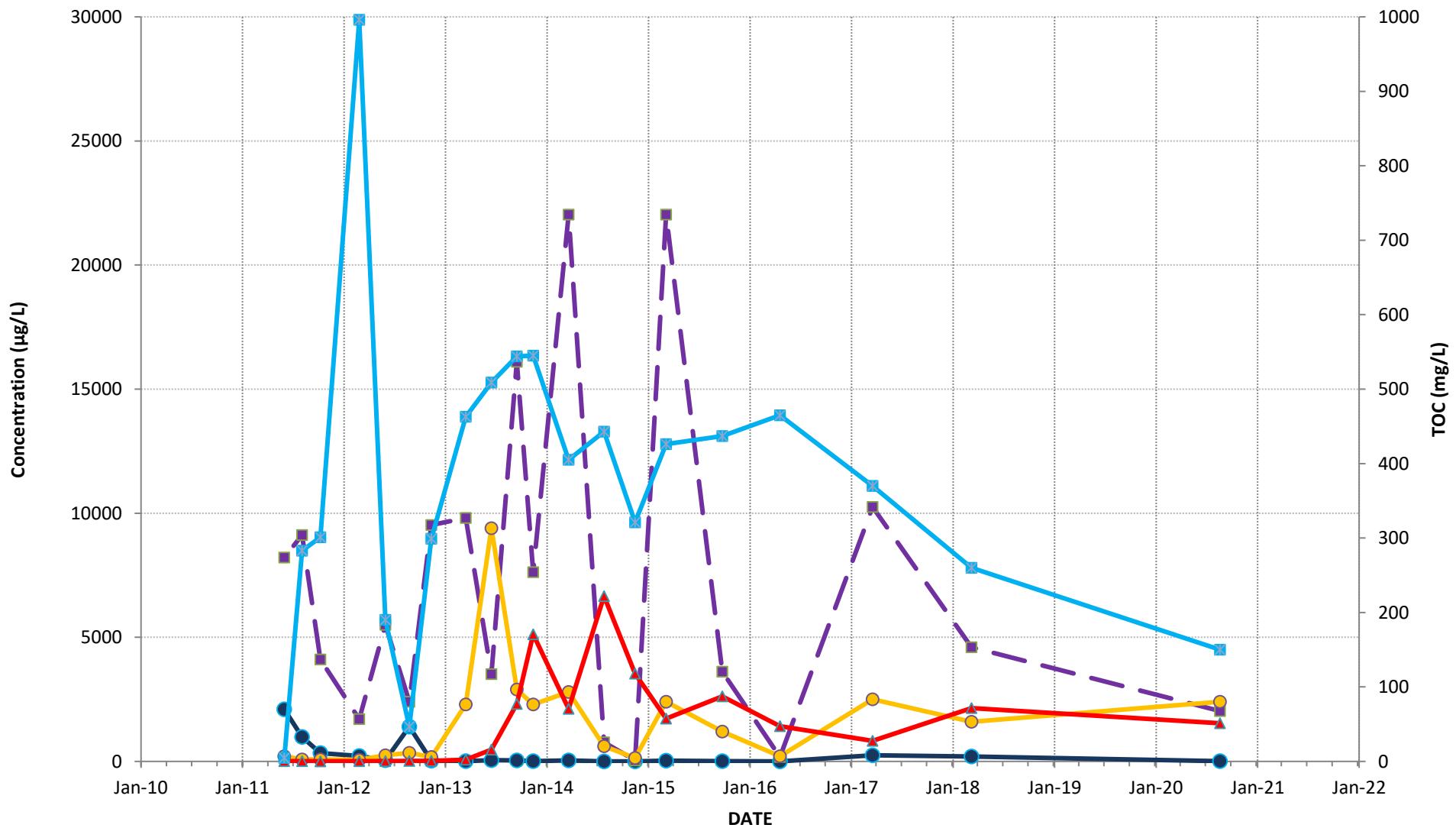
CONCENTRATIONS OF CHLOROETHENES INJ- 7D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC

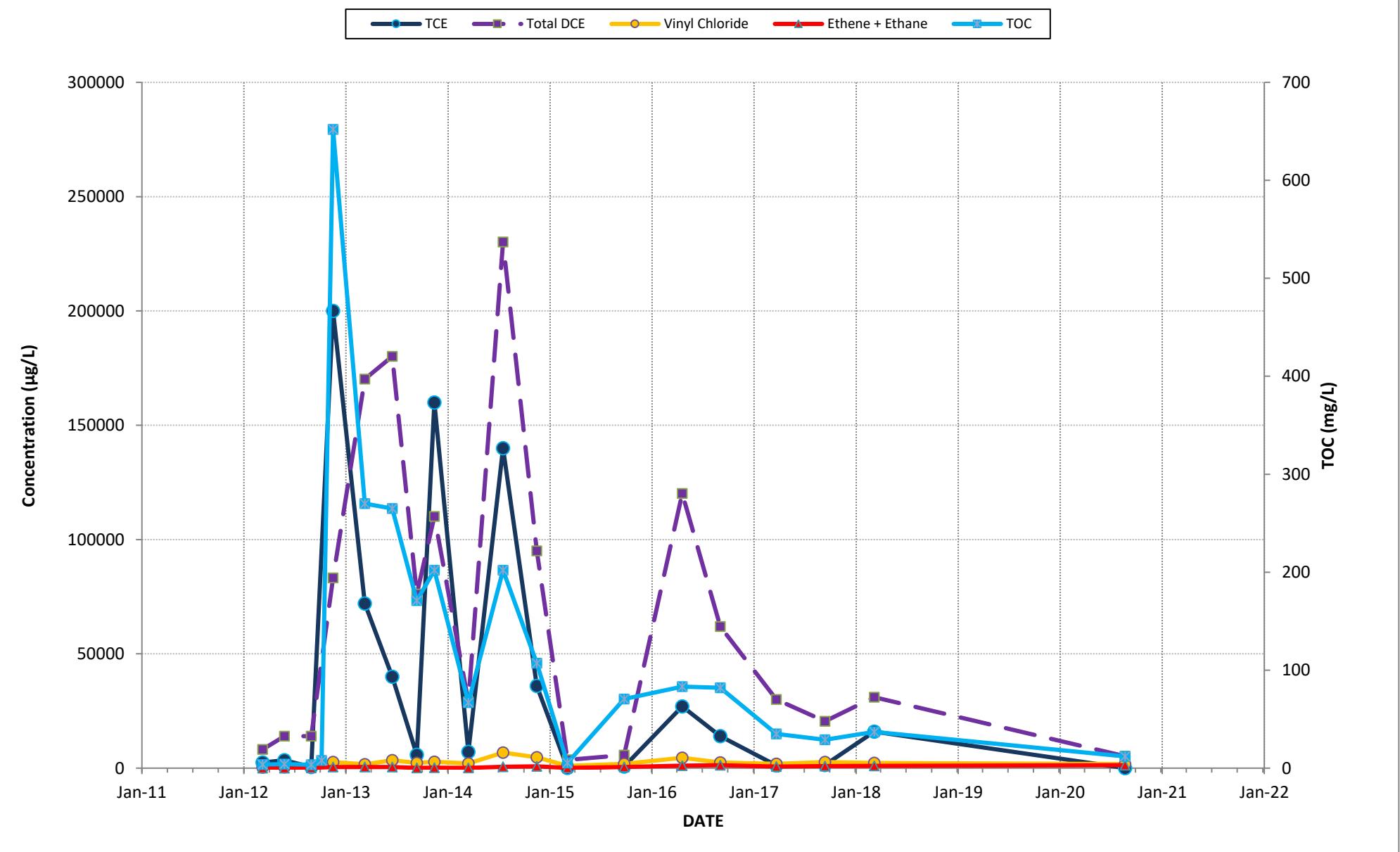


CONCENTRATIONS OF CHLOROETHENES INJ- 8D

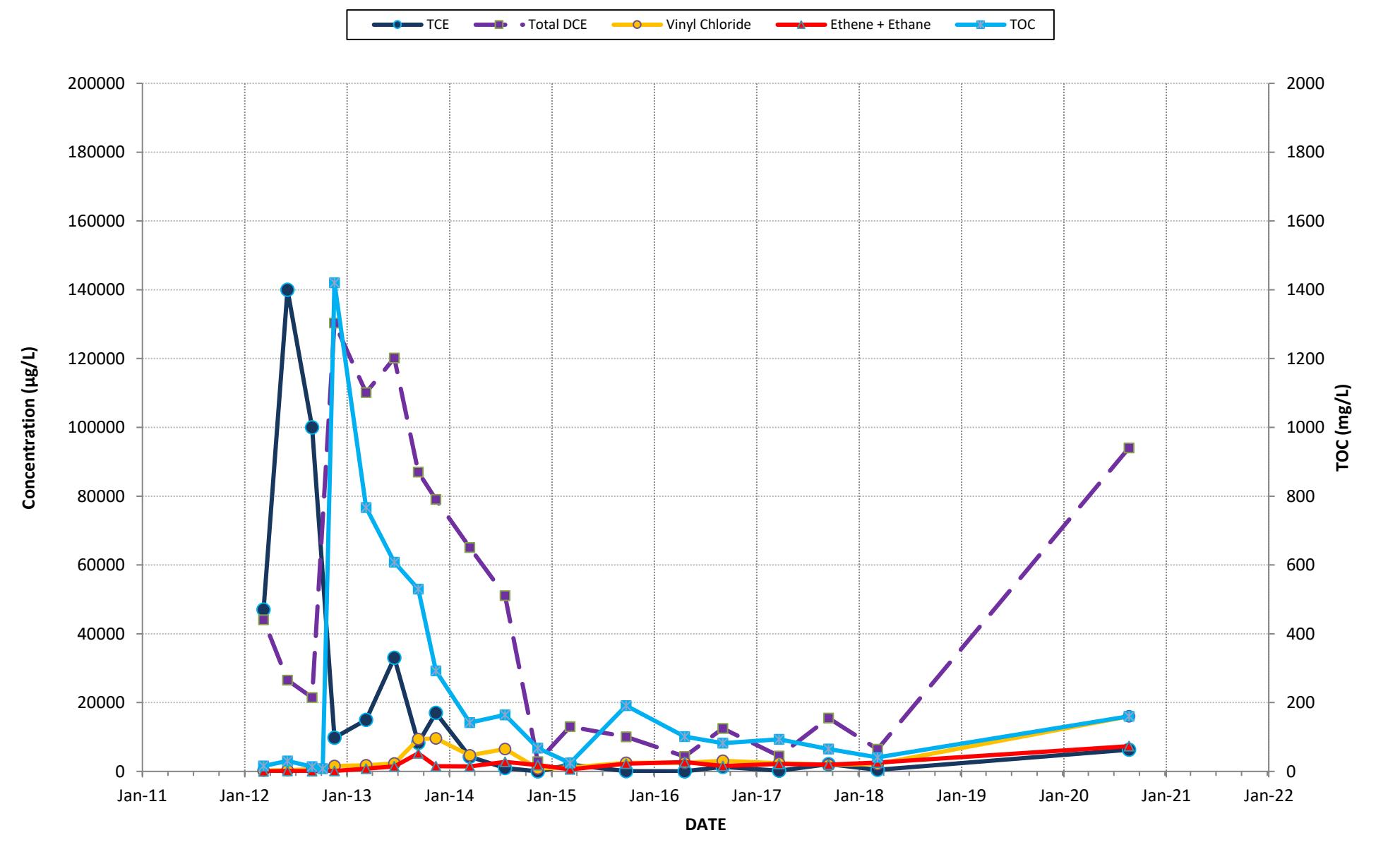
● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



CONCENTRATIONS OF CHLOROETHENES INJ-11D

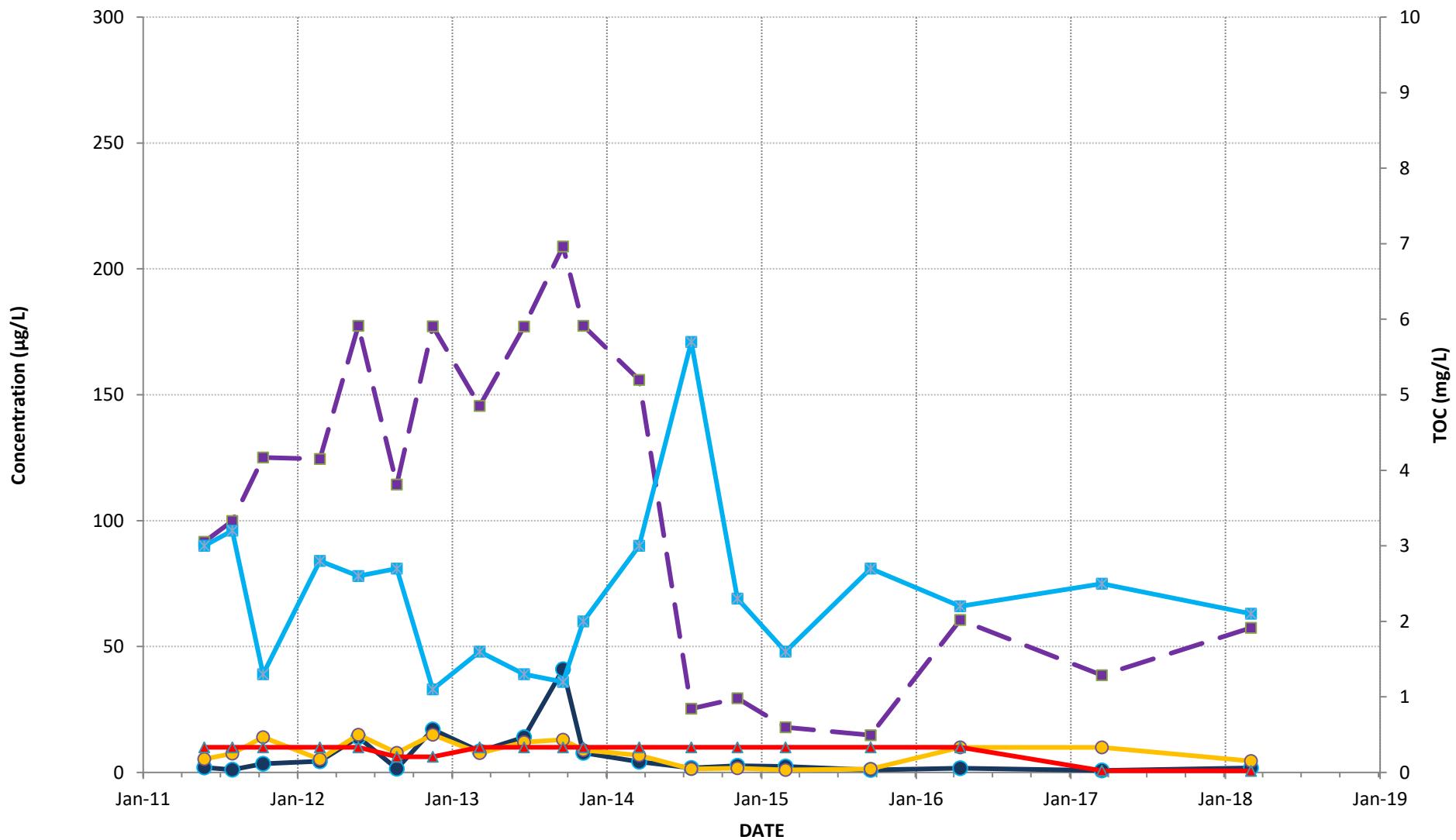


CONCENTRATIONS OF CHLOROETHENES INJ-13D



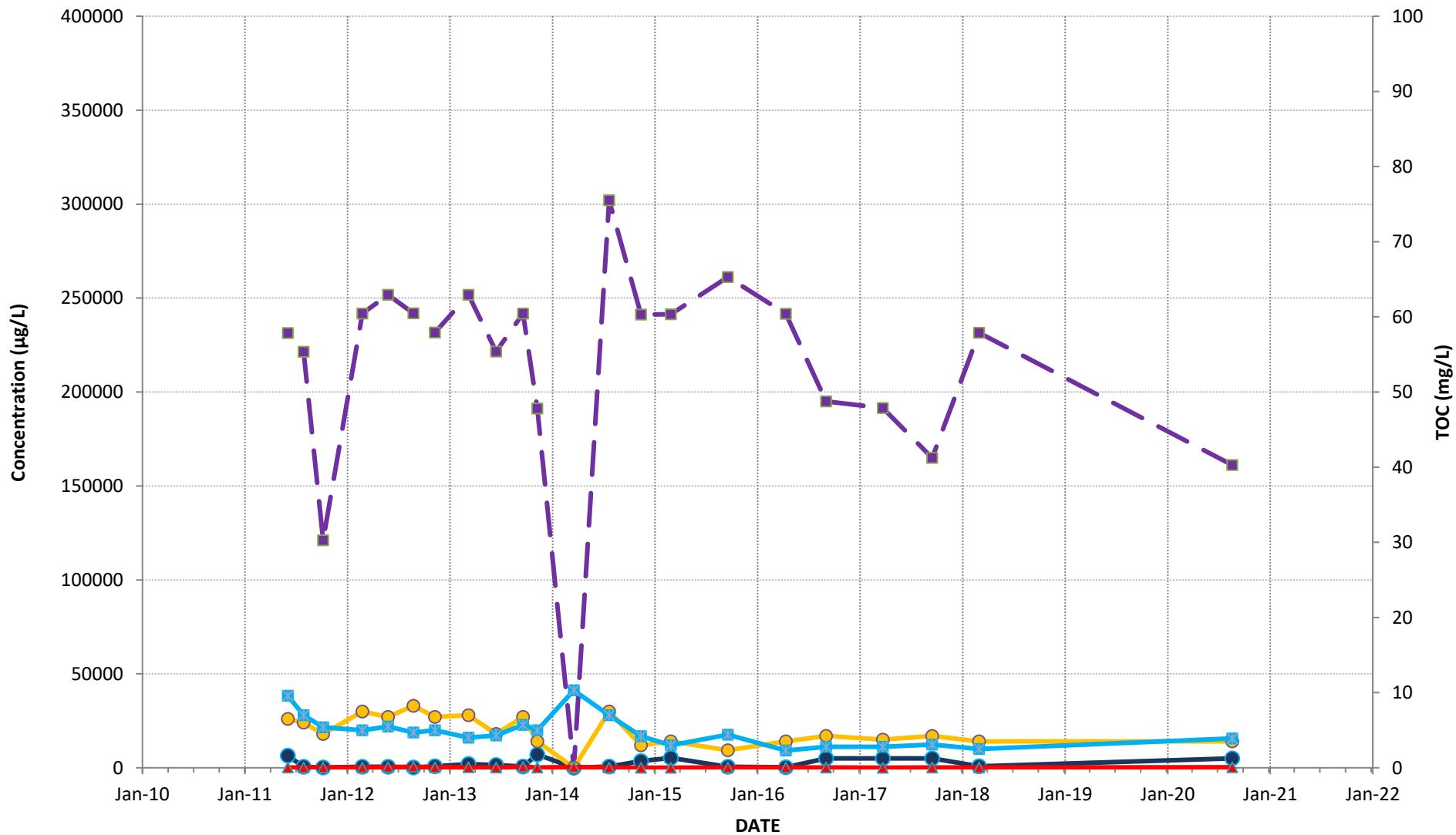
CONCENTRATIONS OF CHLOROETHENES MW- 1S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



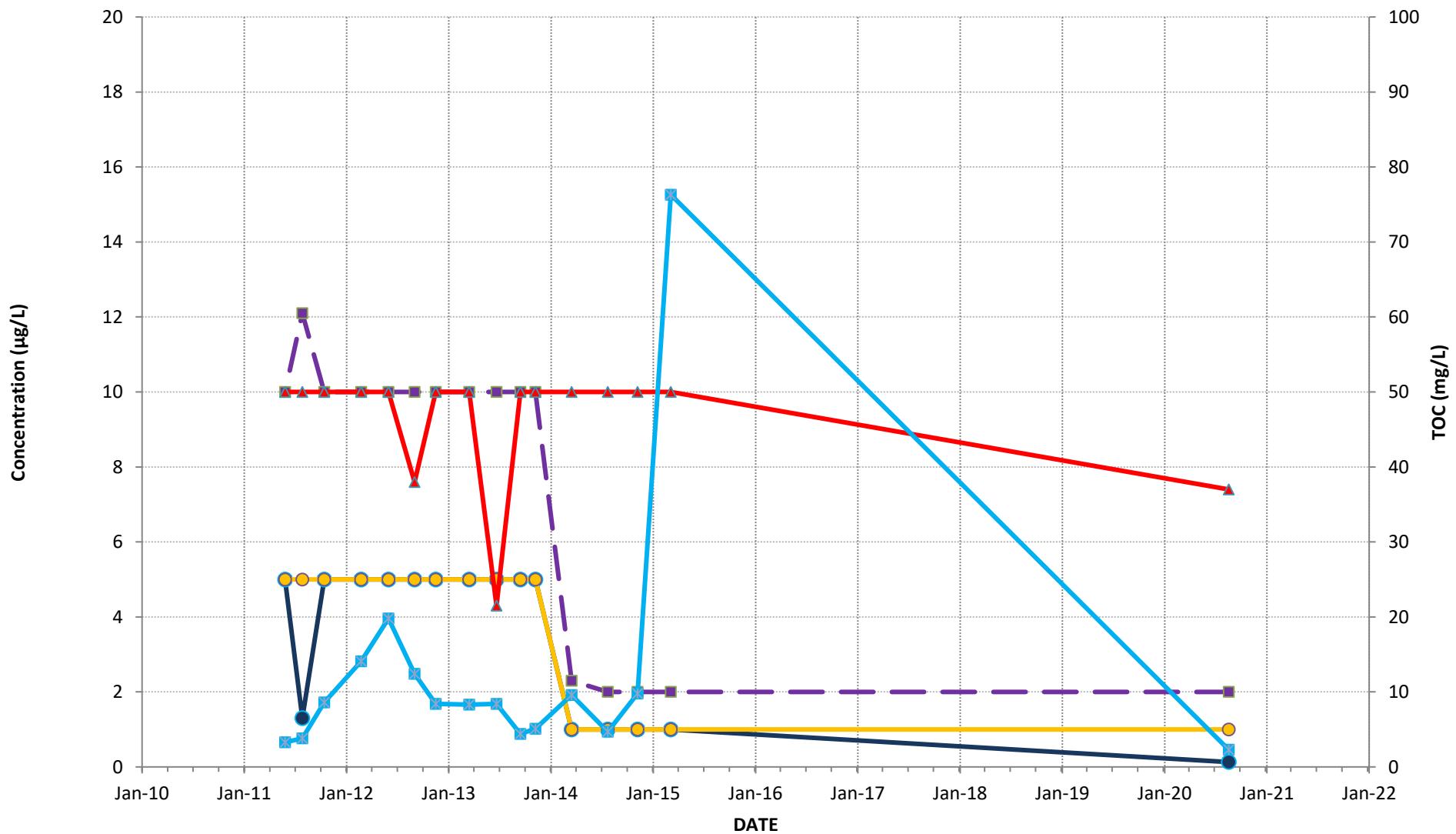
CONCENTRATIONS OF CHLOROETHENES MW- 2S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



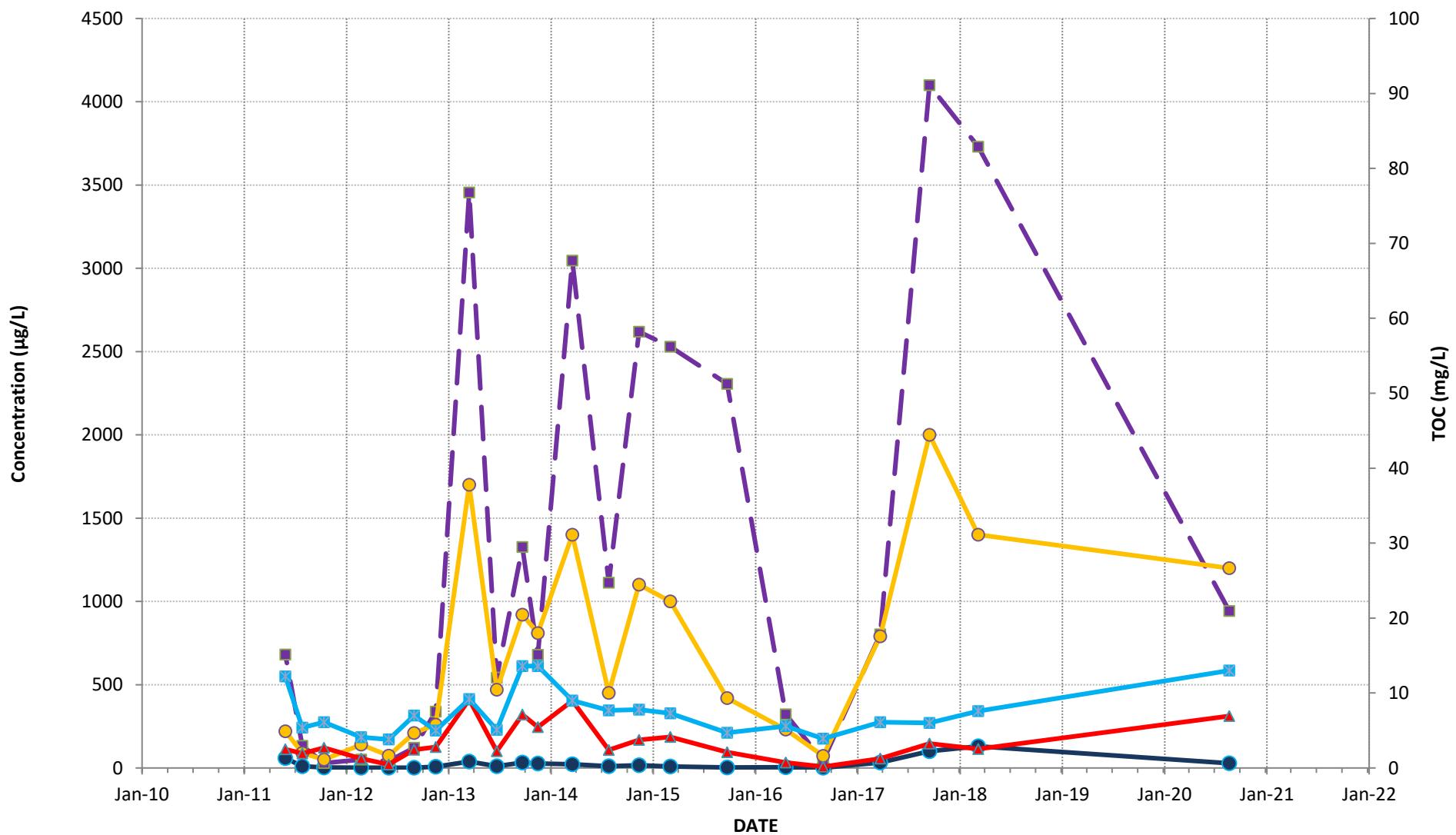
CONCENTRATIONS OF CHLOROETHENES MW- 3S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



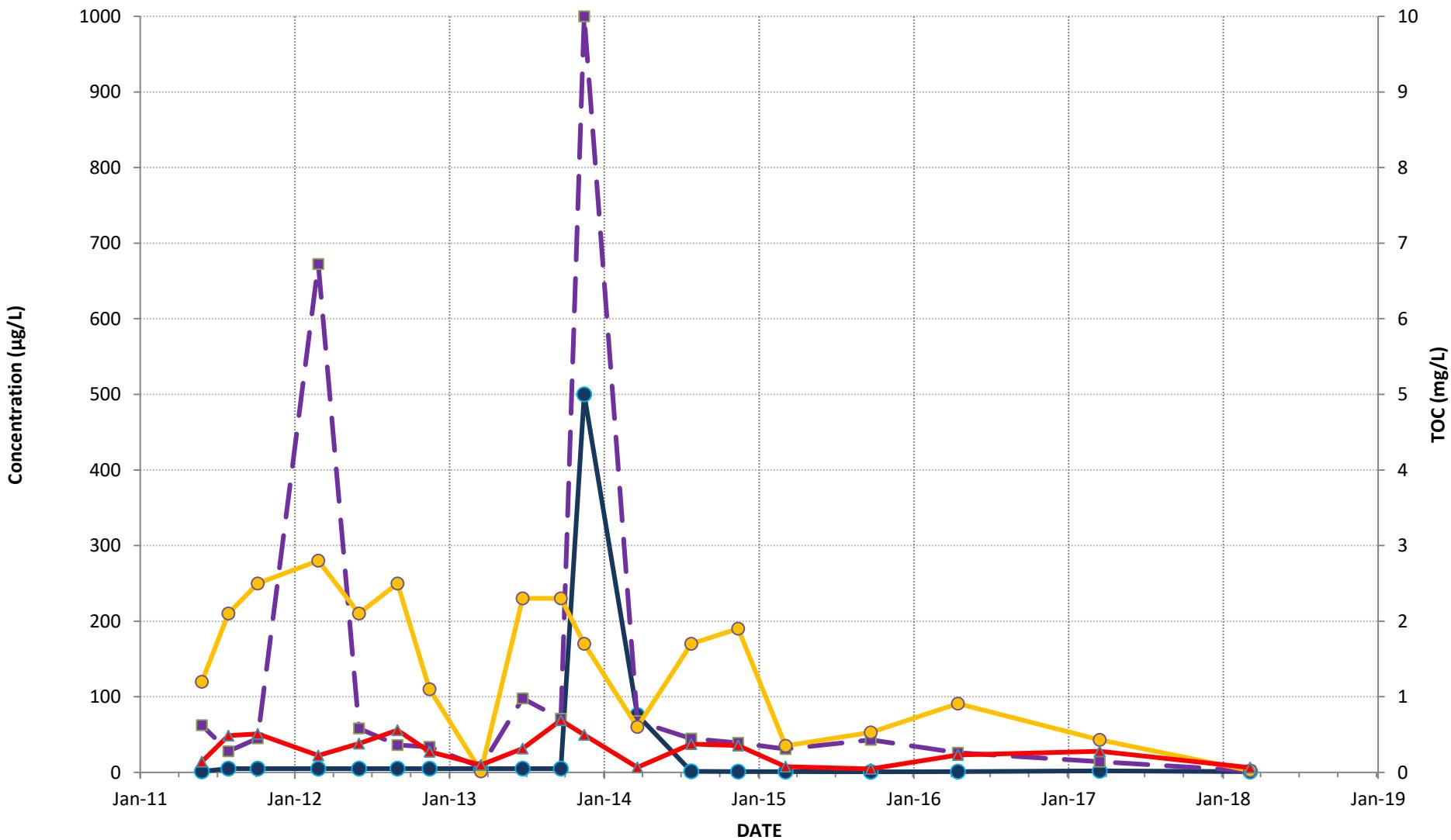
CONCENTRATIONS OF CHLOROETHENES MW- 4S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC



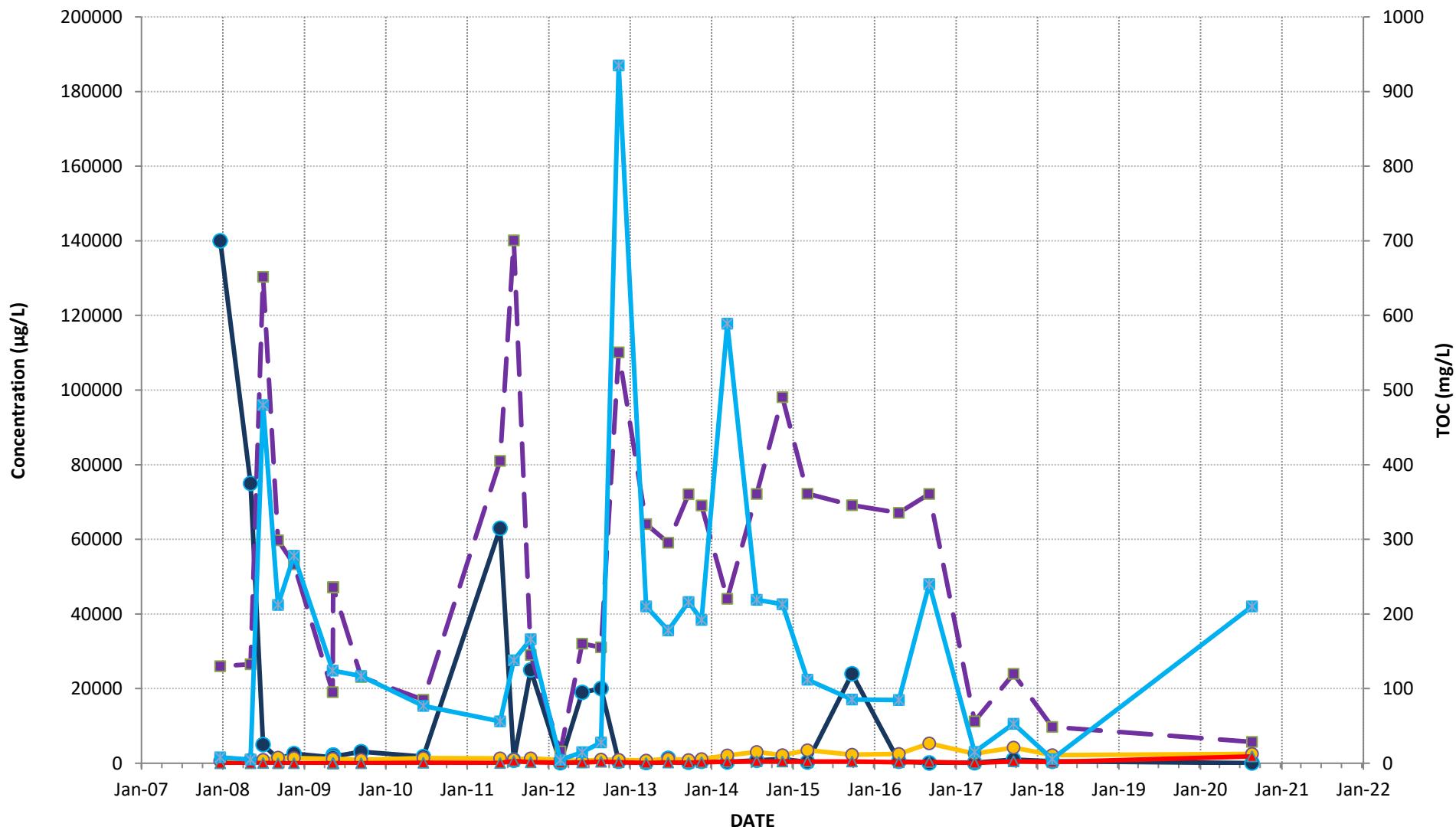
CONCENTRATIONS OF CHLOROETHENES MW- 6S

● TCE
● Total DCE
● Vinyl Chloride
△ Ethene + Ethane
— TOC



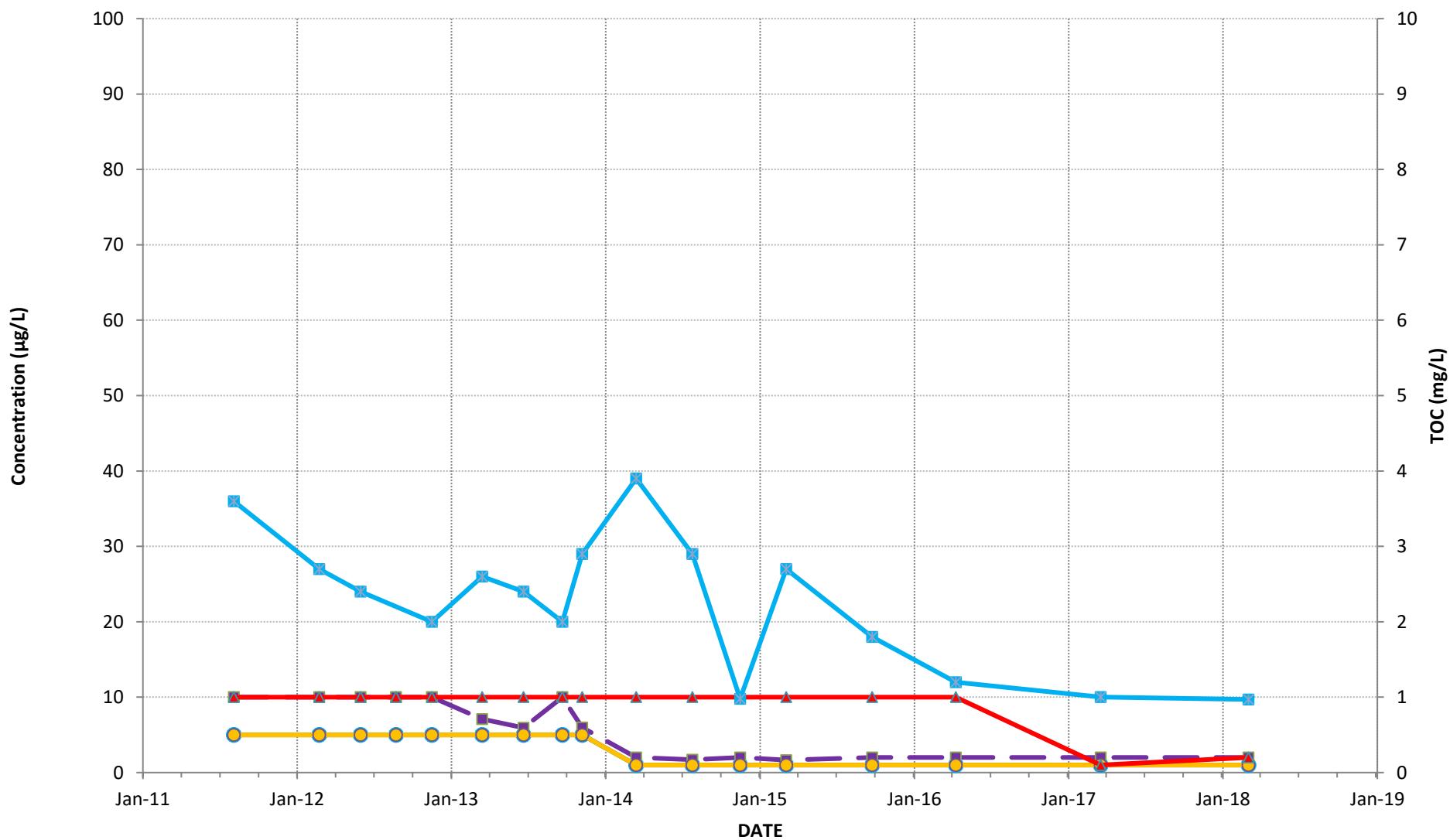
CONCENTRATIONS OF CHLOROETHENES MW- 7D

● TCE
 ■ Total DCE
 ○ Vinyl Chloride
 △ Ethene + Ethane
 □ TOC



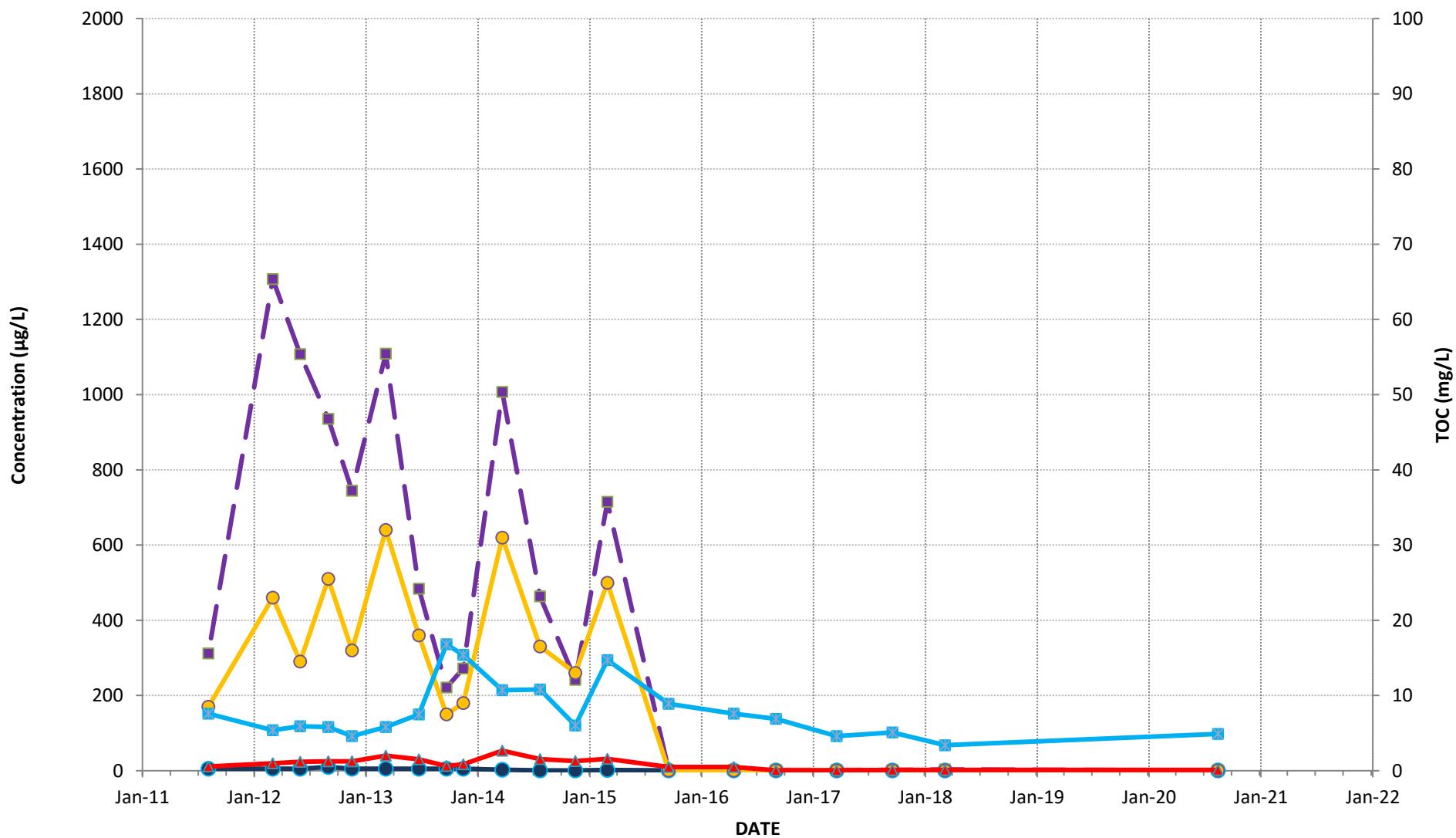
CONCENTRATIONS OF CHLOROETHENES MW- 7S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC

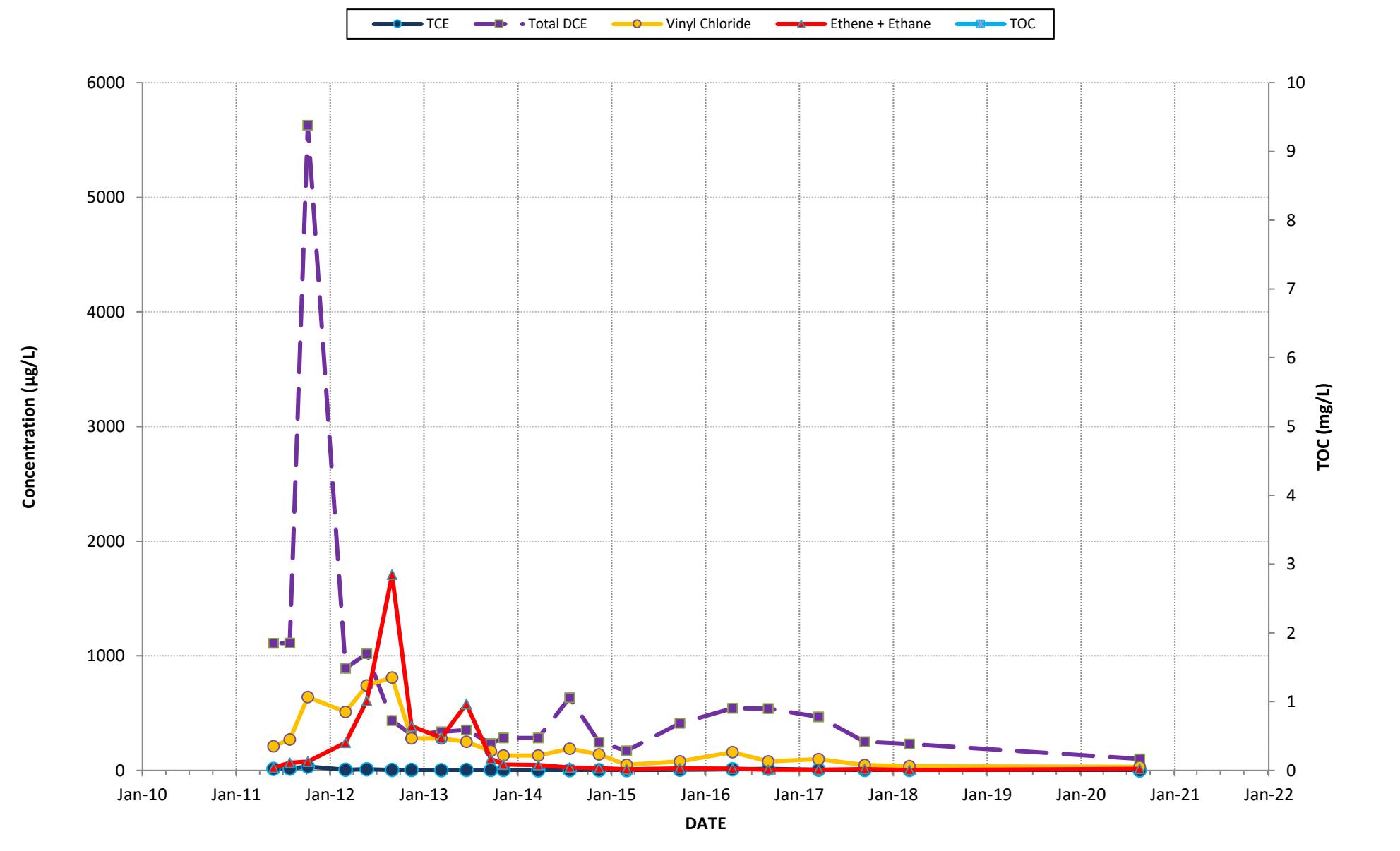


CONCENTRATIONS OF CHLOROETHENES MW- 9S

● TCE ■ Total DCE ○ Vinyl Chloride ▲ Ethene + Ethane □ TOC

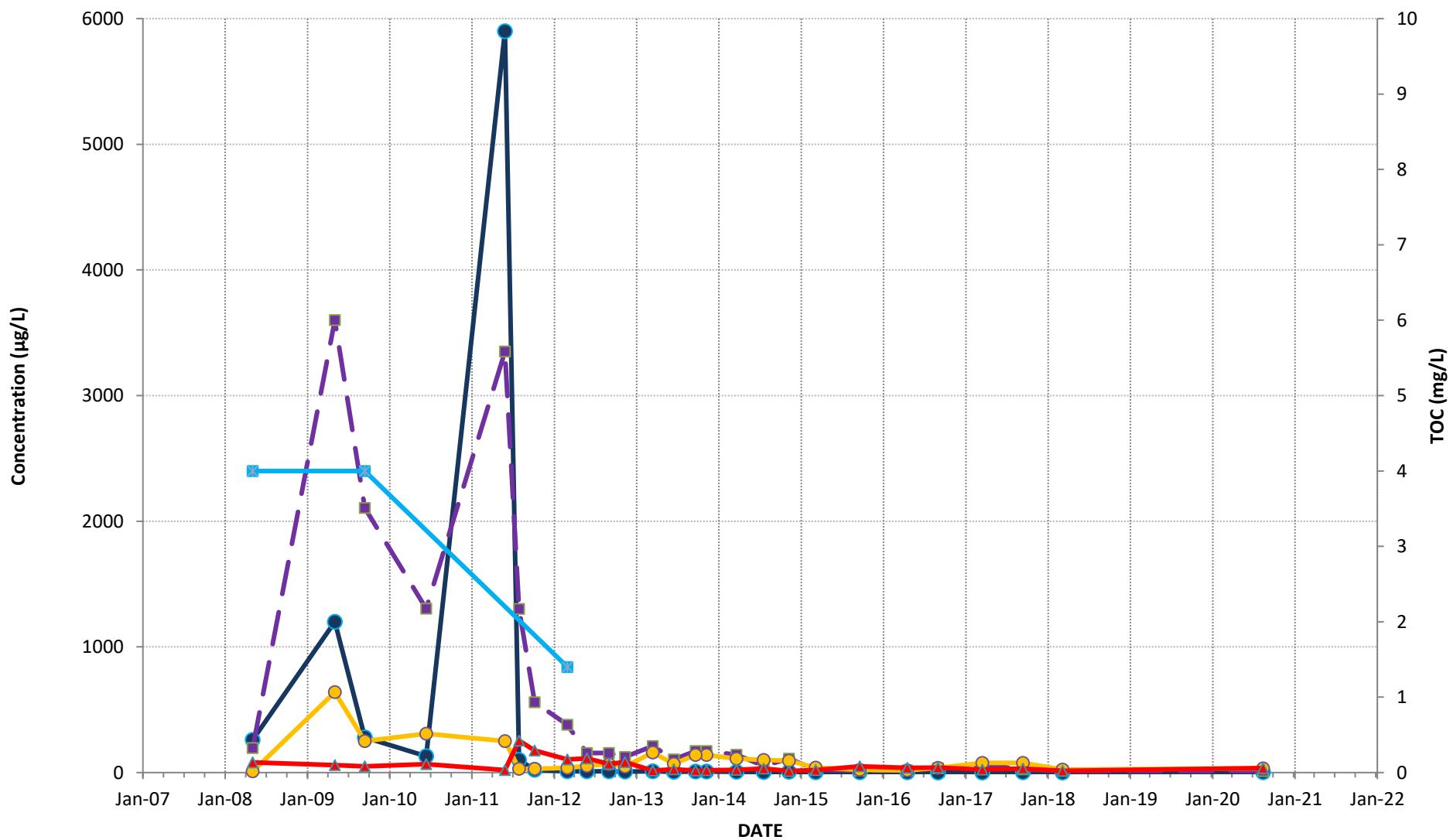


CONCENTRATIONS OF CHLOROETHENES MW-10S



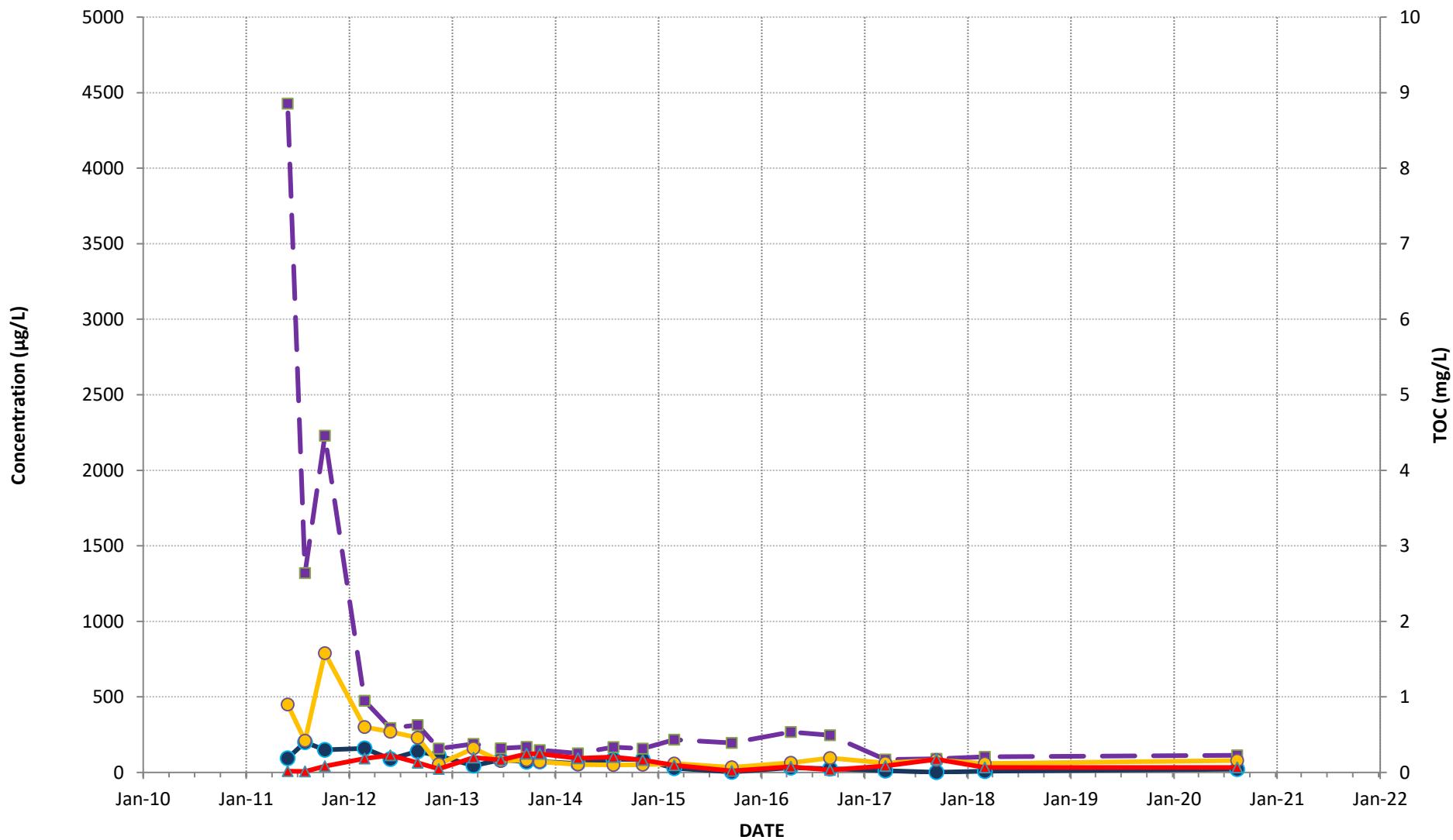
CONCENTRATIONS OF CHLOROETHENES MW-11D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



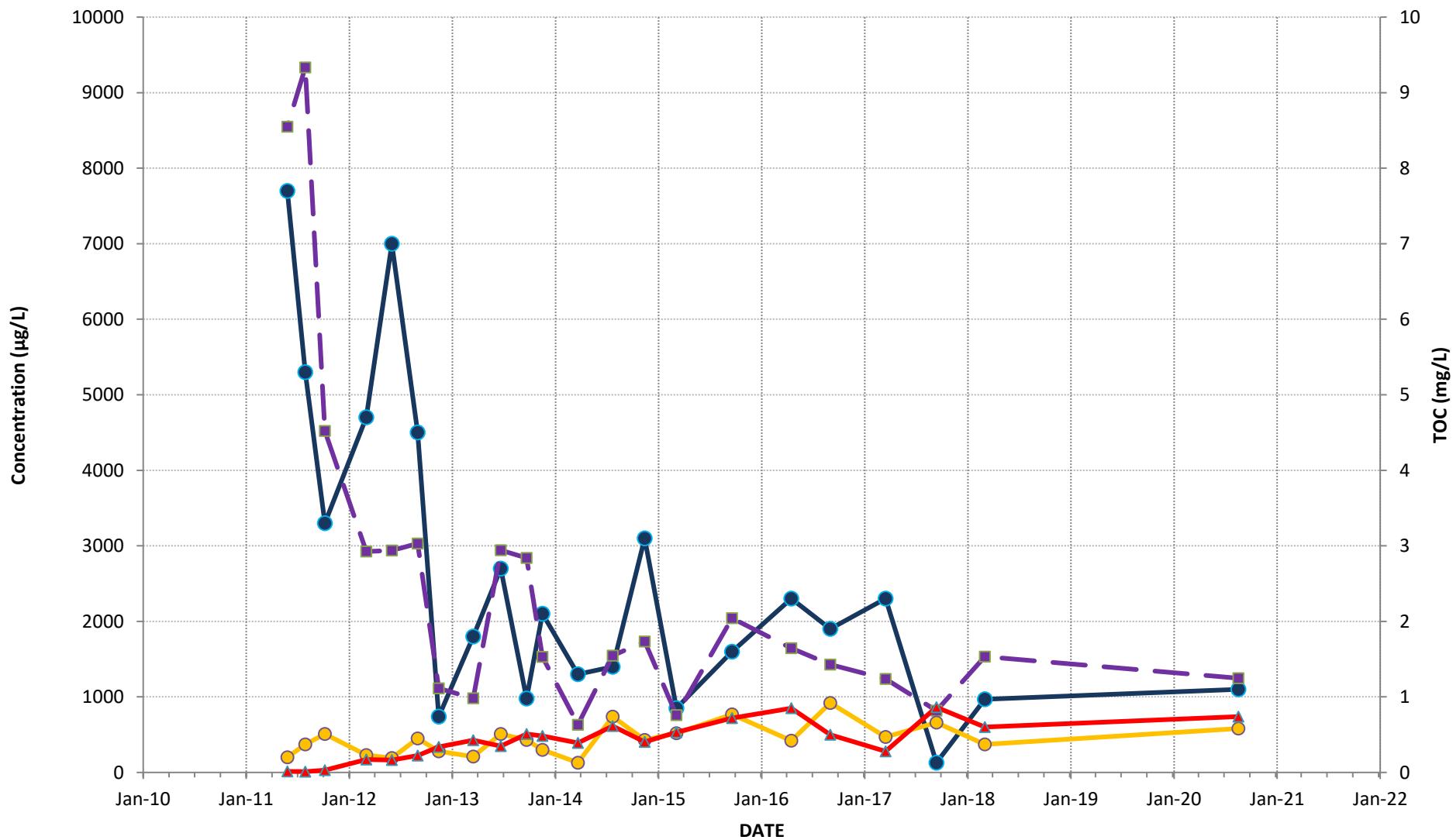
CONCENTRATIONS OF CHLOROETHENES MW-11S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



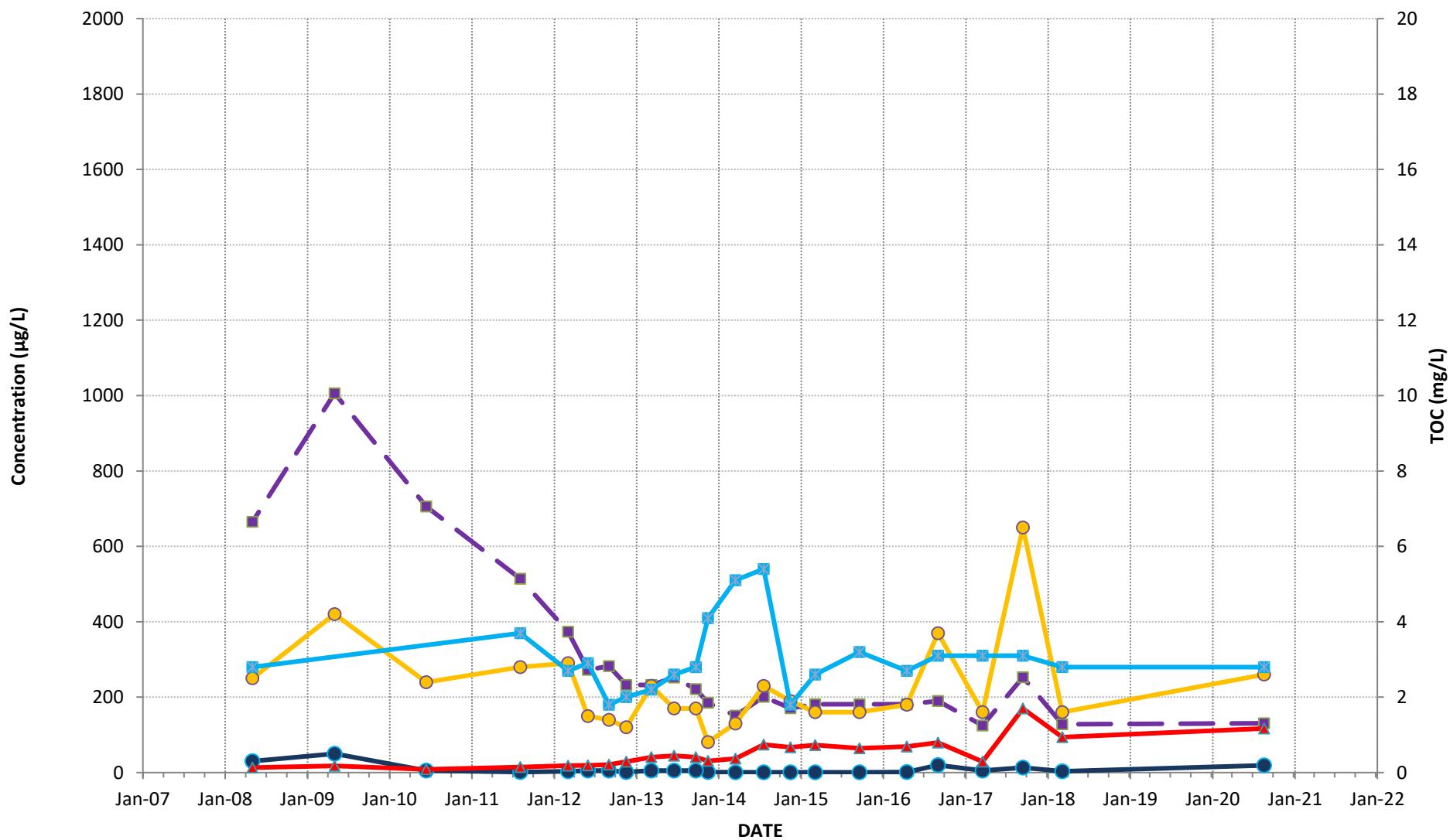
CONCENTRATIONS OF CHLOROETHENES MW-12S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



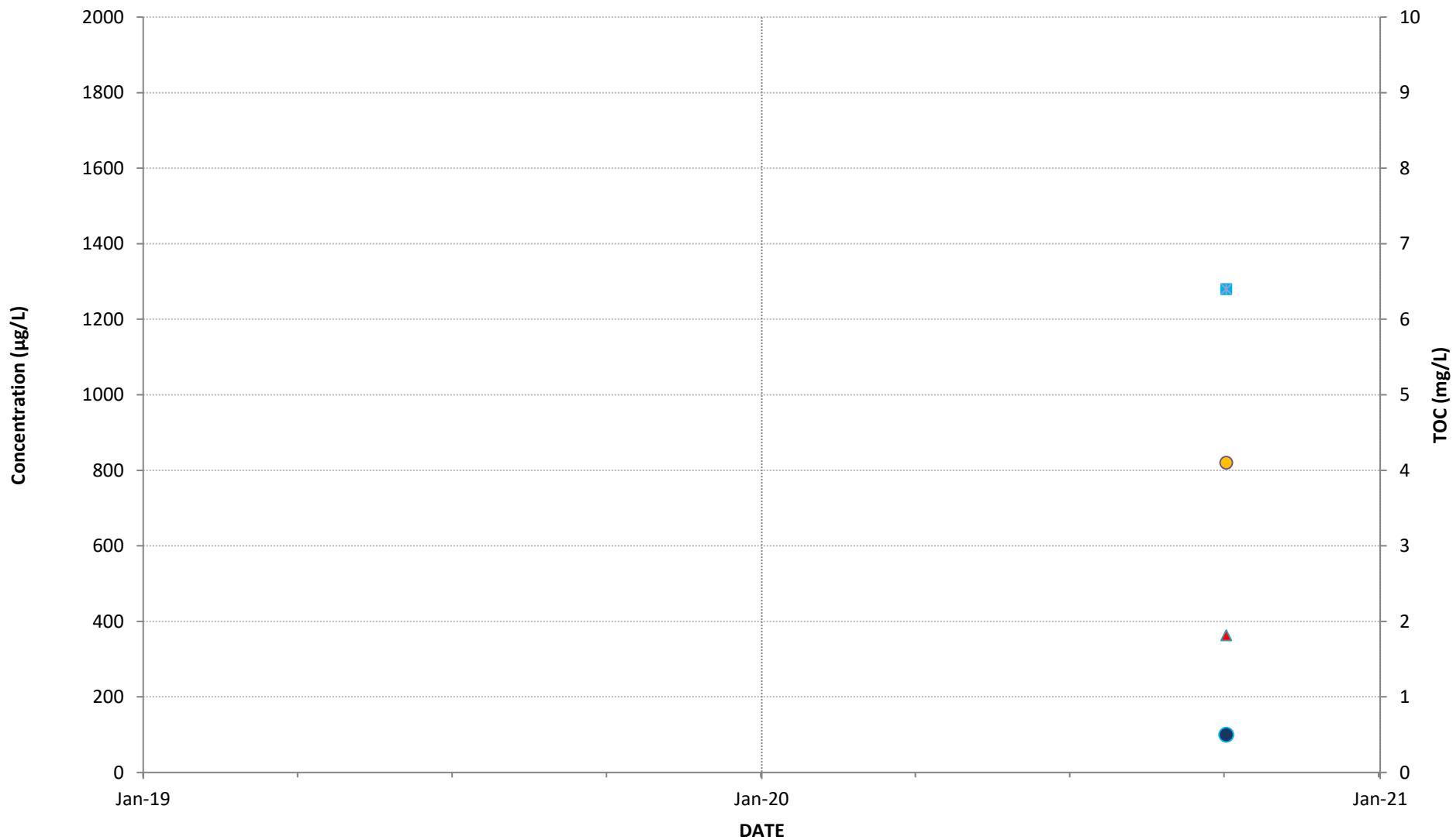
CONCENTRATIONS OF CHLOROETHENES MW-13D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC



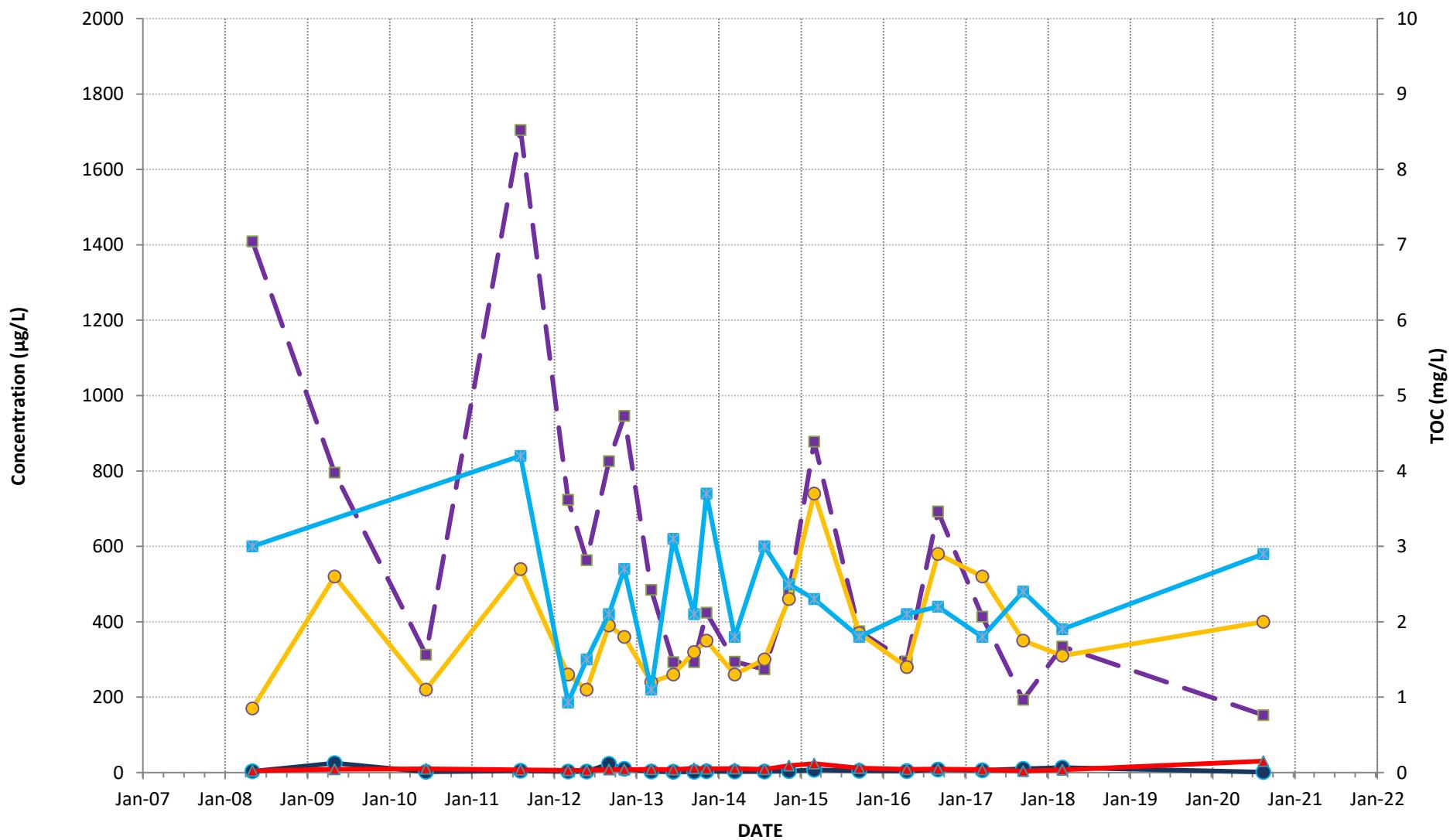
CONCENTRATIONS OF CHLOROETHENES MW-13S

TCE Total DCE Vinyl Chloride Ethene + Ethane TOC



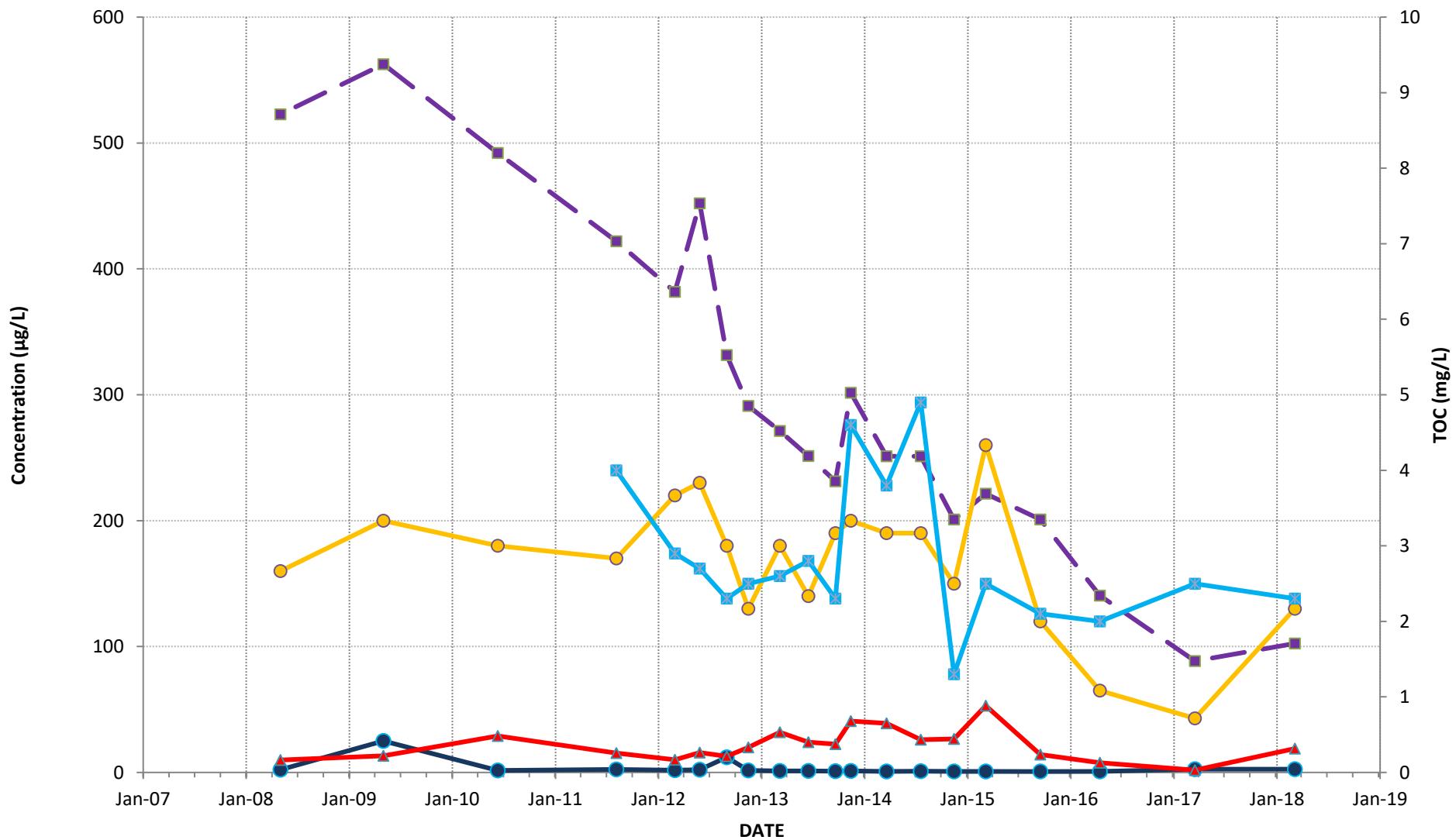
CONCENTRATIONS OF CHLOROETHENES
MW-15D

TCE	Total DCE	Vinyl Chloride	Ethene + Ethane	TOC
-----	-----------	----------------	-----------------	-----



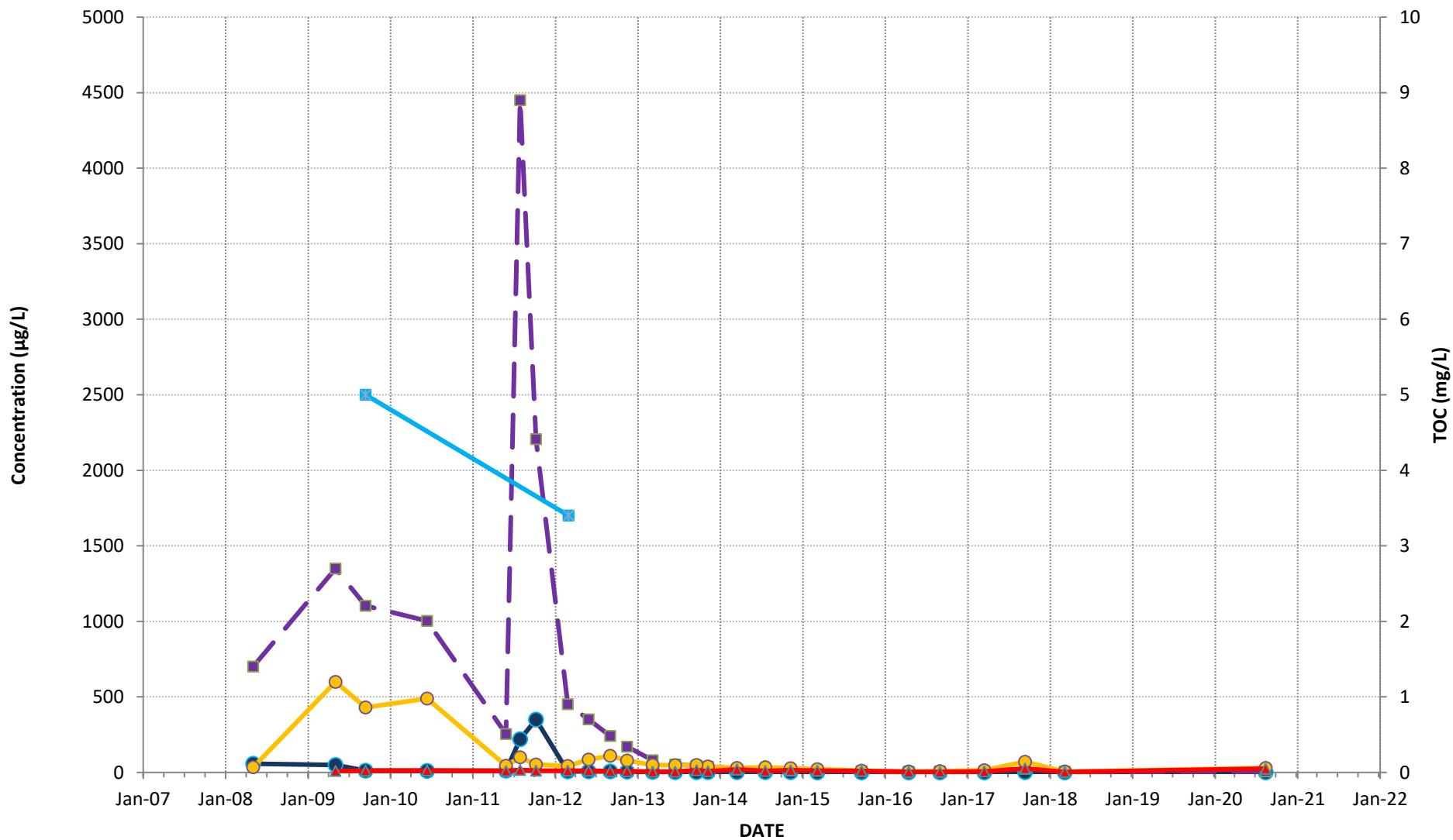
CONCENTRATIONS OF CHLOROETHENES MW-16D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



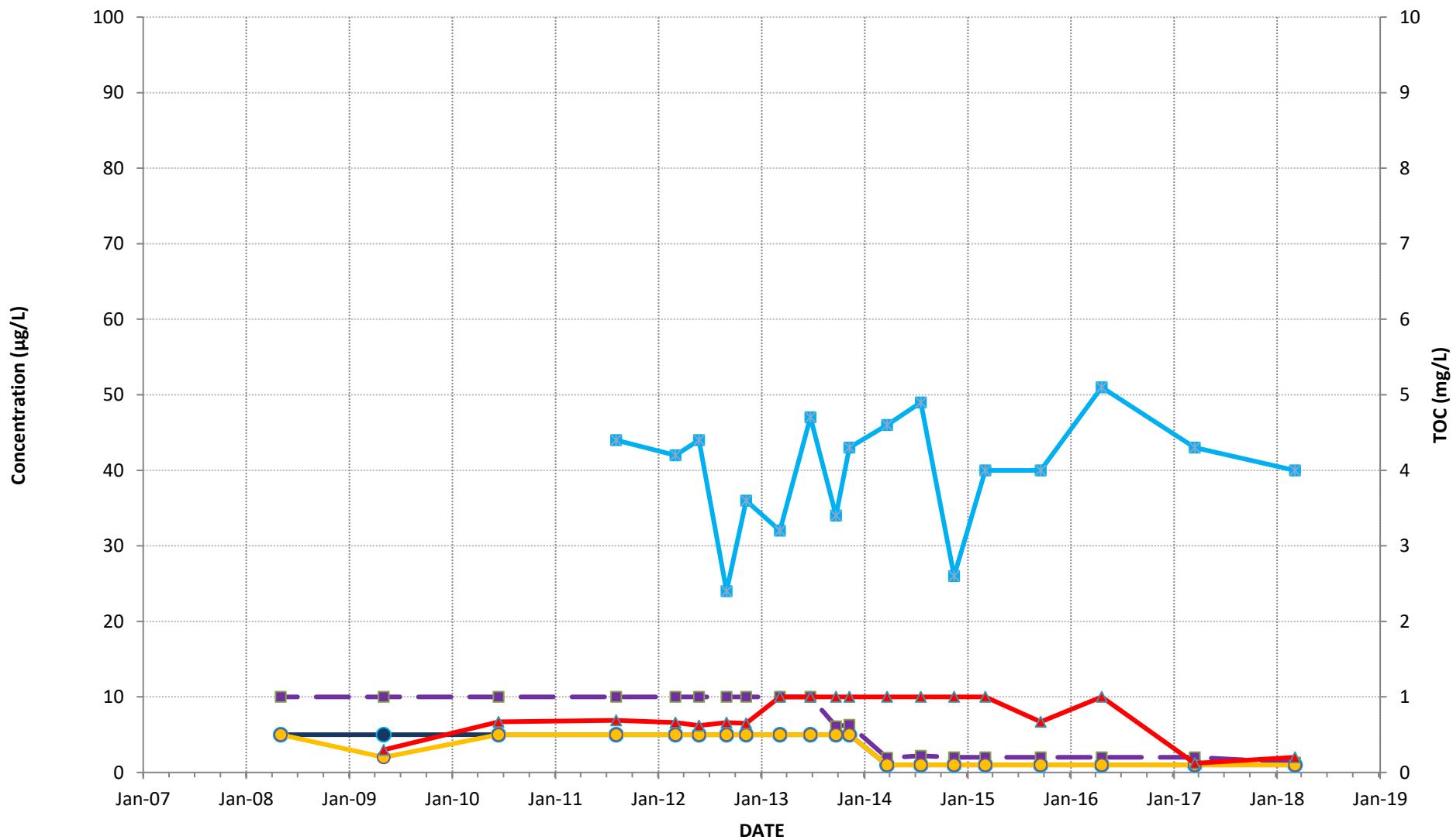
CONCENTRATIONS OF CHLOROETHENES MW-17D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC



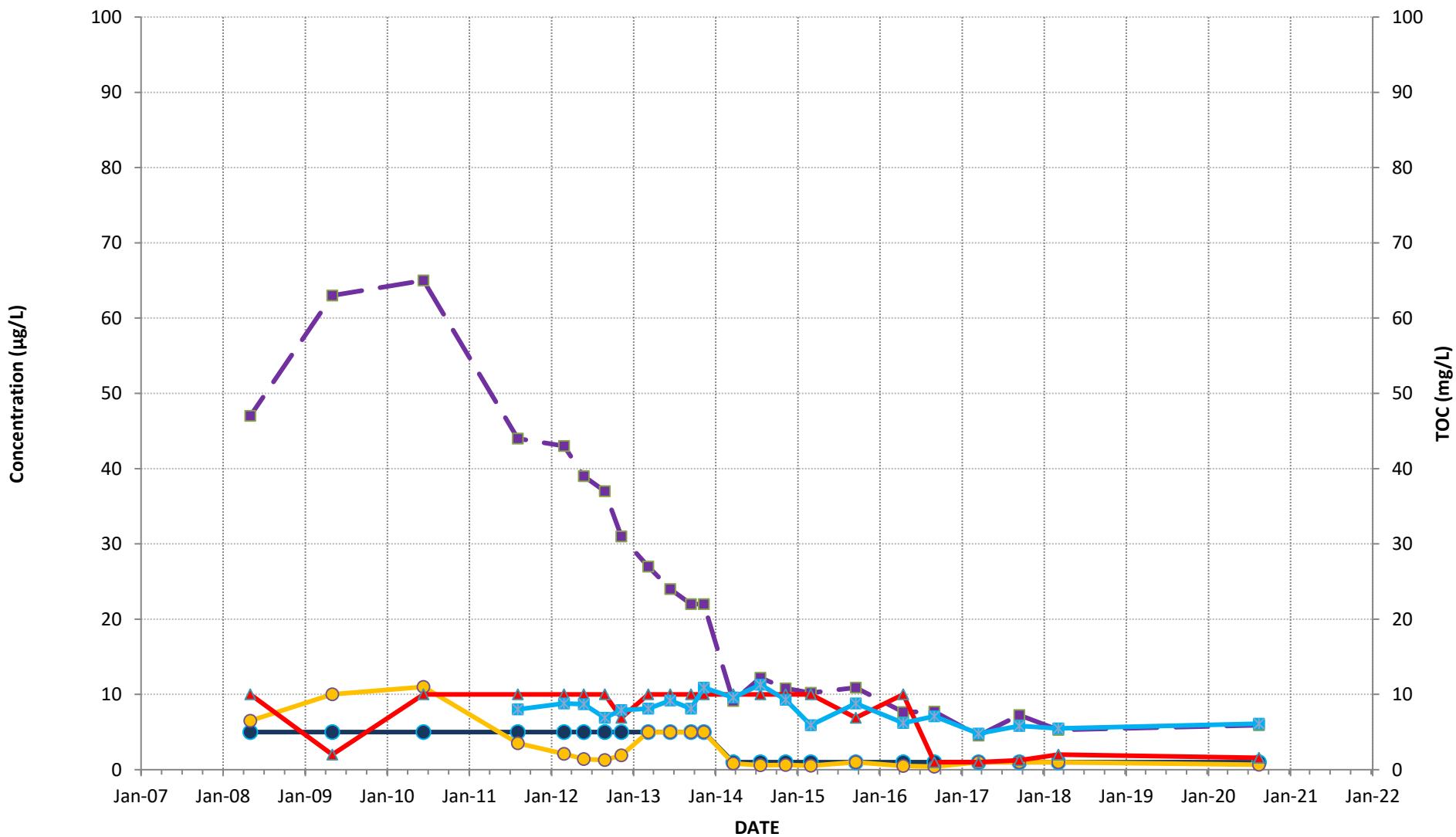
CONCENTRATIONS OF CHLOROETHENES MW-18D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



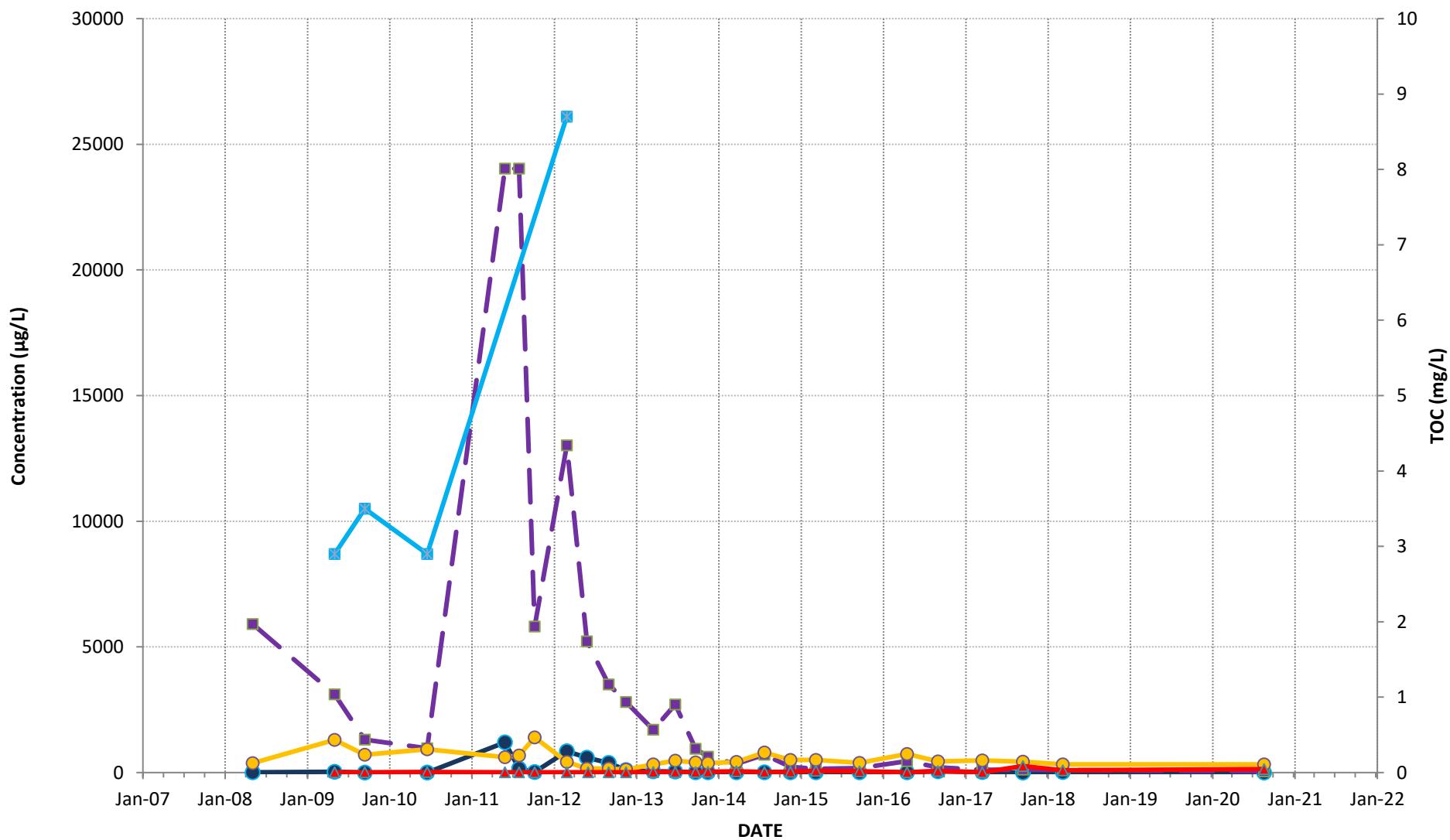
CONCENTRATIONS OF CHLOROETHENES MW-19D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



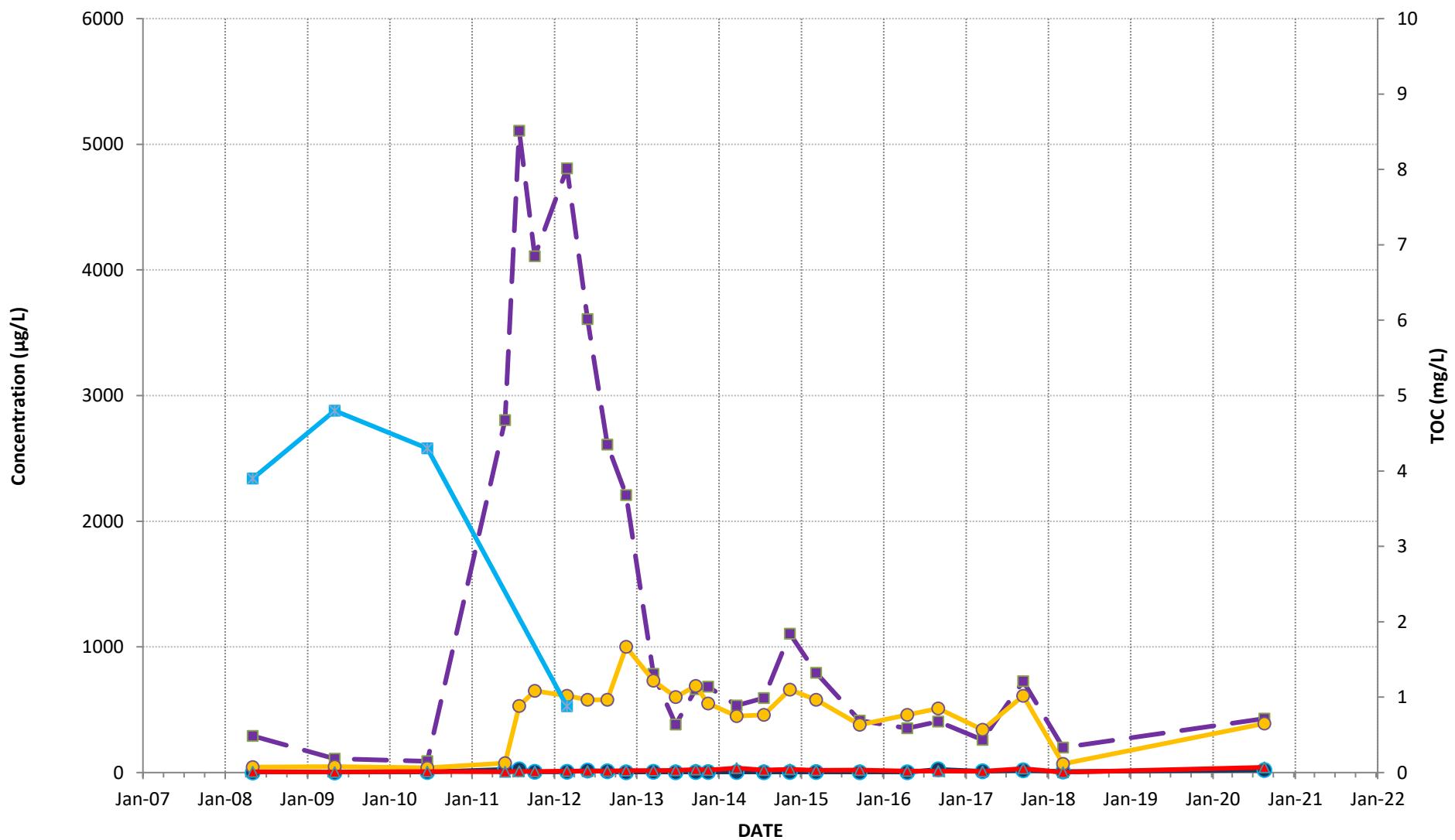
CONCENTRATIONS OF CHLOROETHENES MW-20D

● TCE ■ Total DCE ○ Vinyl Chloride ▲ Ethene + Ethane ■ TOC



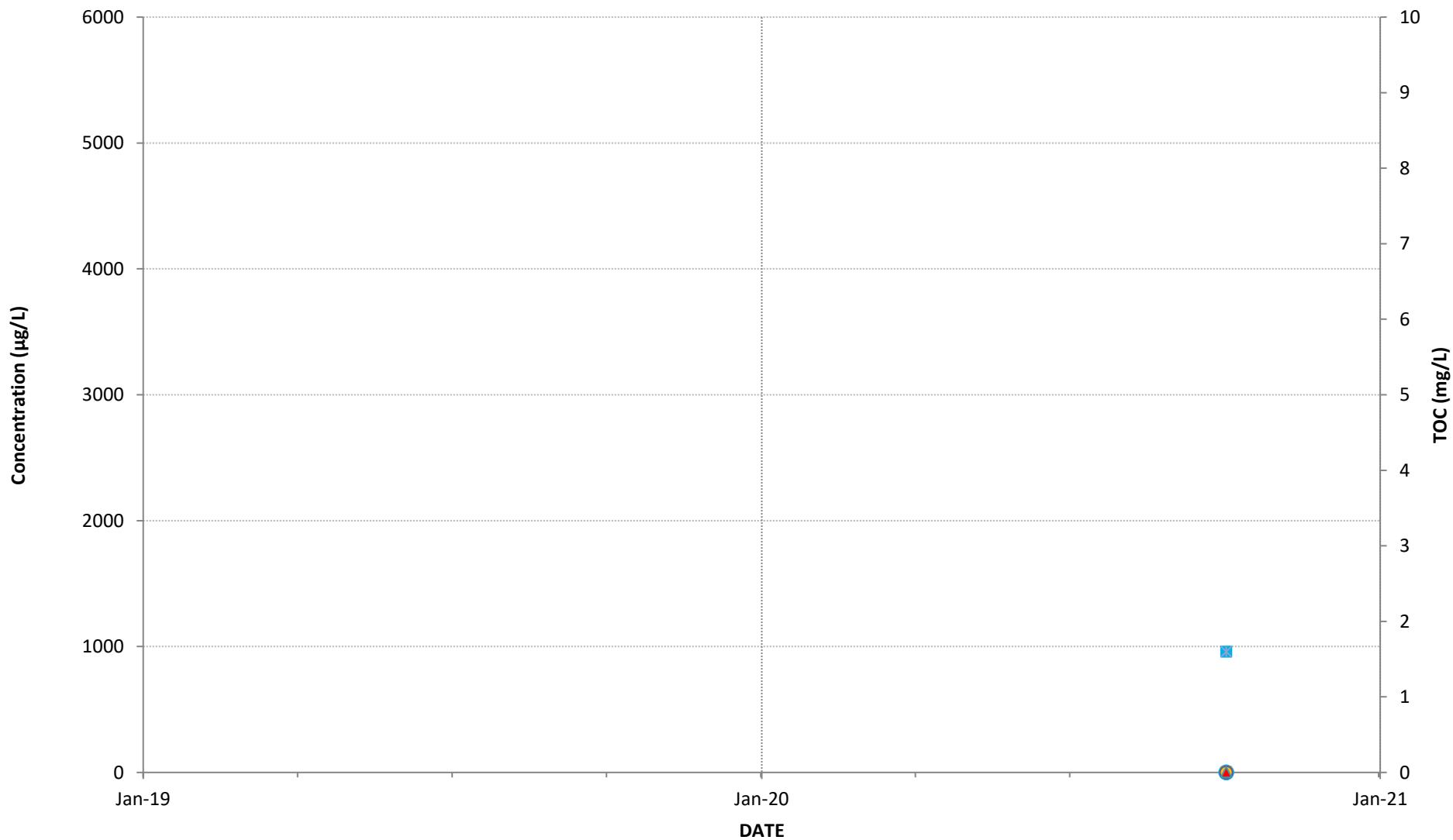
CONCENTRATIONS OF CHLOROETHENES MW-21D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC



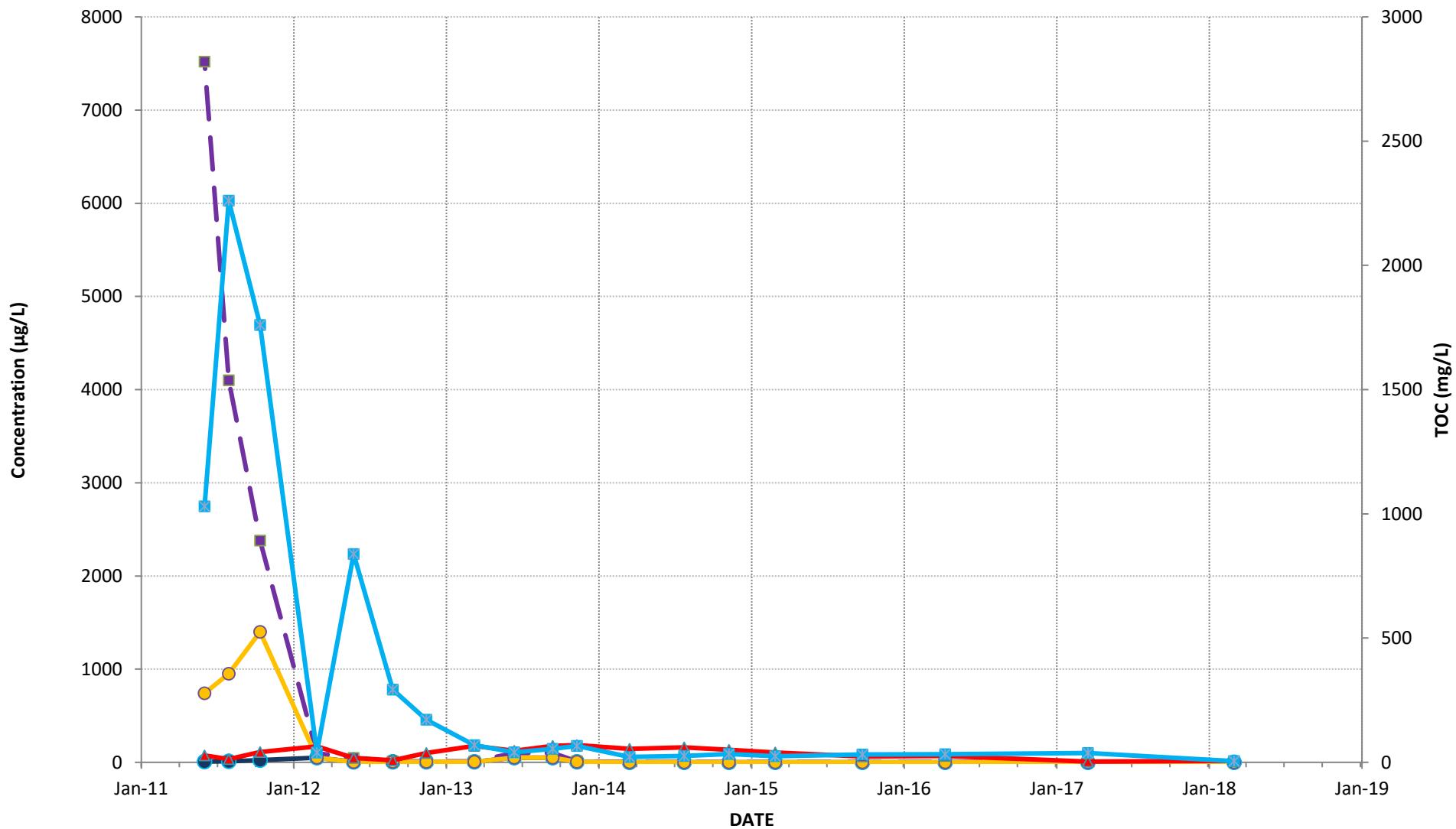
CONCENTRATIONS OF CHLOROETHENES
MW-22D

TCE Total DCE Vinyl Chloride Ethene + Ethane TOC



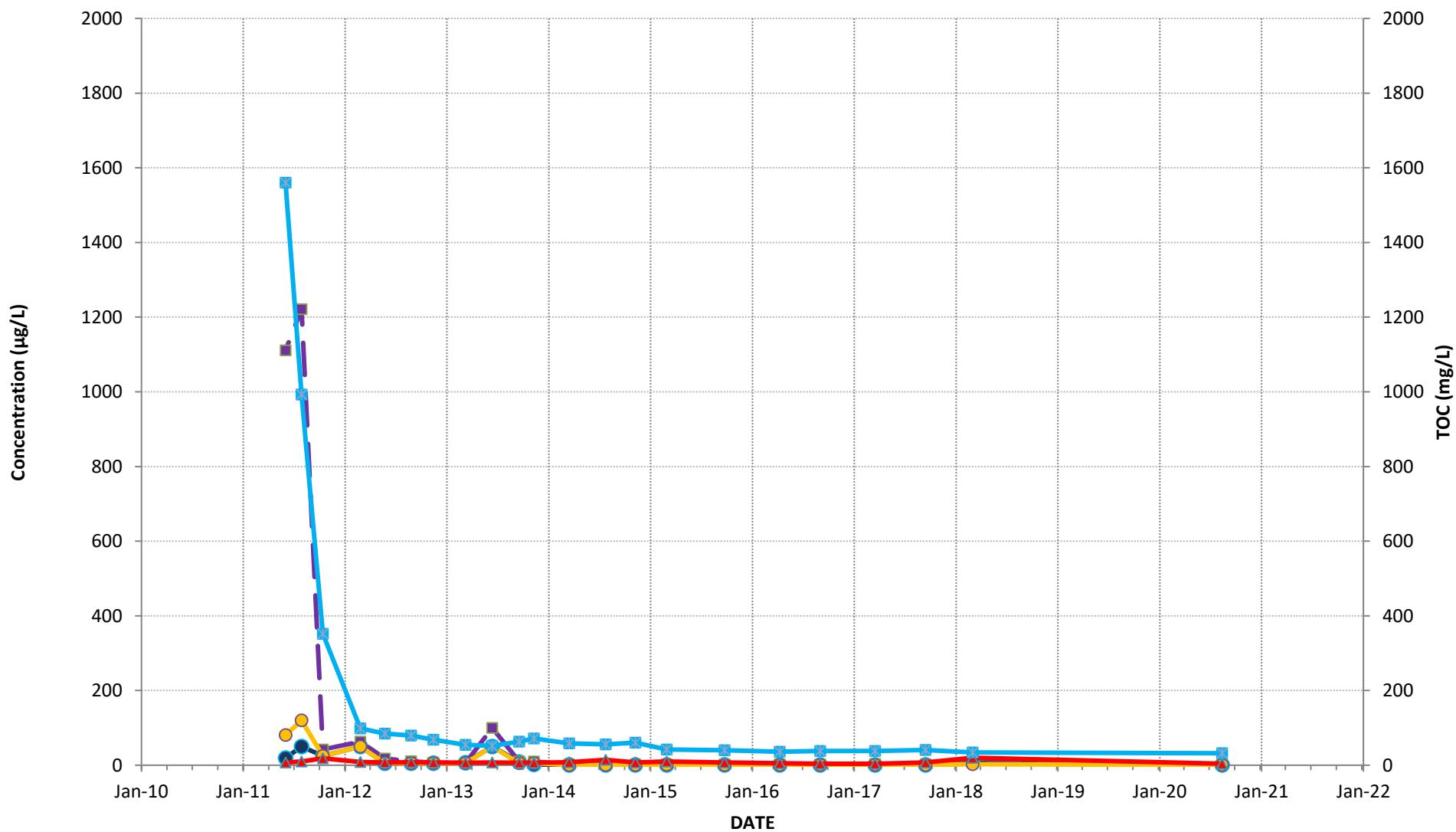
CONCENTRATIONS OF CHLOROETHENES OR- 3SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC



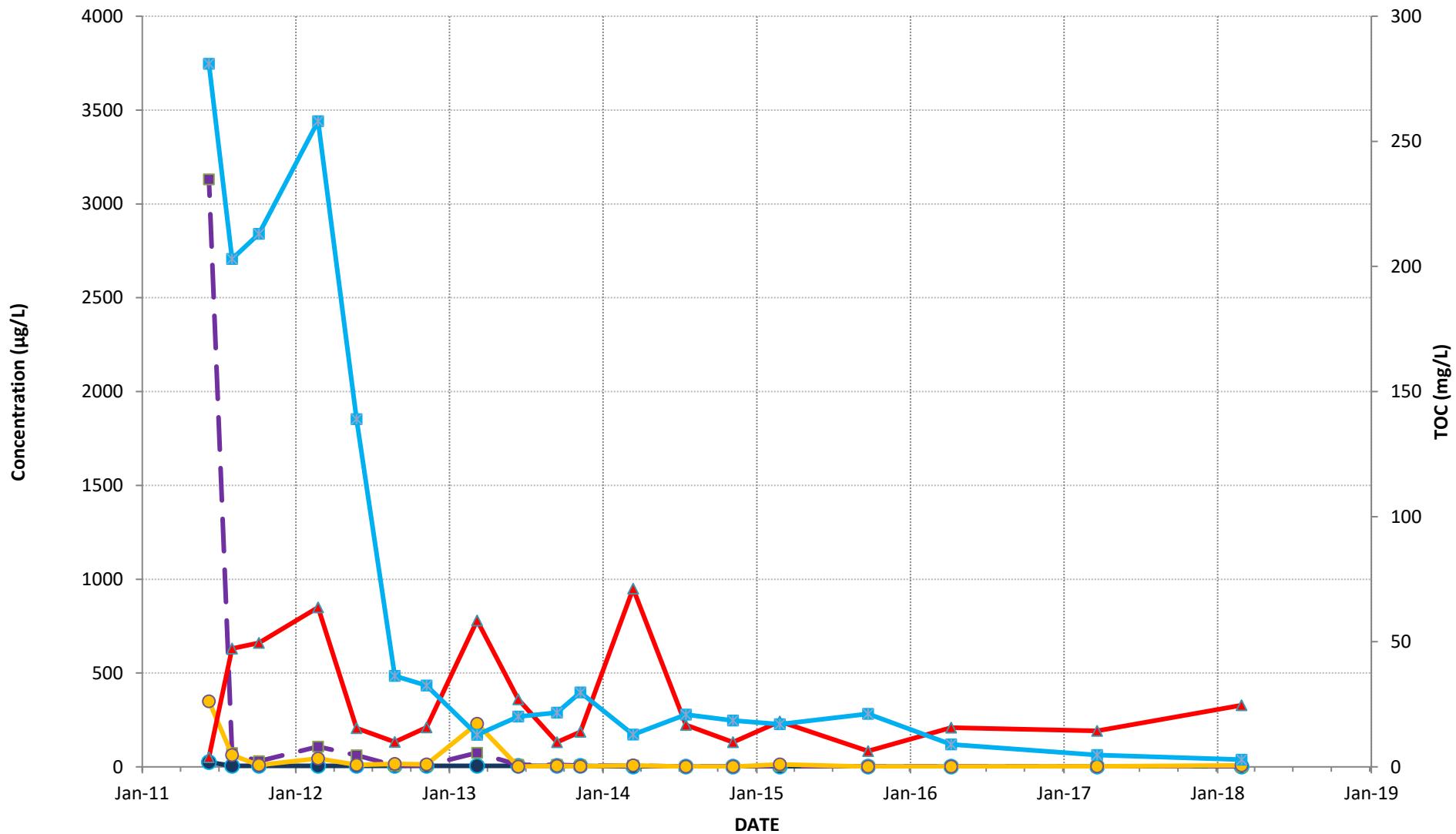
CONCENTRATIONS OF CHLOROETHENES OR- 4SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC



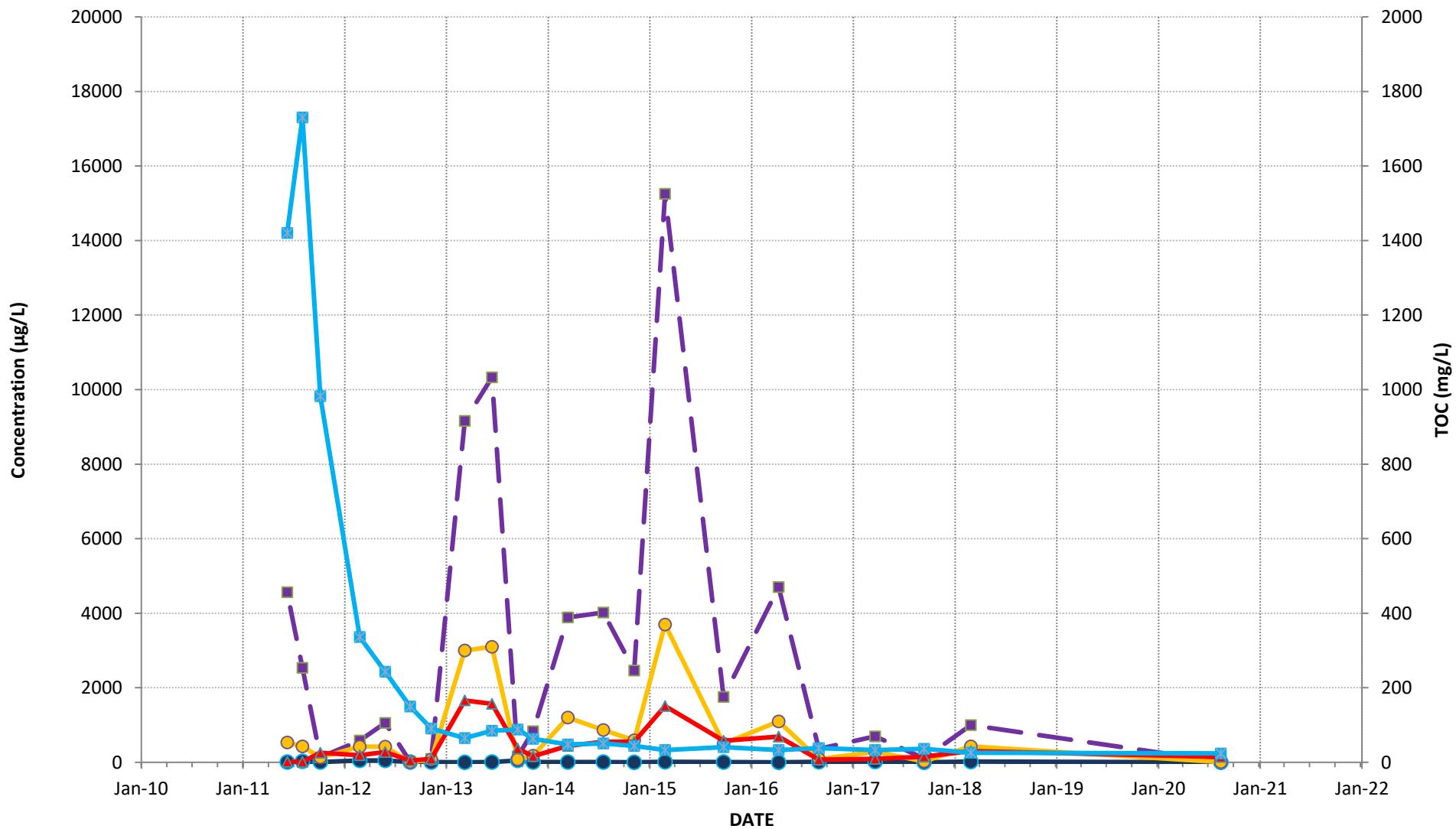
CONCENTRATIONS OF CHLOROETHENES OR- 5SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



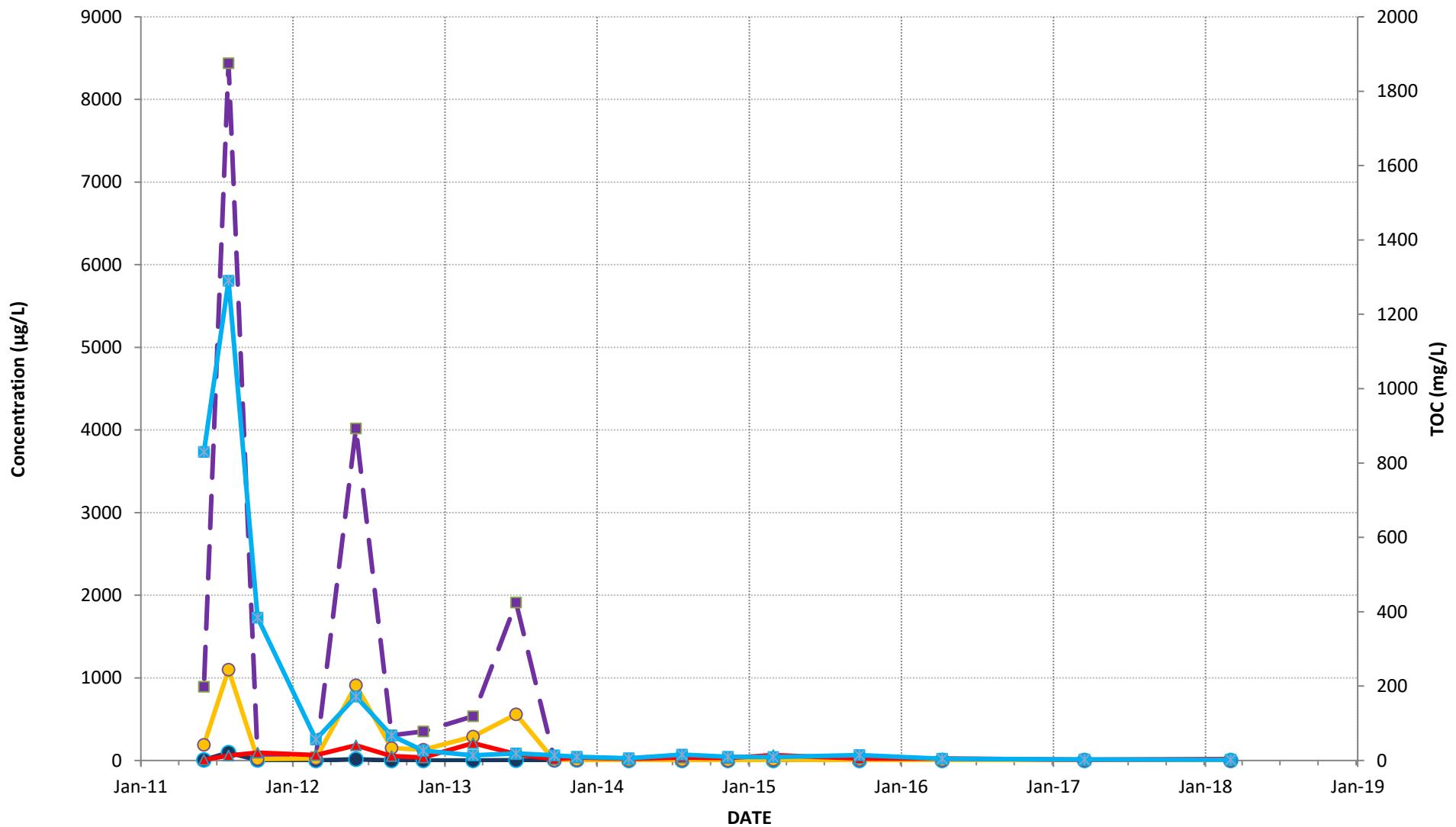
CONCENTRATIONS OF CHLOROETHENES OR- 6SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC

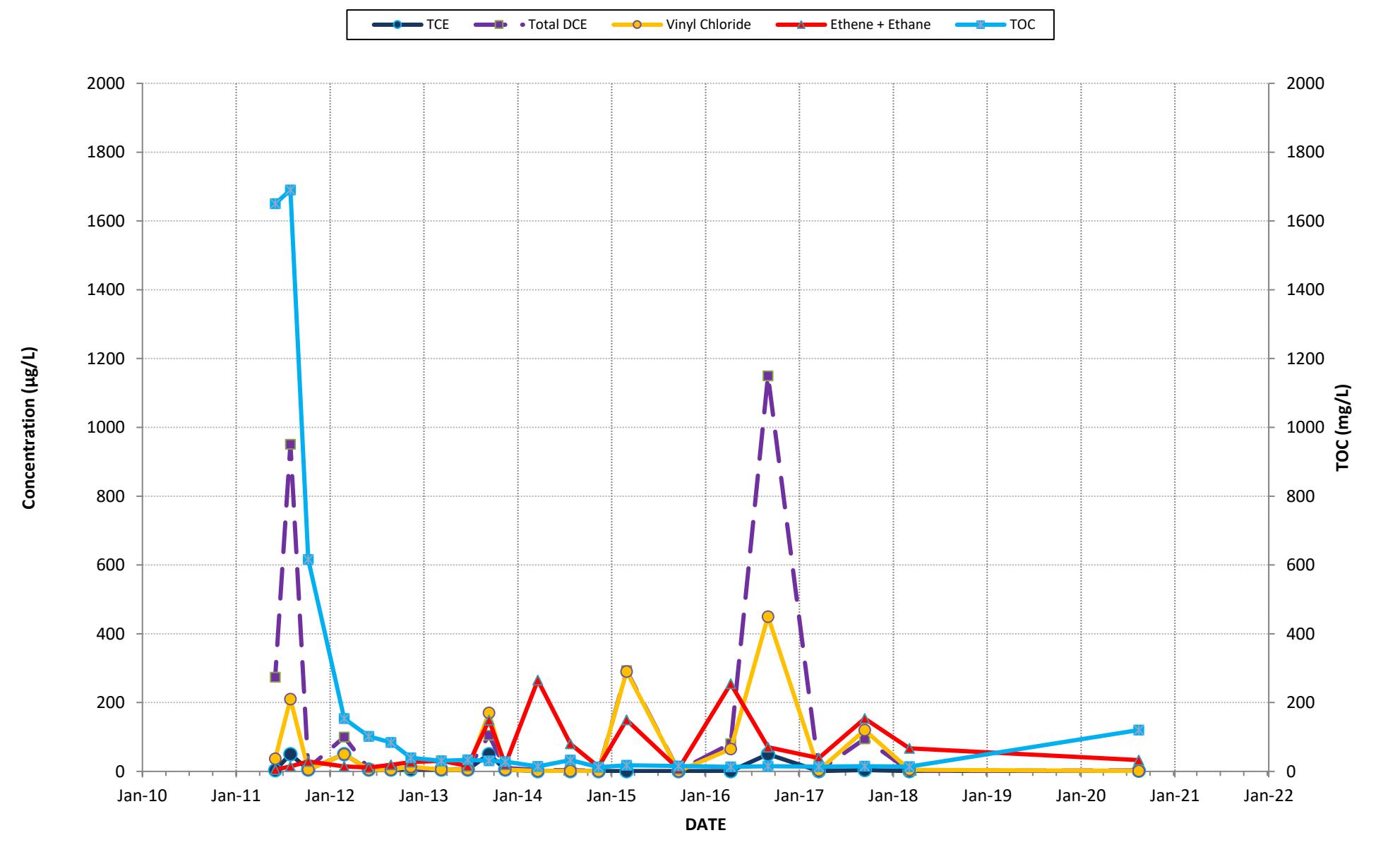


CONCENTRATIONS OF CHLOROETHENES OR- 9SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC

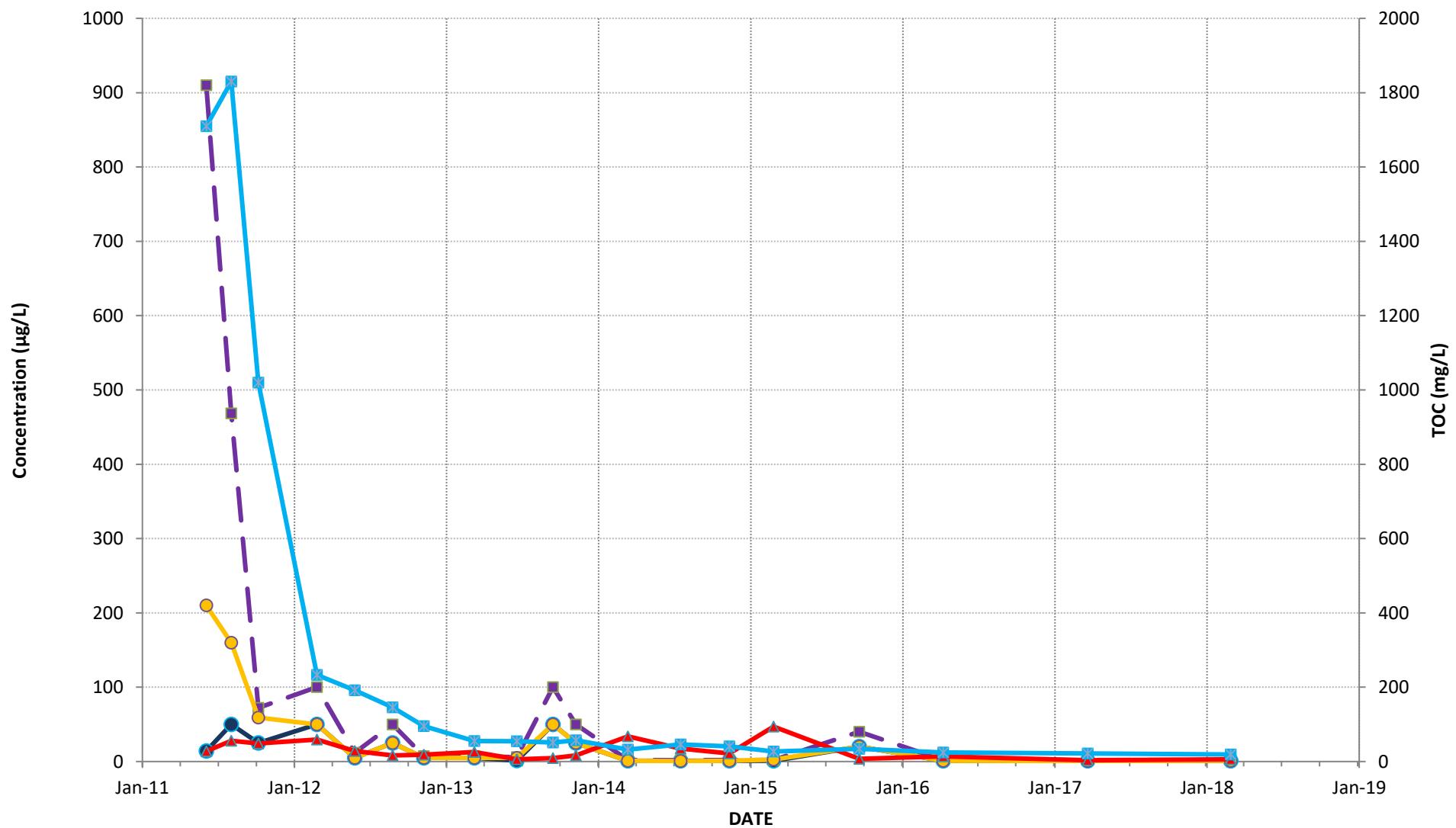


CONCENTRATIONS OF CHLOROETHENES OR-10SM



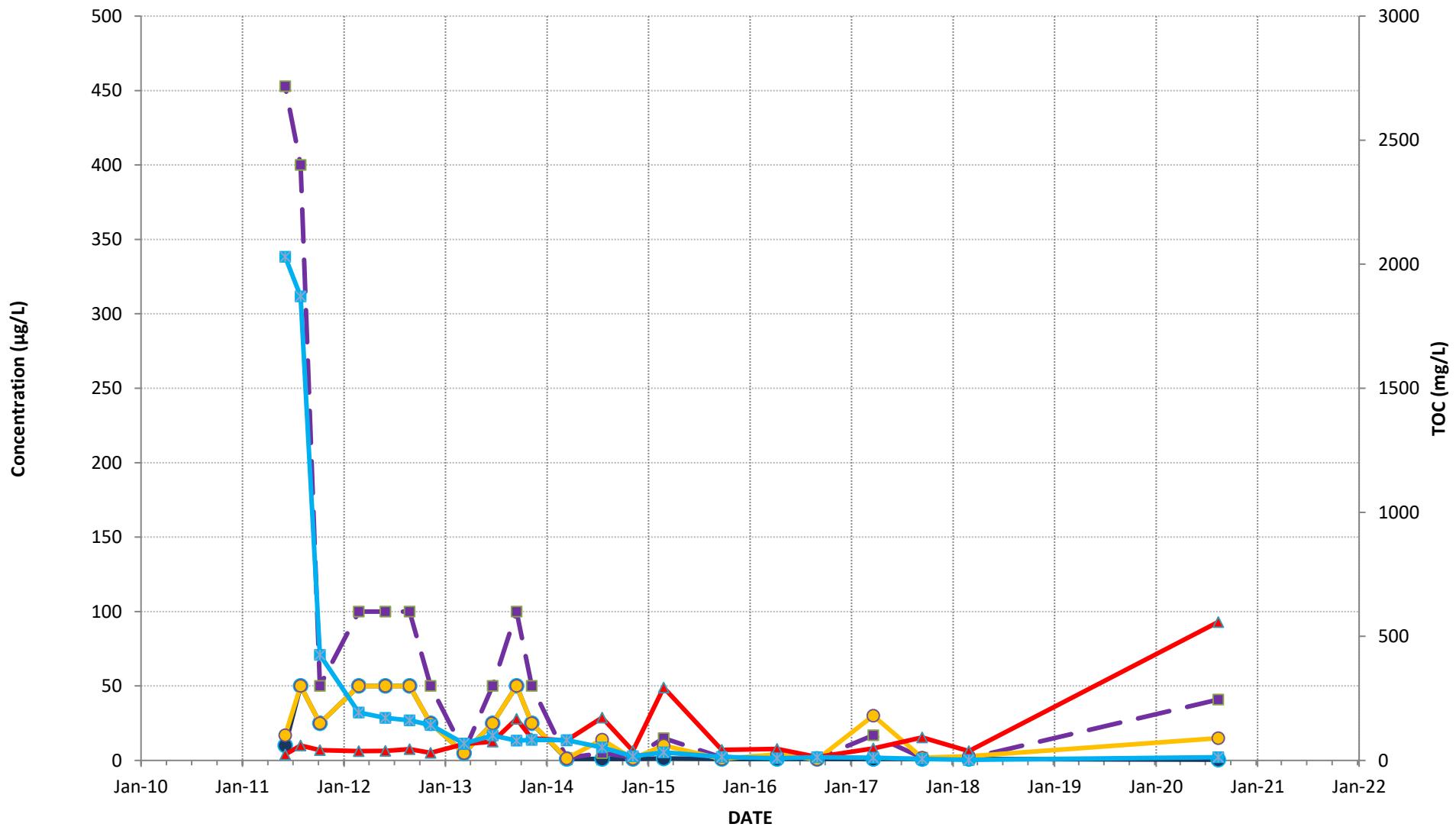
CONCENTRATIONS OF CHLOROETHENES OR-13SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



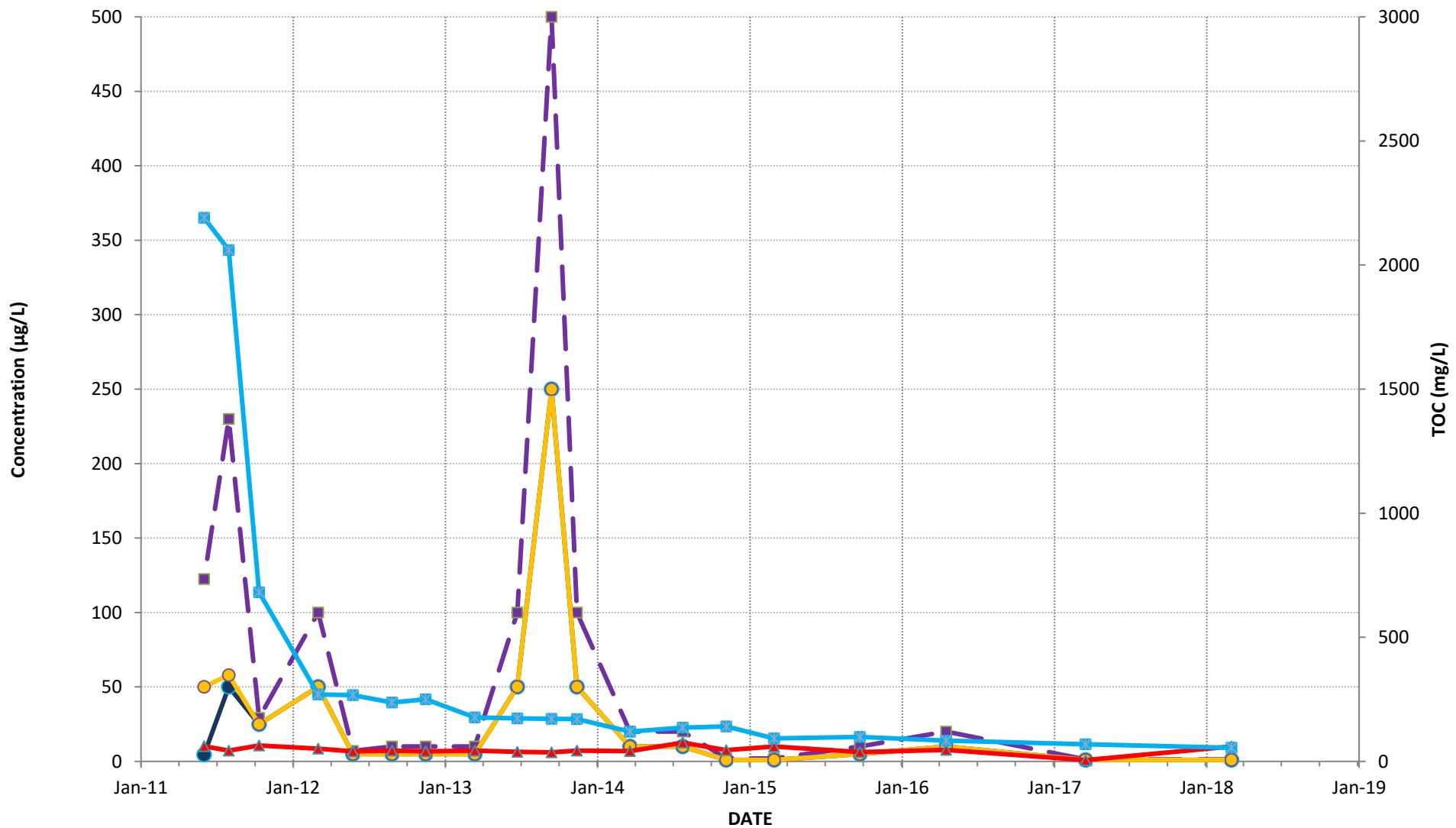
CONCENTRATIONS OF CHLOROETHENES OR-14SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



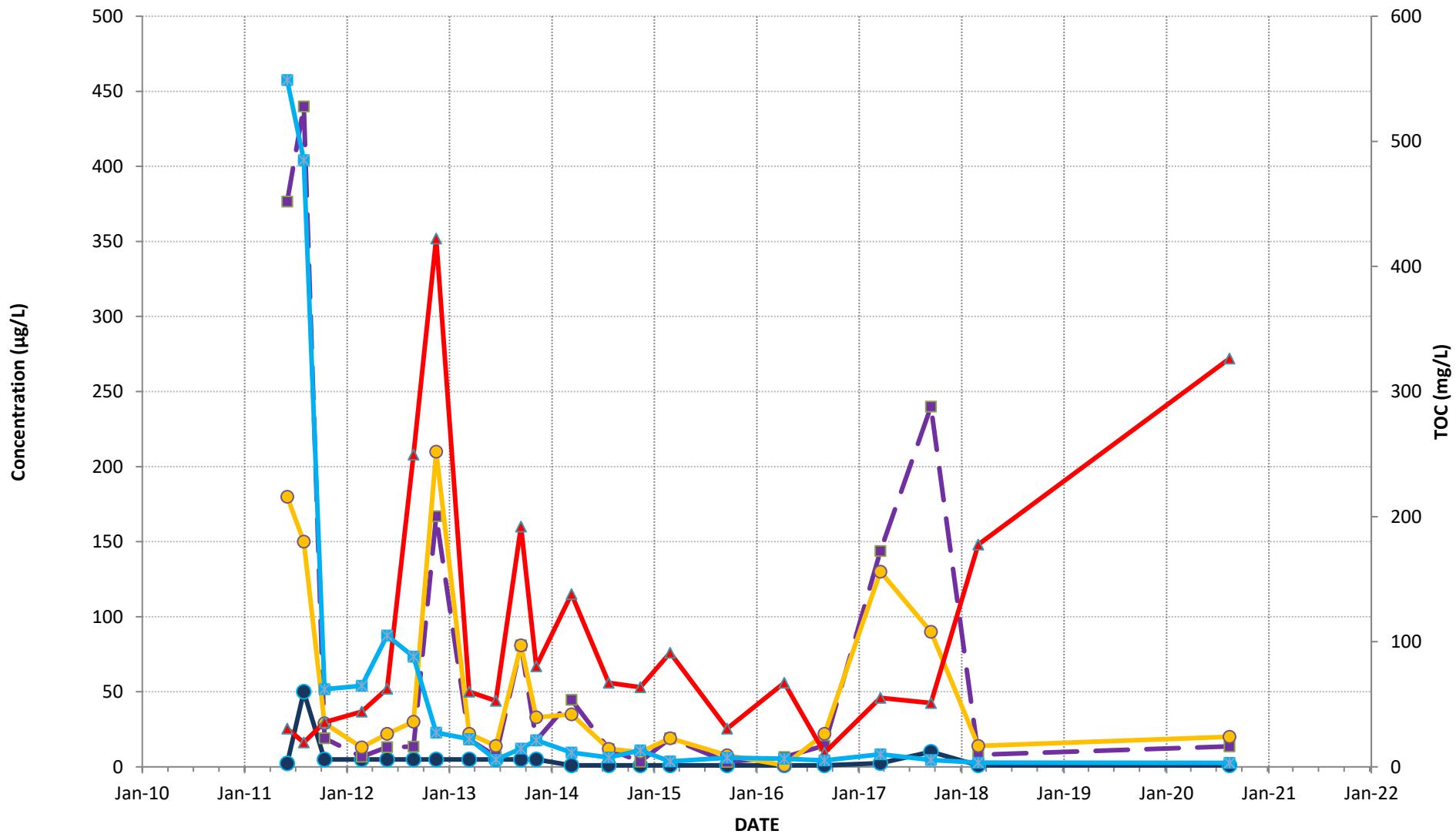
CONCENTRATIONS OF CHLOROETHENES OR-15SM

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC

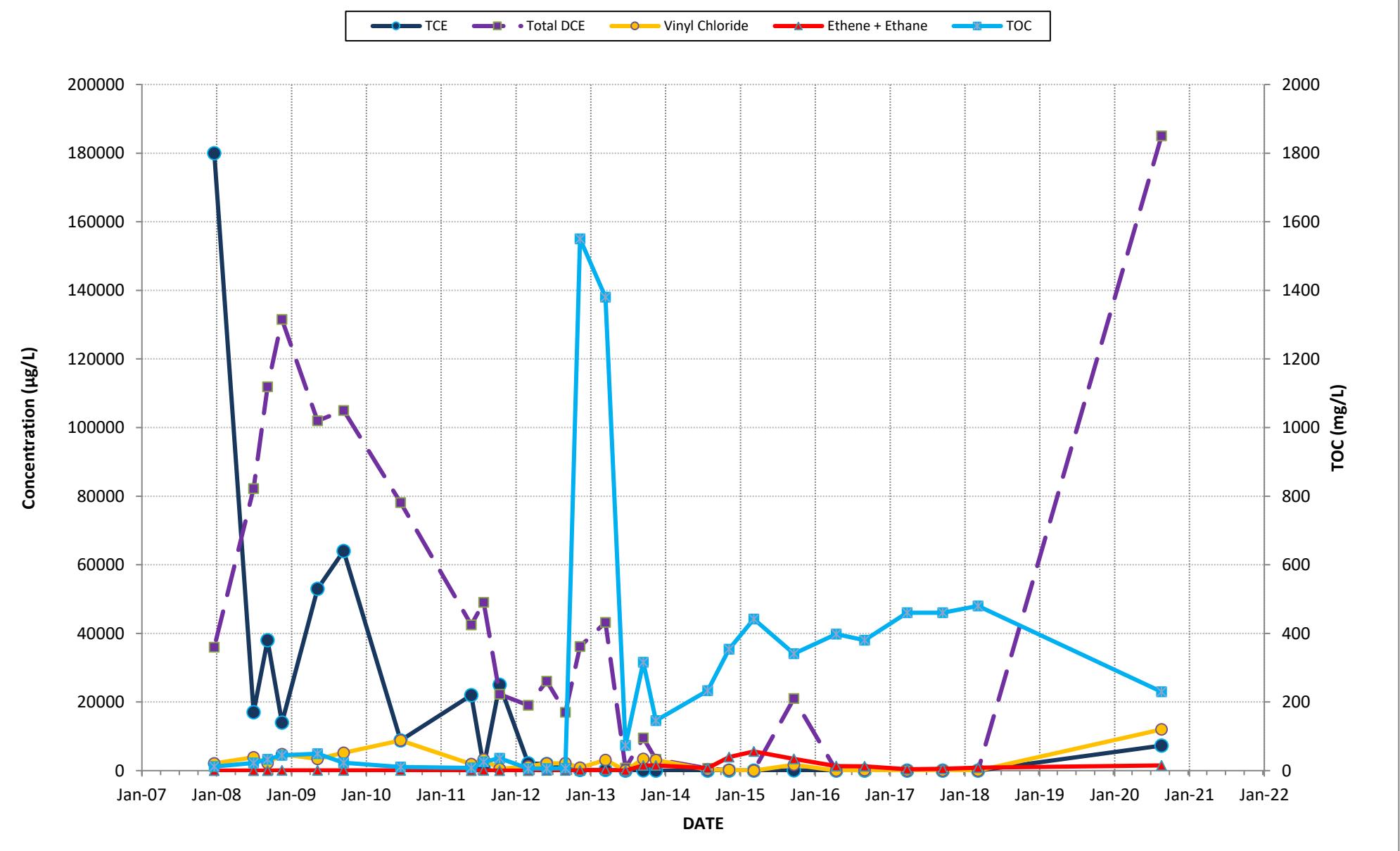


CONCENTRATIONS OF CHLOROETHENES OR-18SM

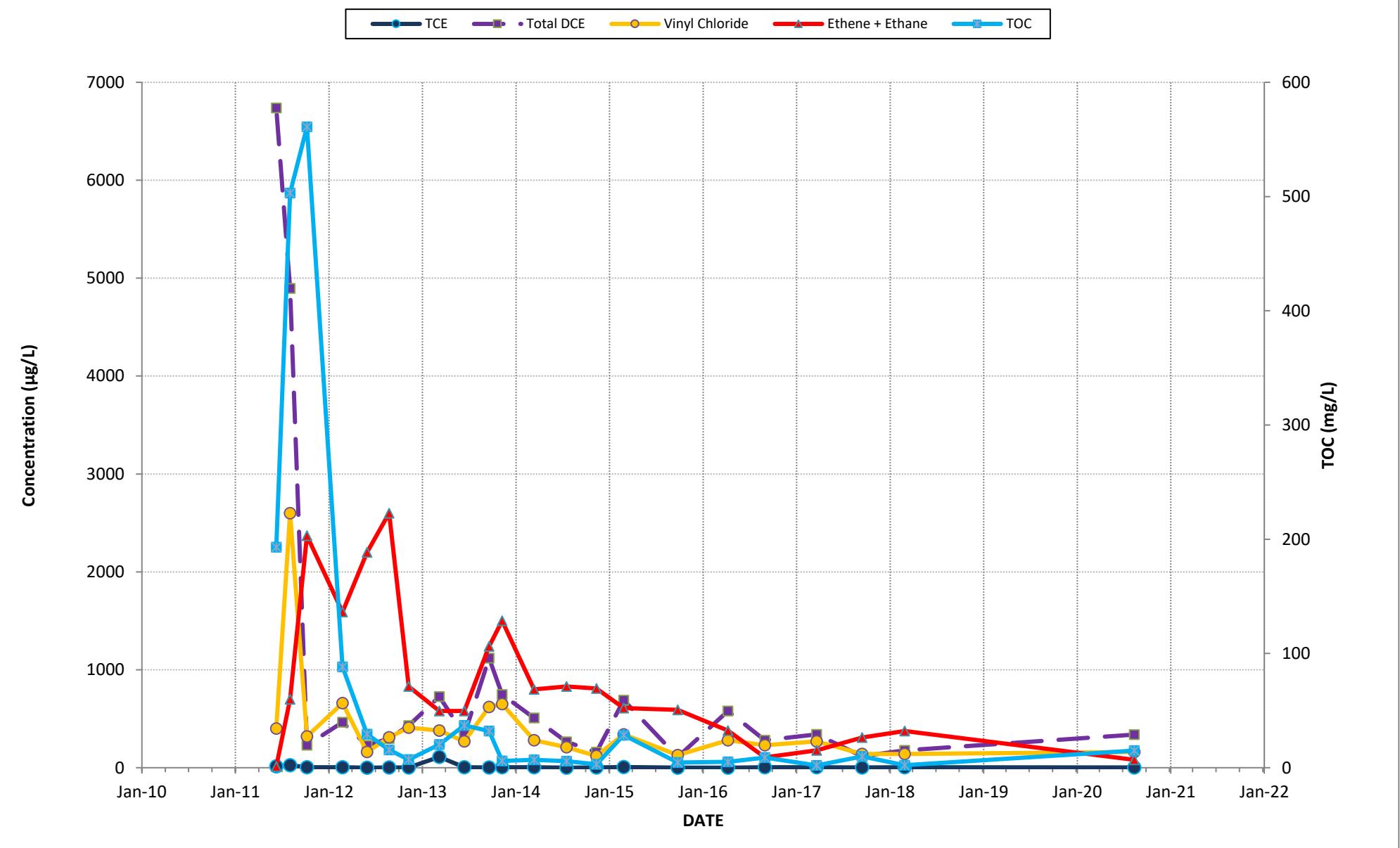
● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



CONCENTRATIONS OF CHLOROETHENES PMW- 1D

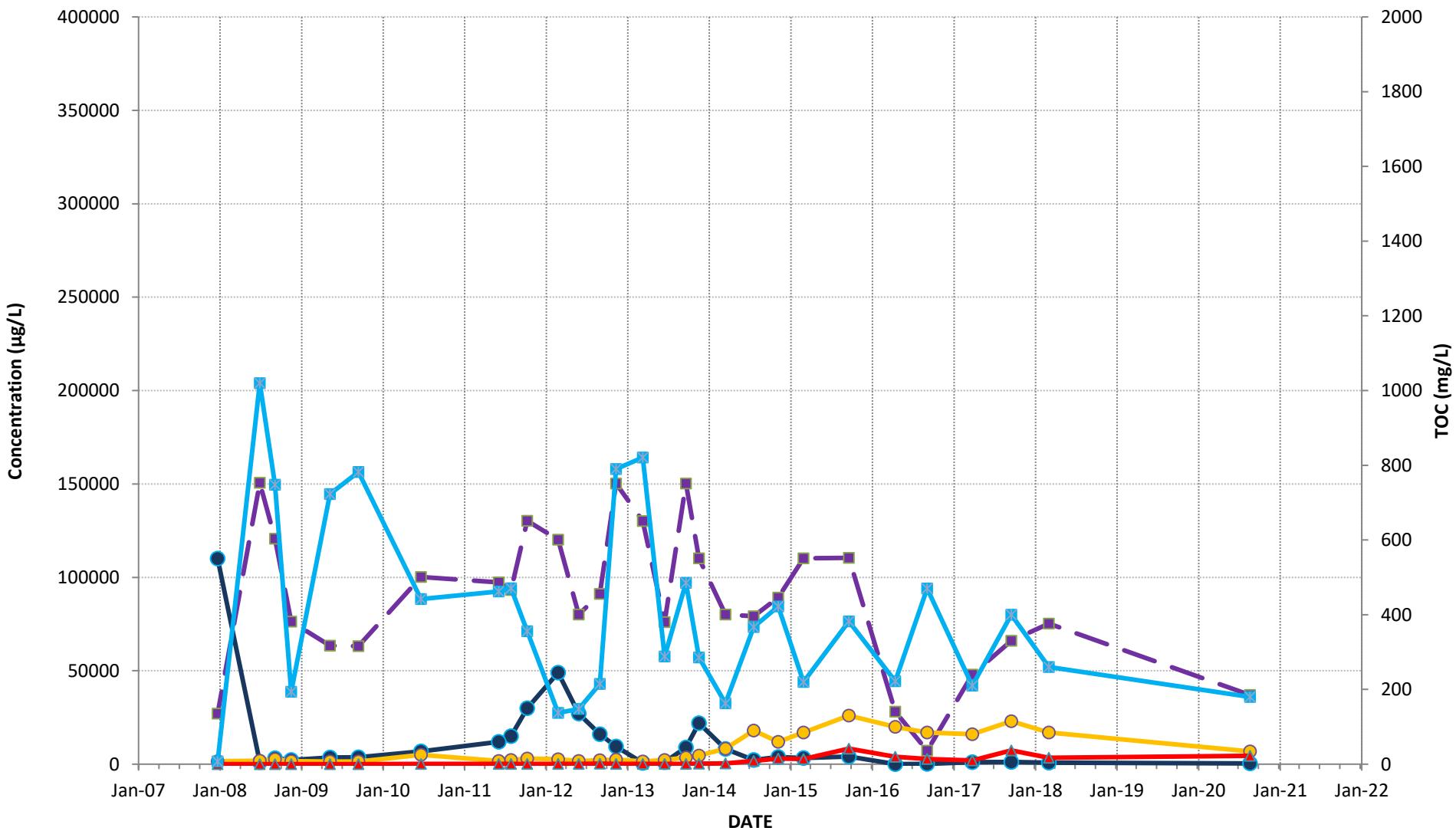


CONCENTRATIONS OF CHLOROETHENES PMW- 1S



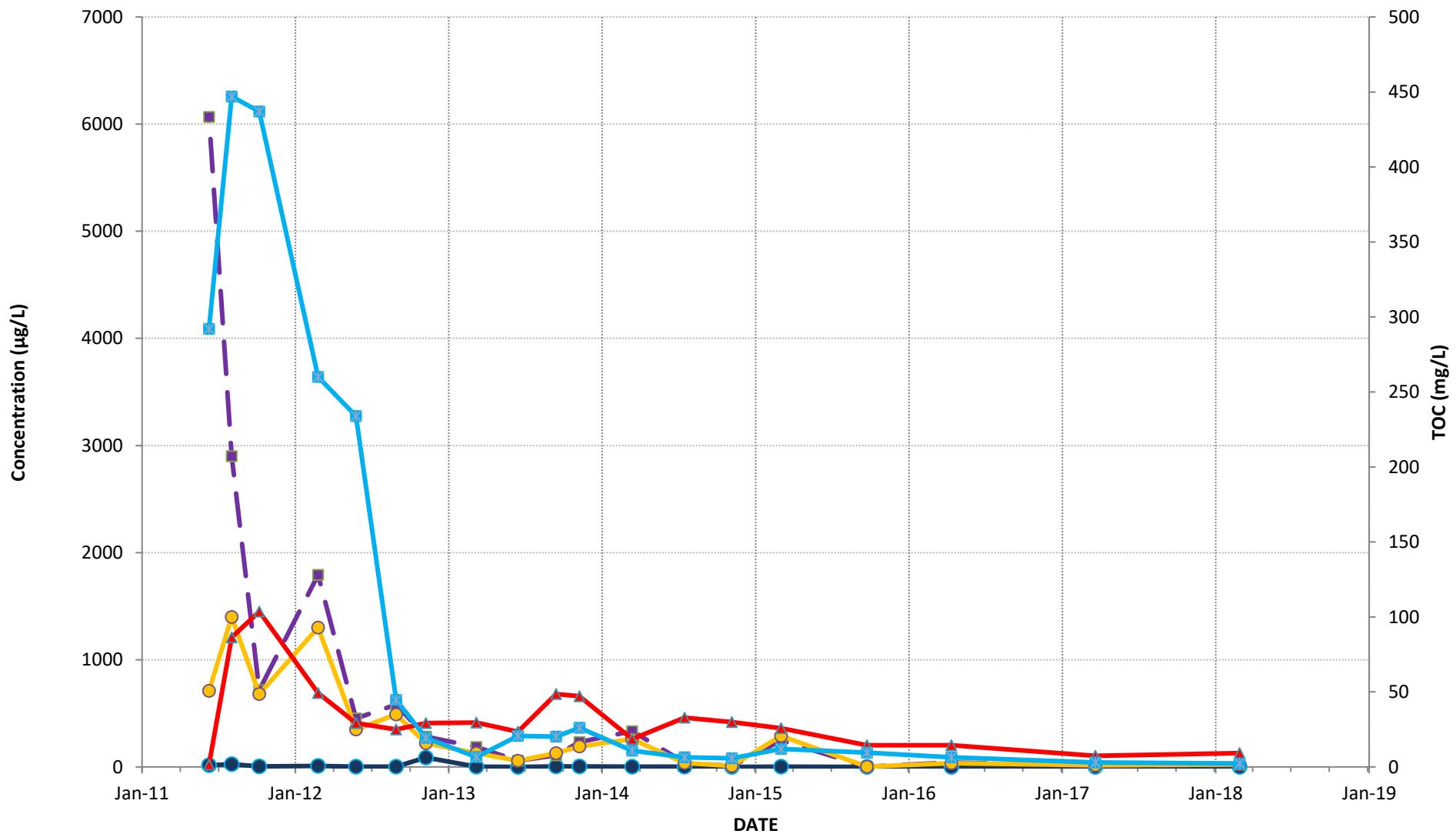
CONCENTRATIONS OF CHLOROETHENES PMW- 2D

● TCE
 ■ Total DCE
 ○ Vinyl Chloride
 △ Ethene + Ethane
 □ TOC



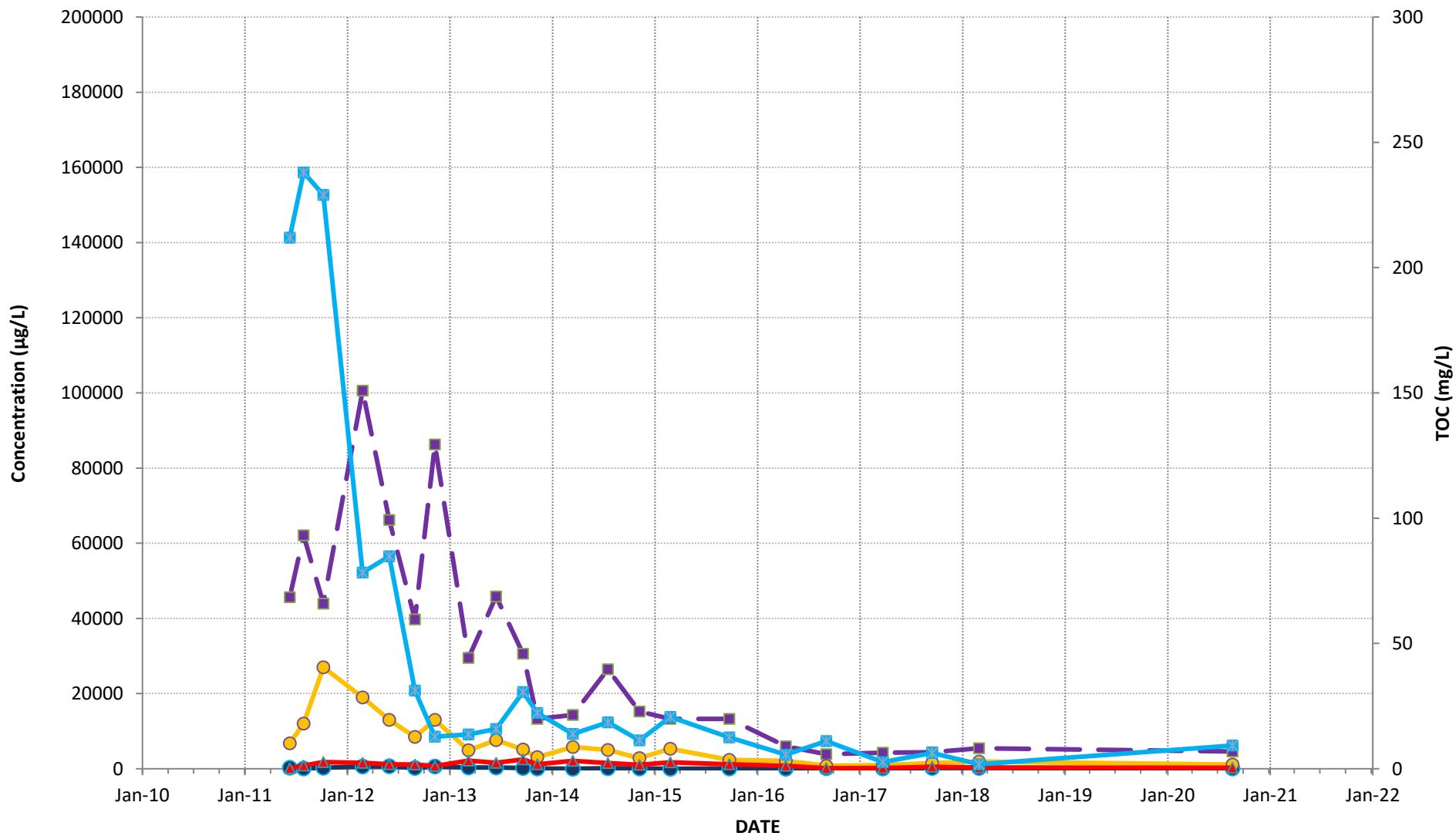
CONCENTRATIONS OF CHLOROETHENES PMW- 2S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



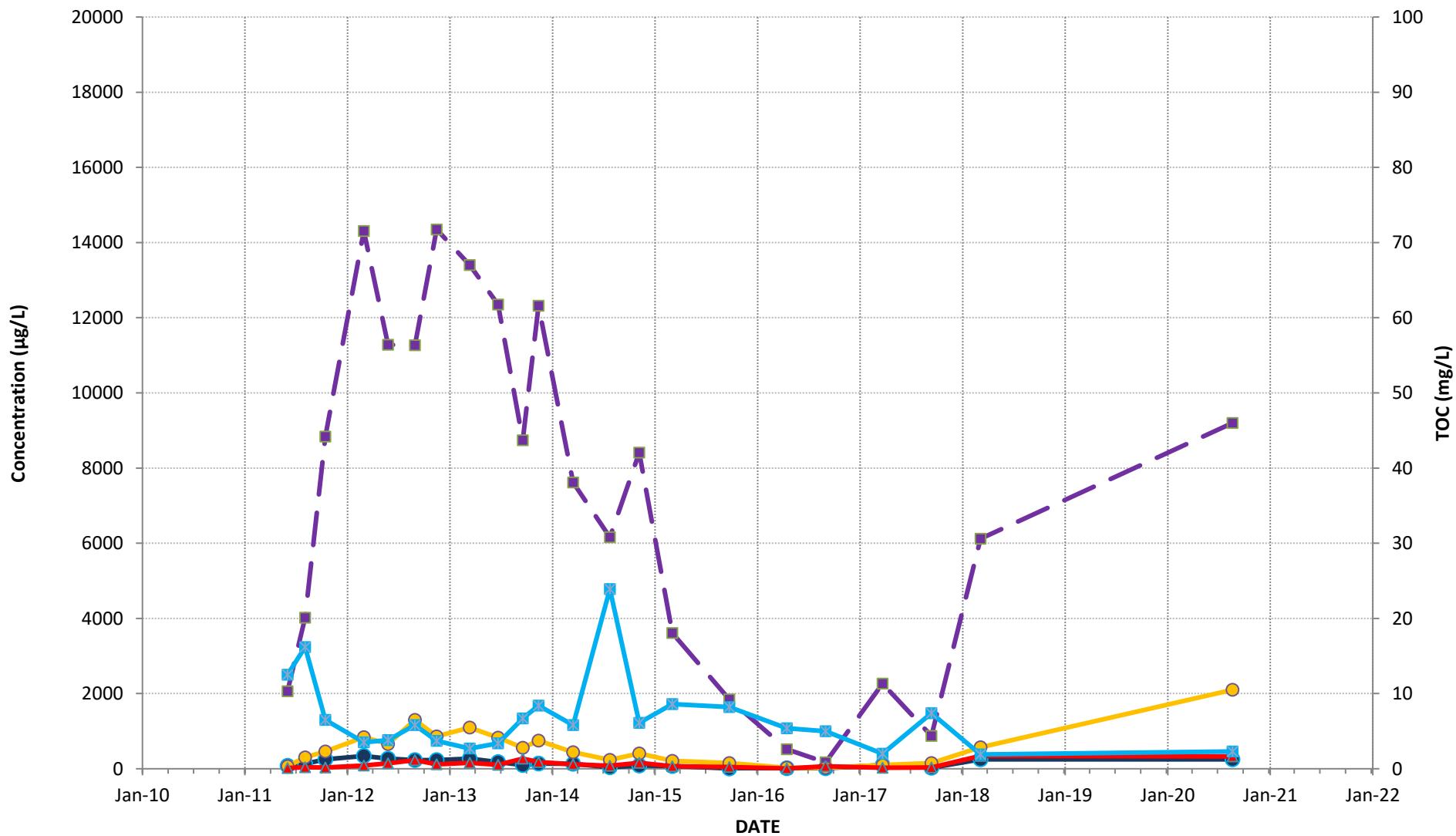
CONCENTRATIONS OF CHLOROETHENES PMW- 3S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



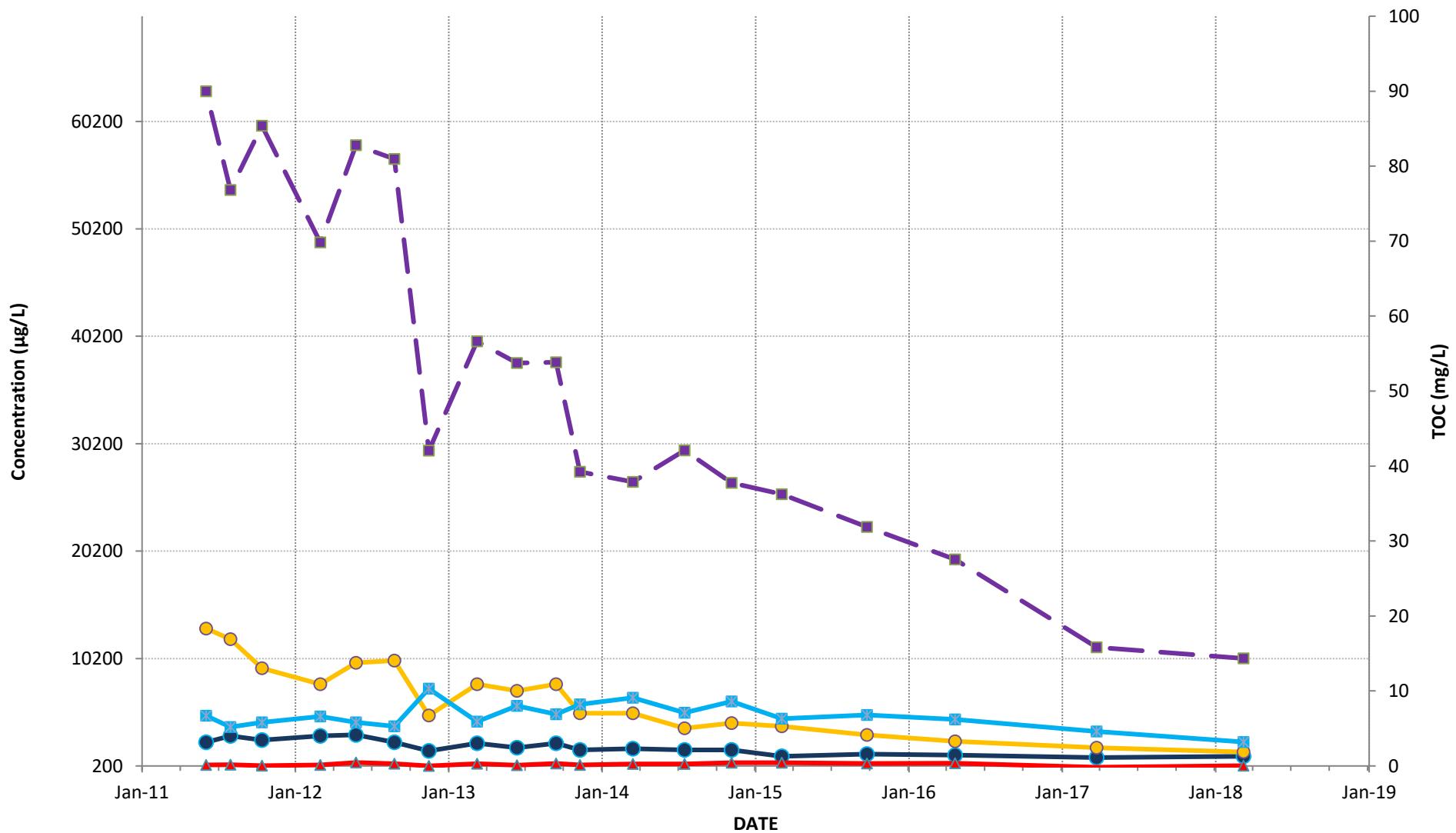
CONCENTRATIONS OF CHLOROETHENES PMW- 4S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



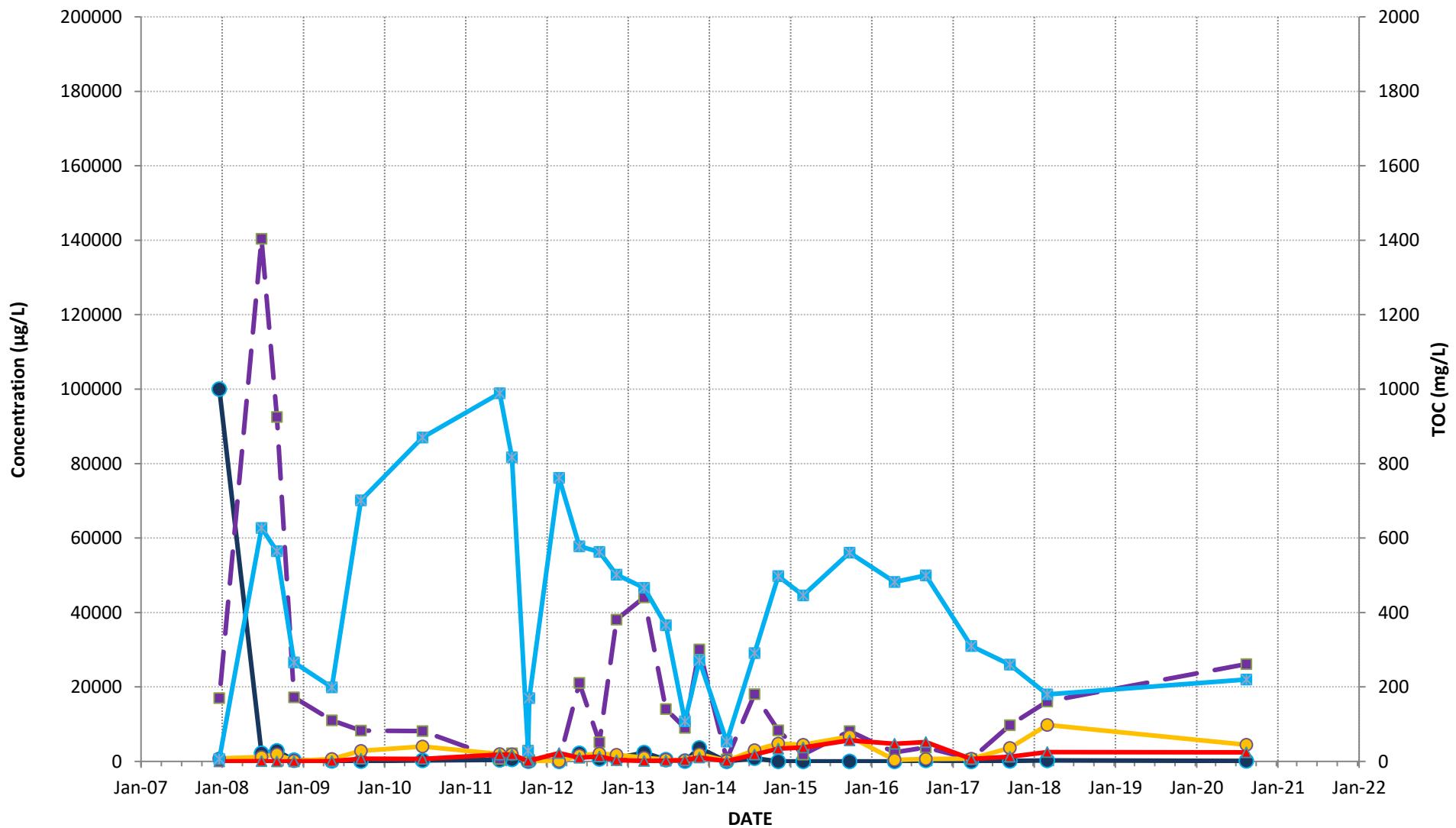
CONCENTRATIONS OF CHLOROETHENES PMW- 5S

● TCE ■ Total DCE ○ Vinyl Chloride ▲ Ethene + Ethane ✖ TOC



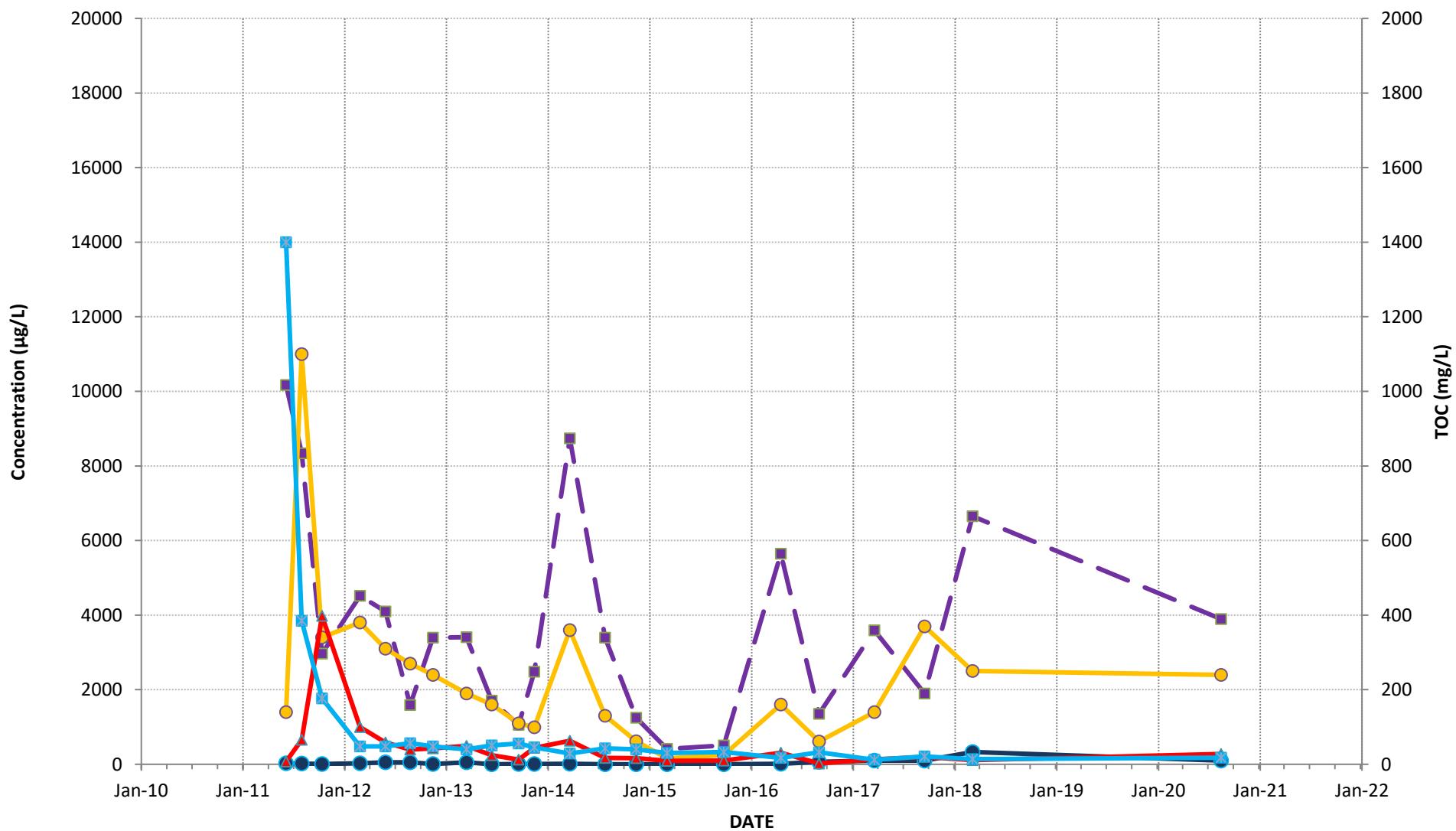
CONCENTRATIONS OF CHLOROETHENES PMW- 6D

● TCE
 ● Total DCE
 ○ Vinyl Chloride
 ▲ Ethene + Ethane
 ■ TOC



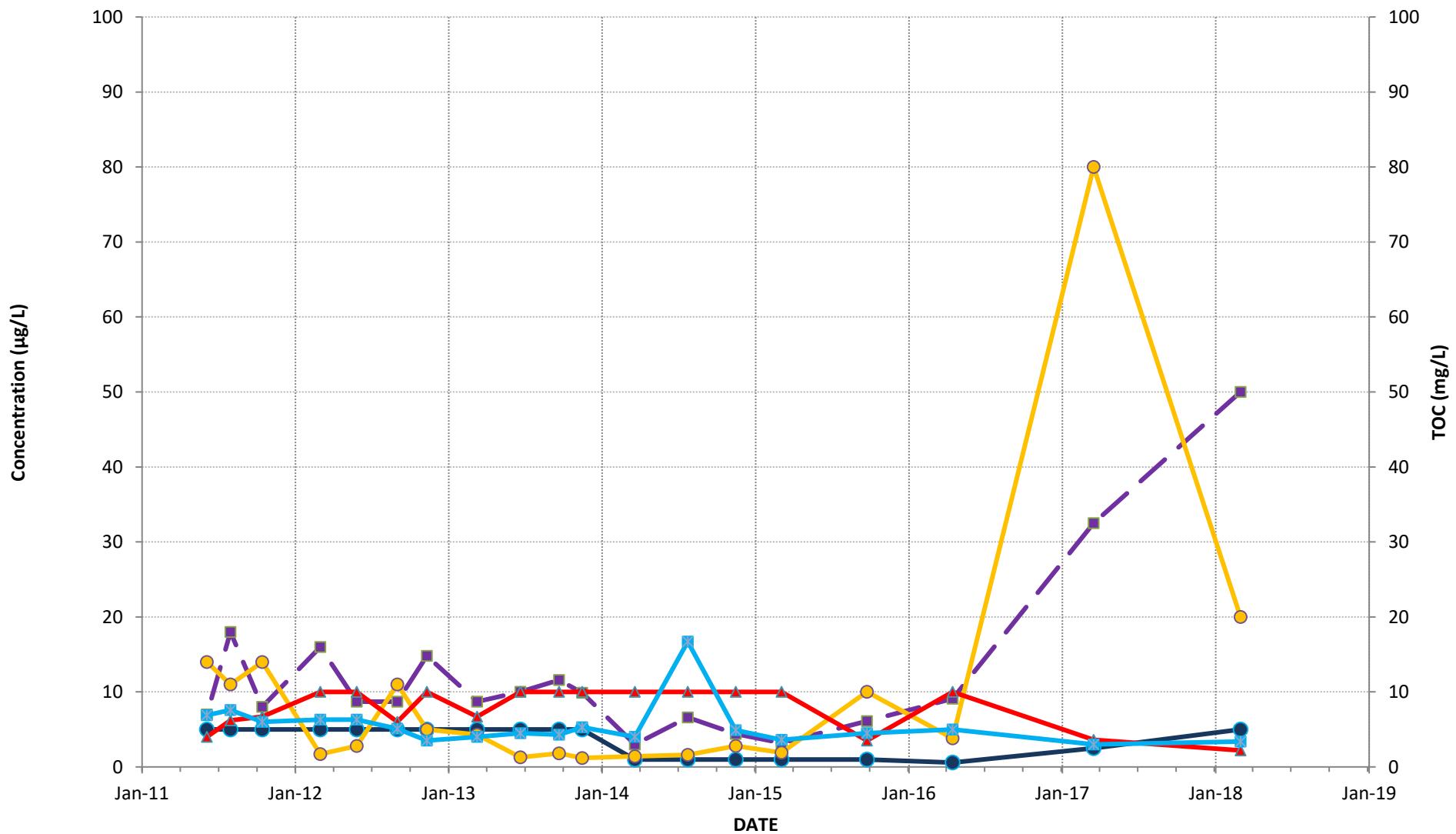
CONCENTRATIONS OF CHLOROETHENES PMW- 6S

● TCE ■ Total DCE ○ Vinyl Chloride ▲ Ethene + Ethane ■ TOC



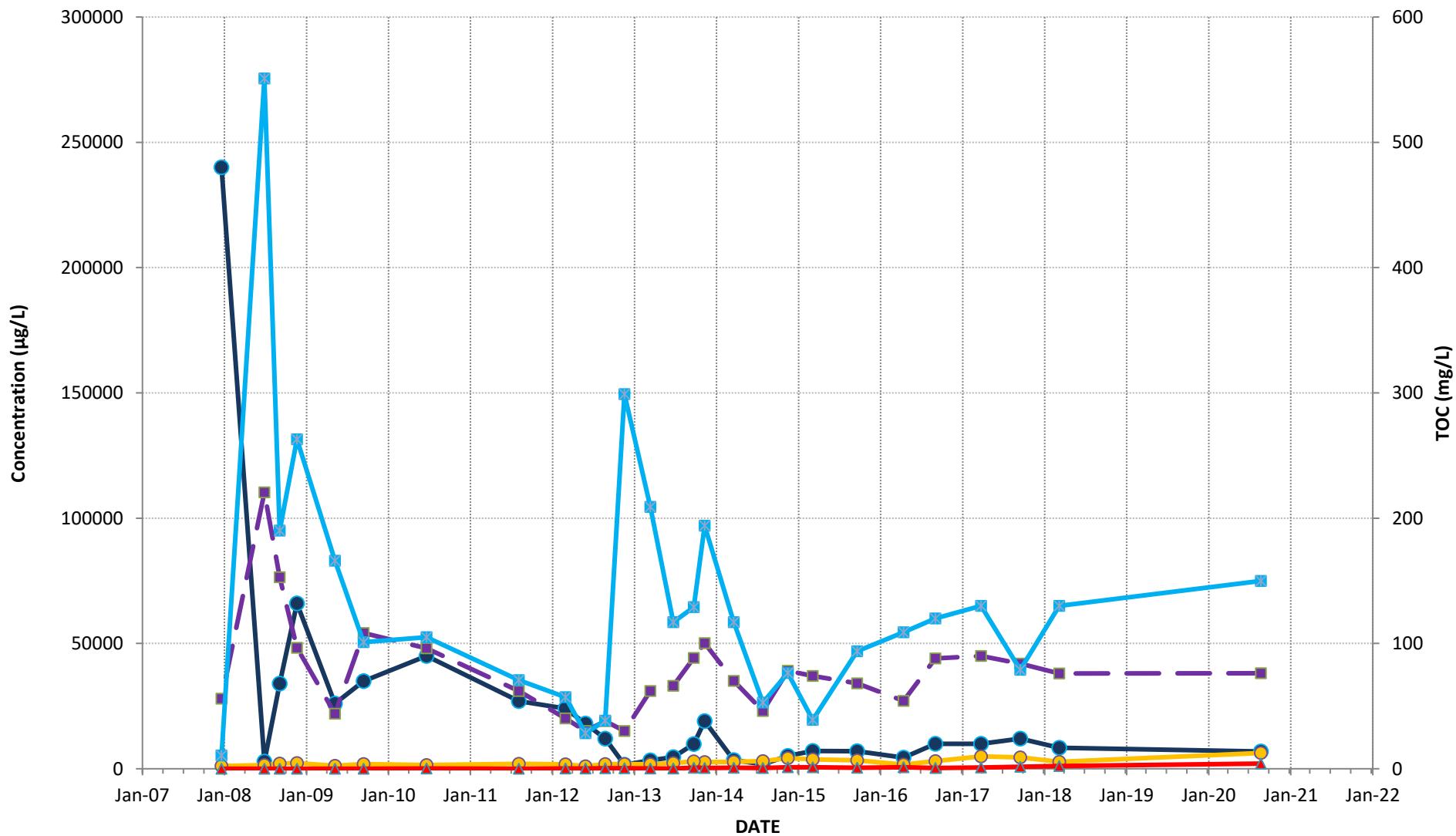
CONCENTRATIONS OF CHLOROETHENES PMW- 7S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



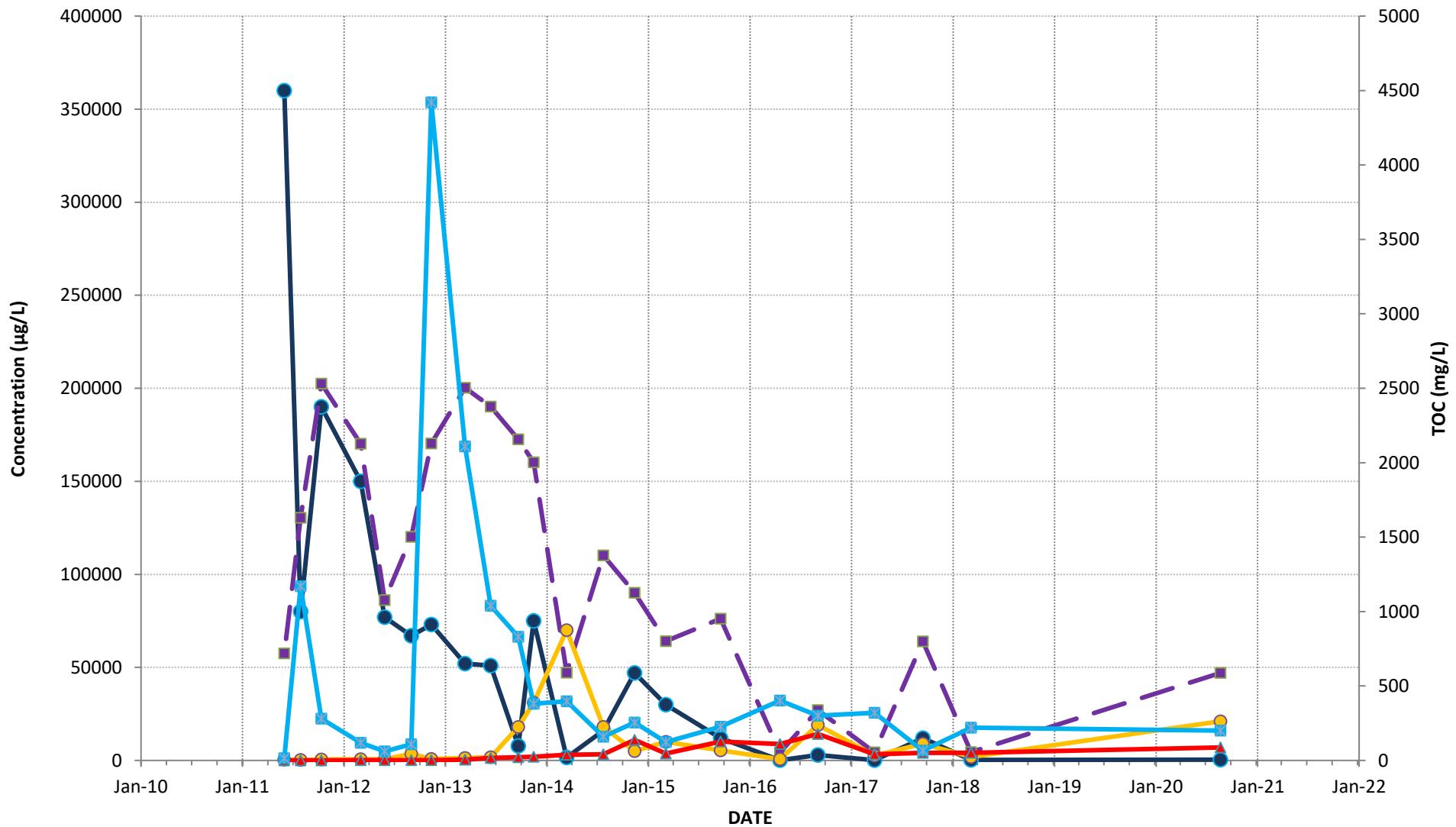
CONCENTRATIONS OF CHLOROETHENES PMW- 8D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



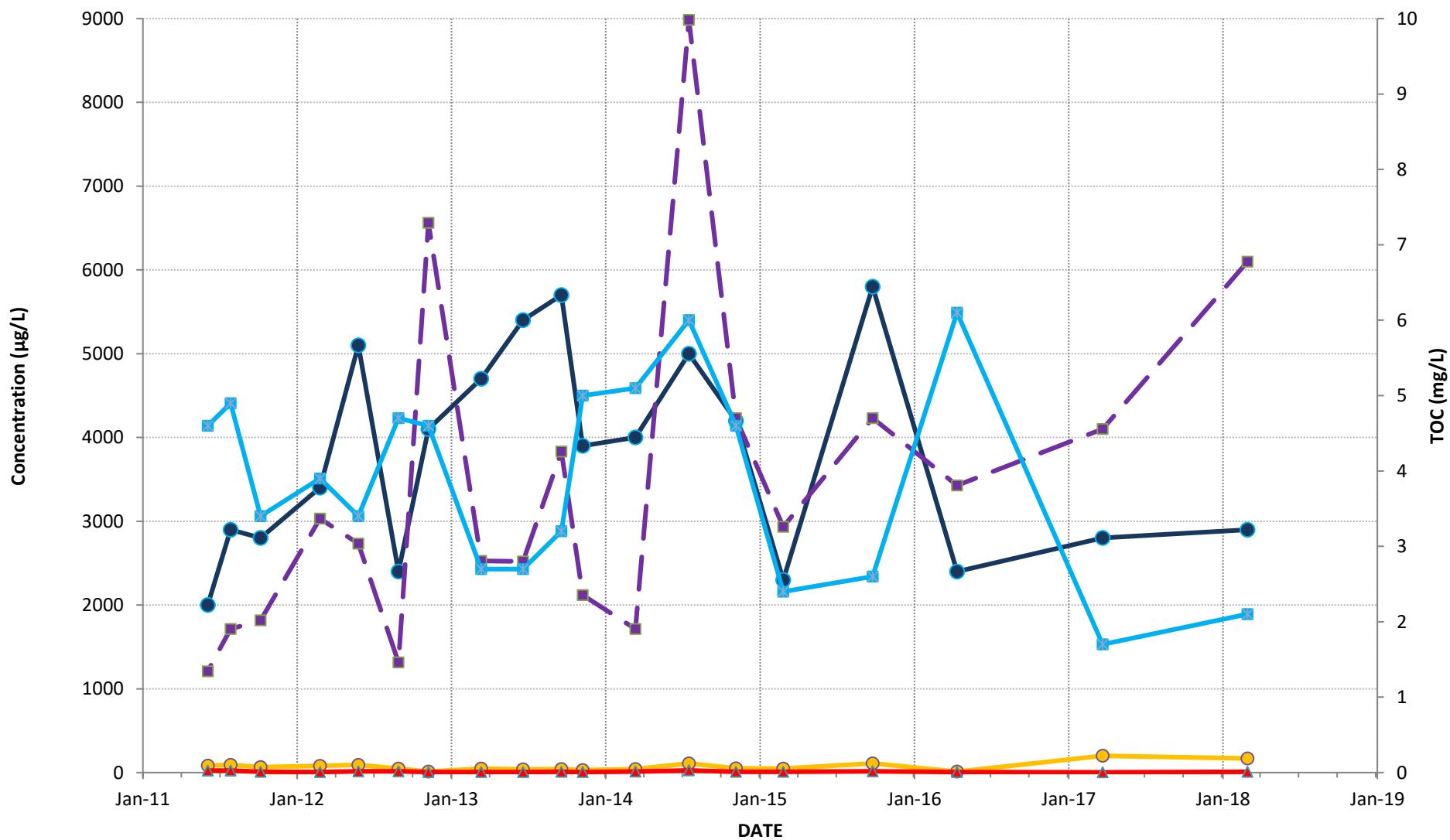
CONCENTRATIONS OF CHLOROETHENES PMW- 9D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



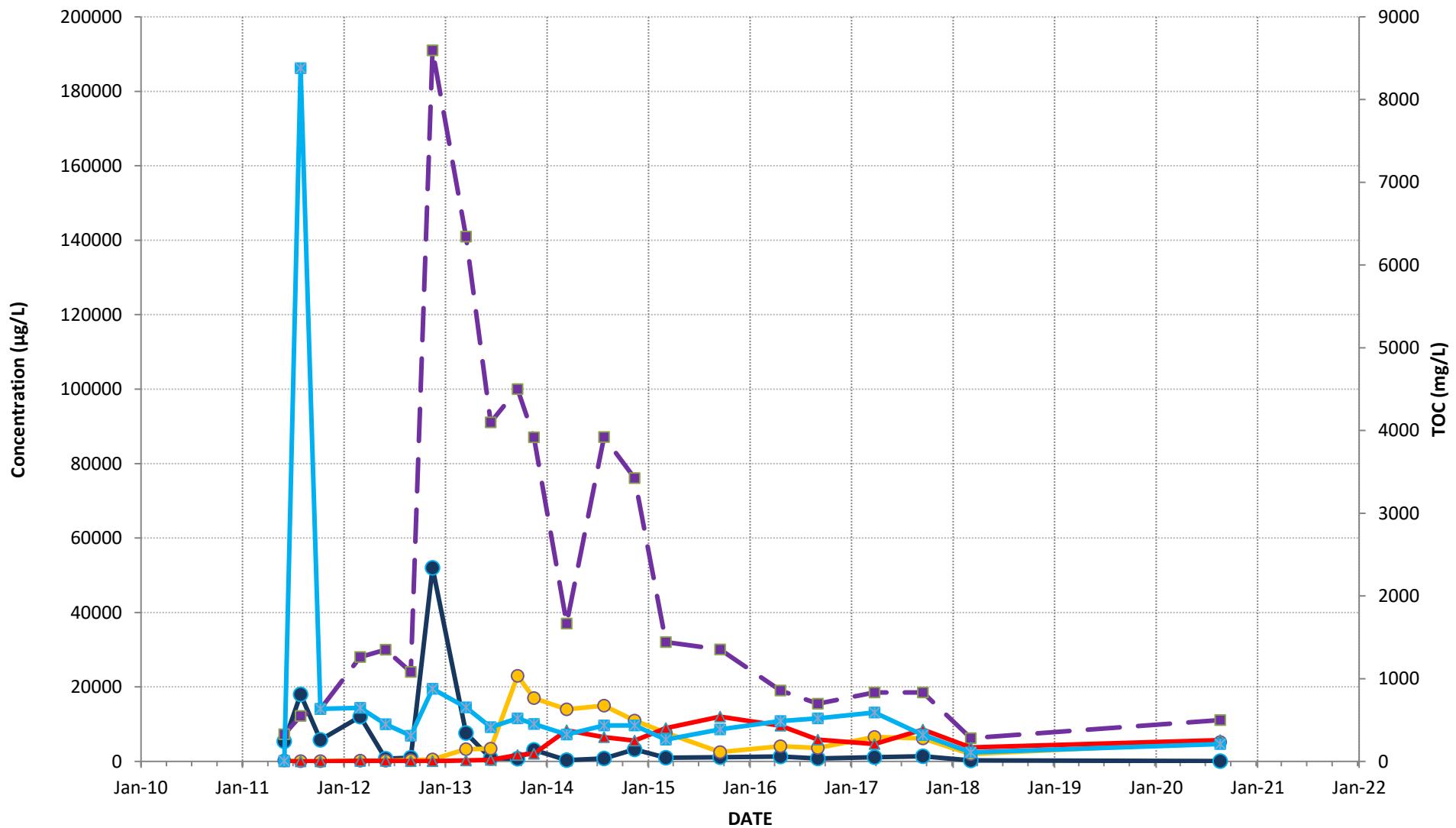
CONCENTRATIONS OF CHLOROETHENES PMW- 9S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



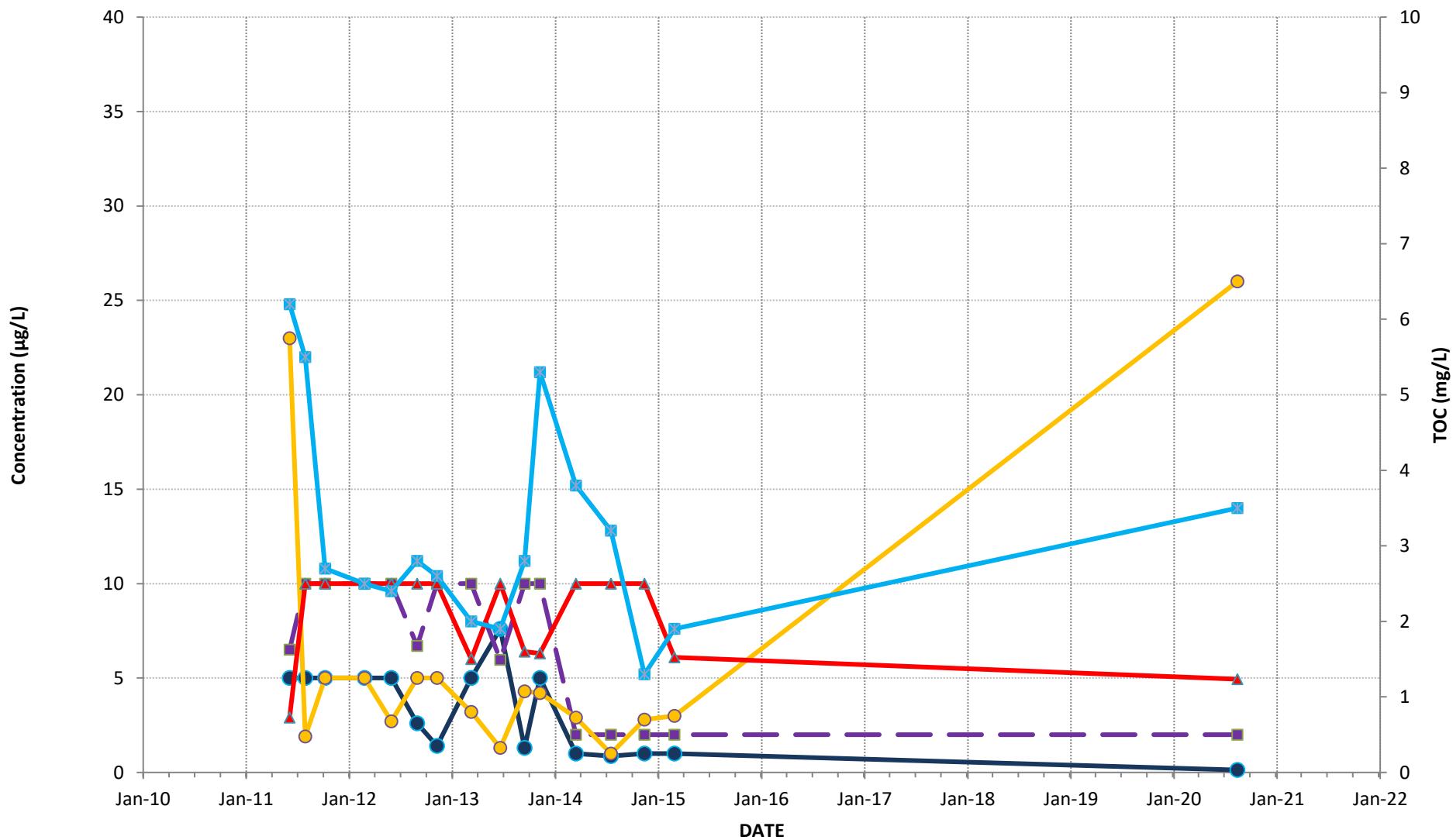
CONCENTRATIONS OF CHLOROETHENES PMW-10D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



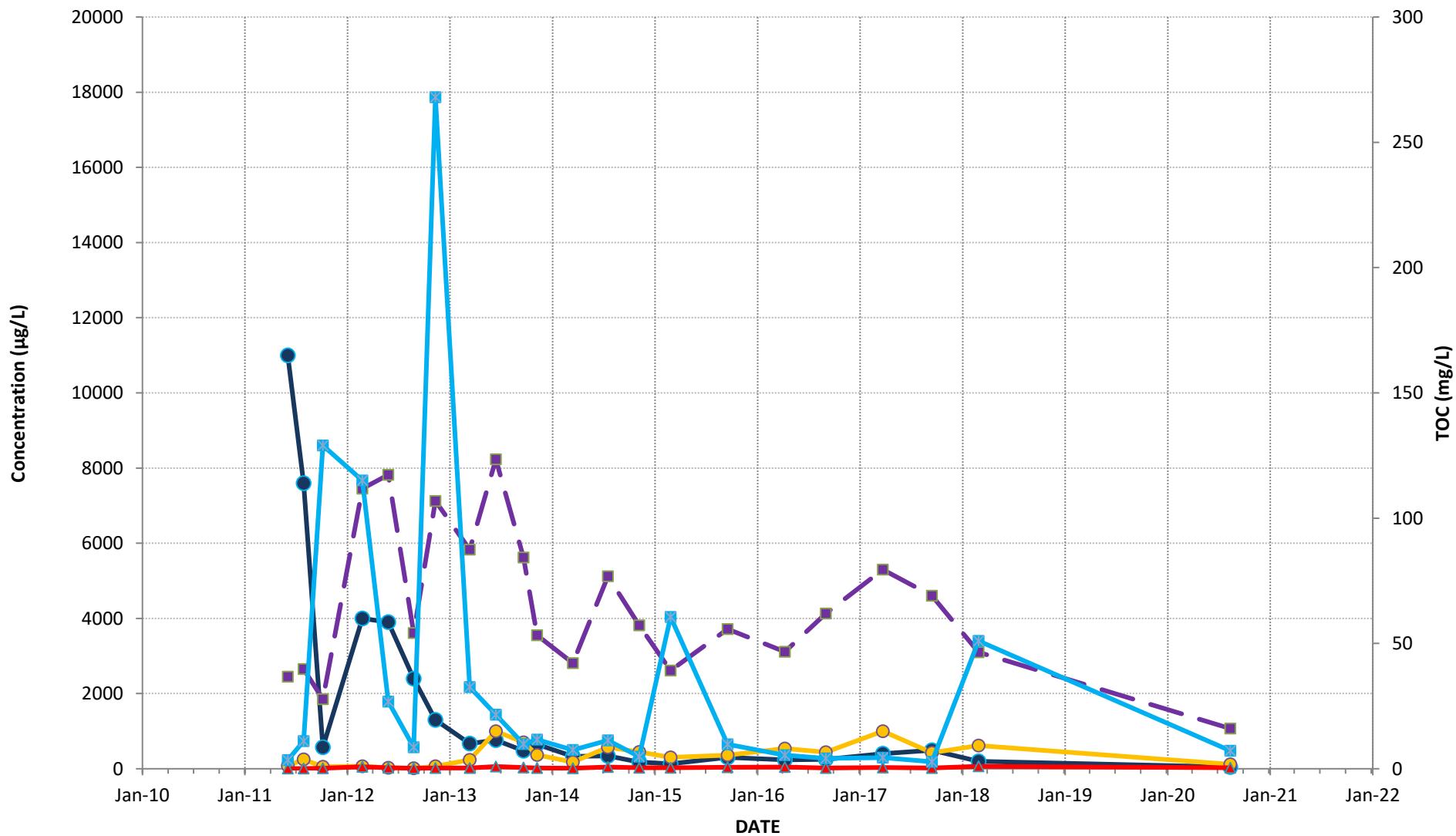
CONCENTRATIONS OF CHLOROETHENES PMW-10S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



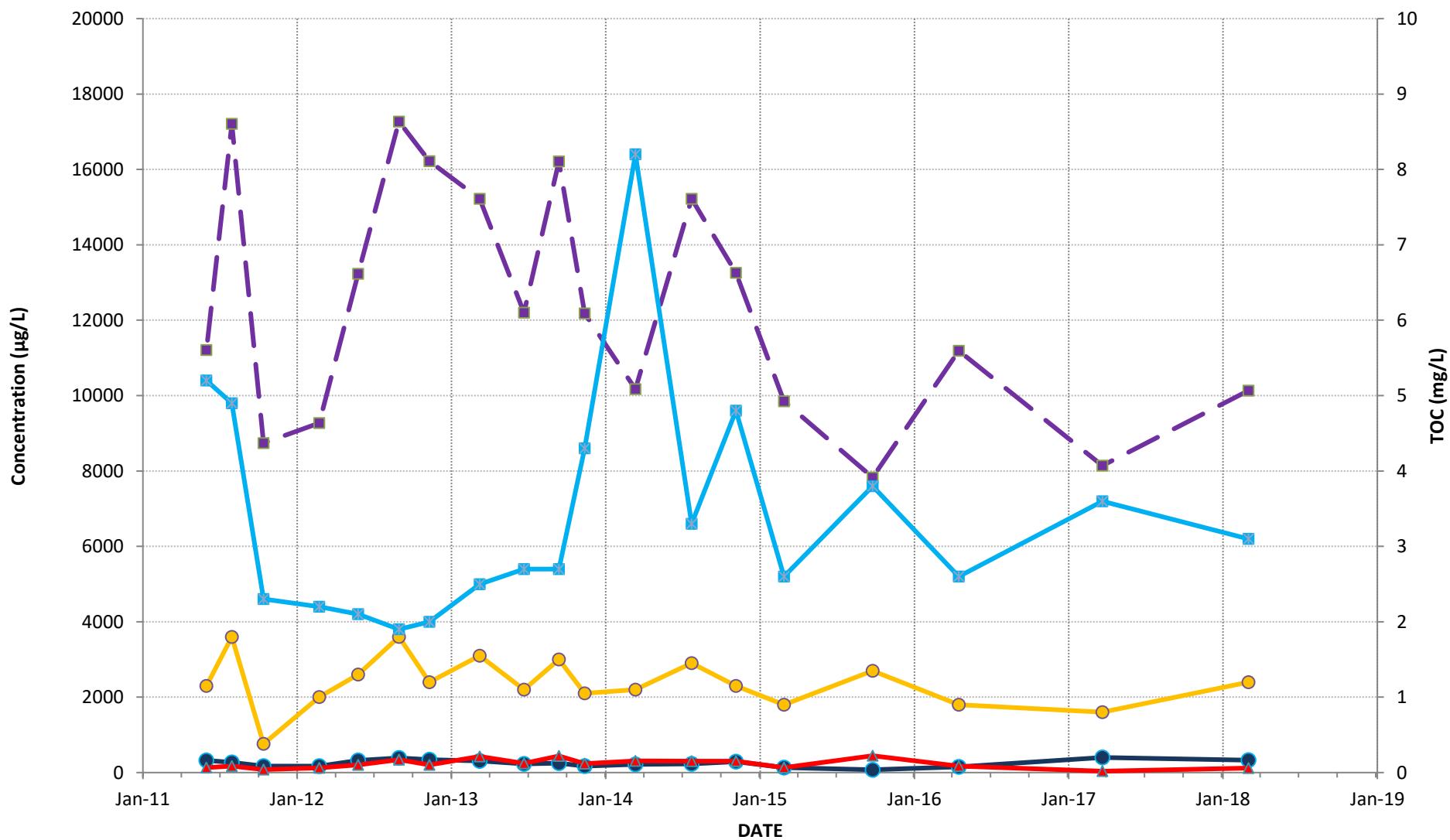
CONCENTRATIONS OF CHLOROETHENES PMW-11D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



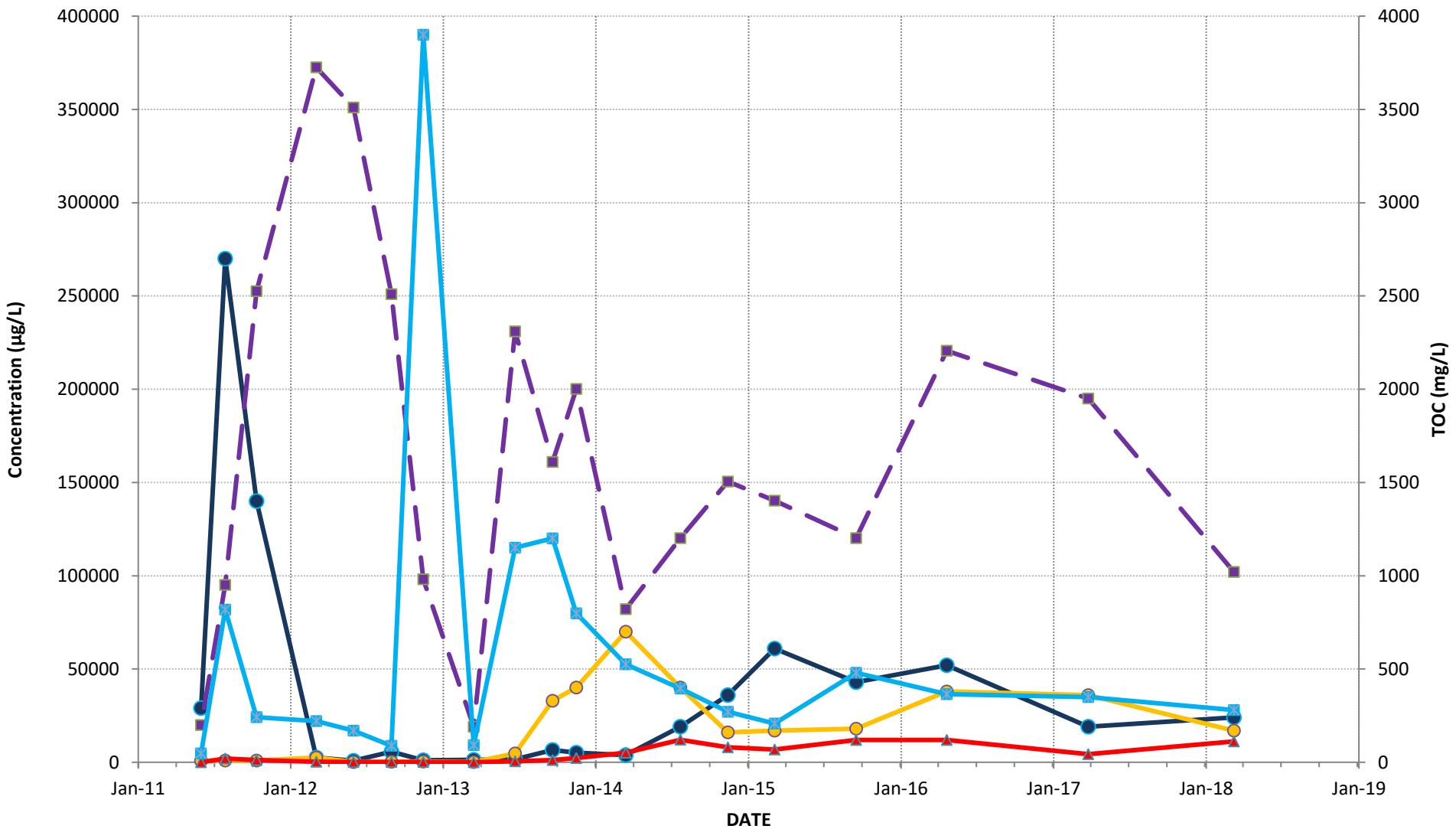
CONCENTRATIONS OF CHLOROETHENES PMW-11S

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



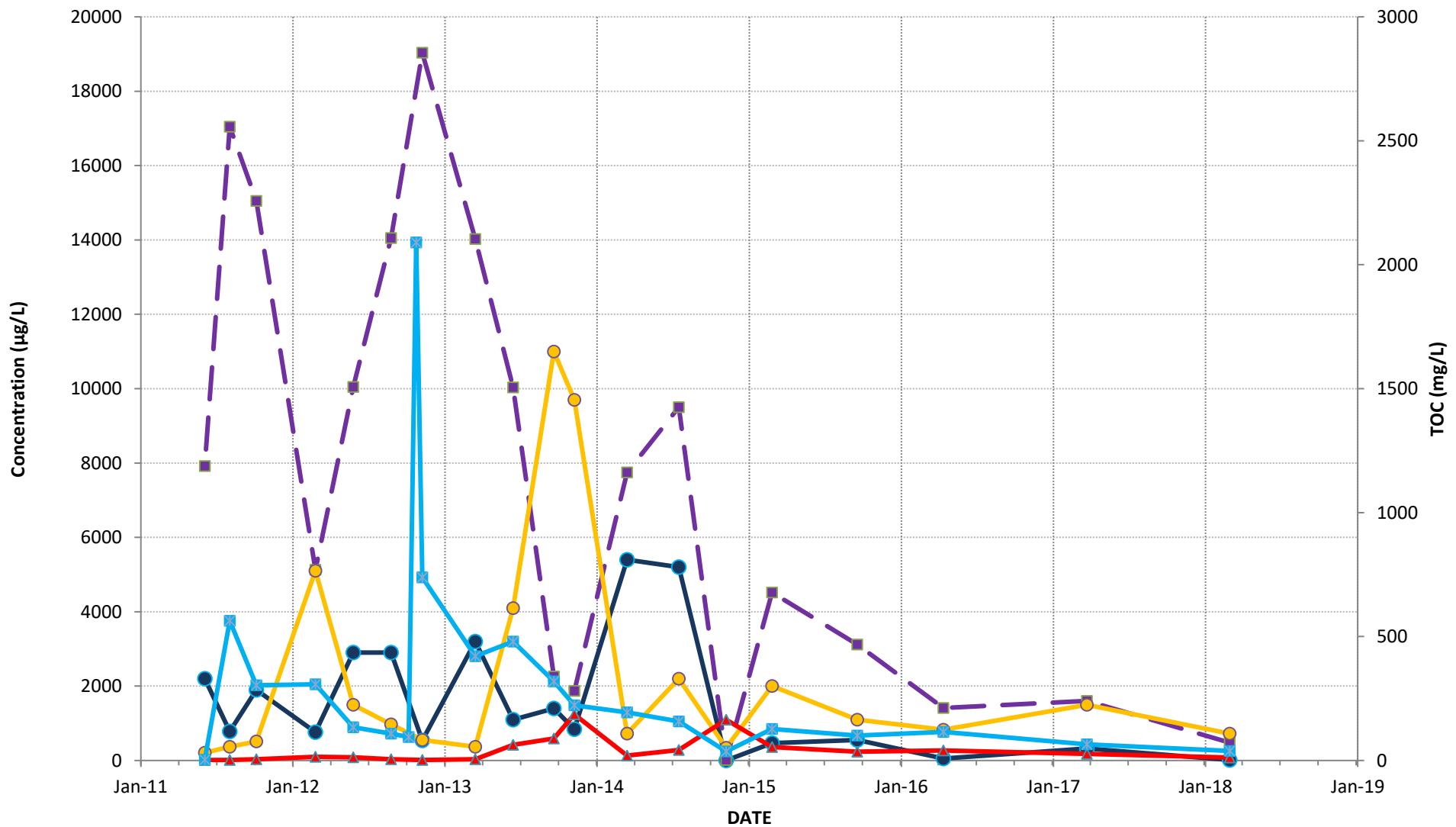
CONCENTRATIONS OF CHLOROETHENES PMW-12D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ✖ TOC



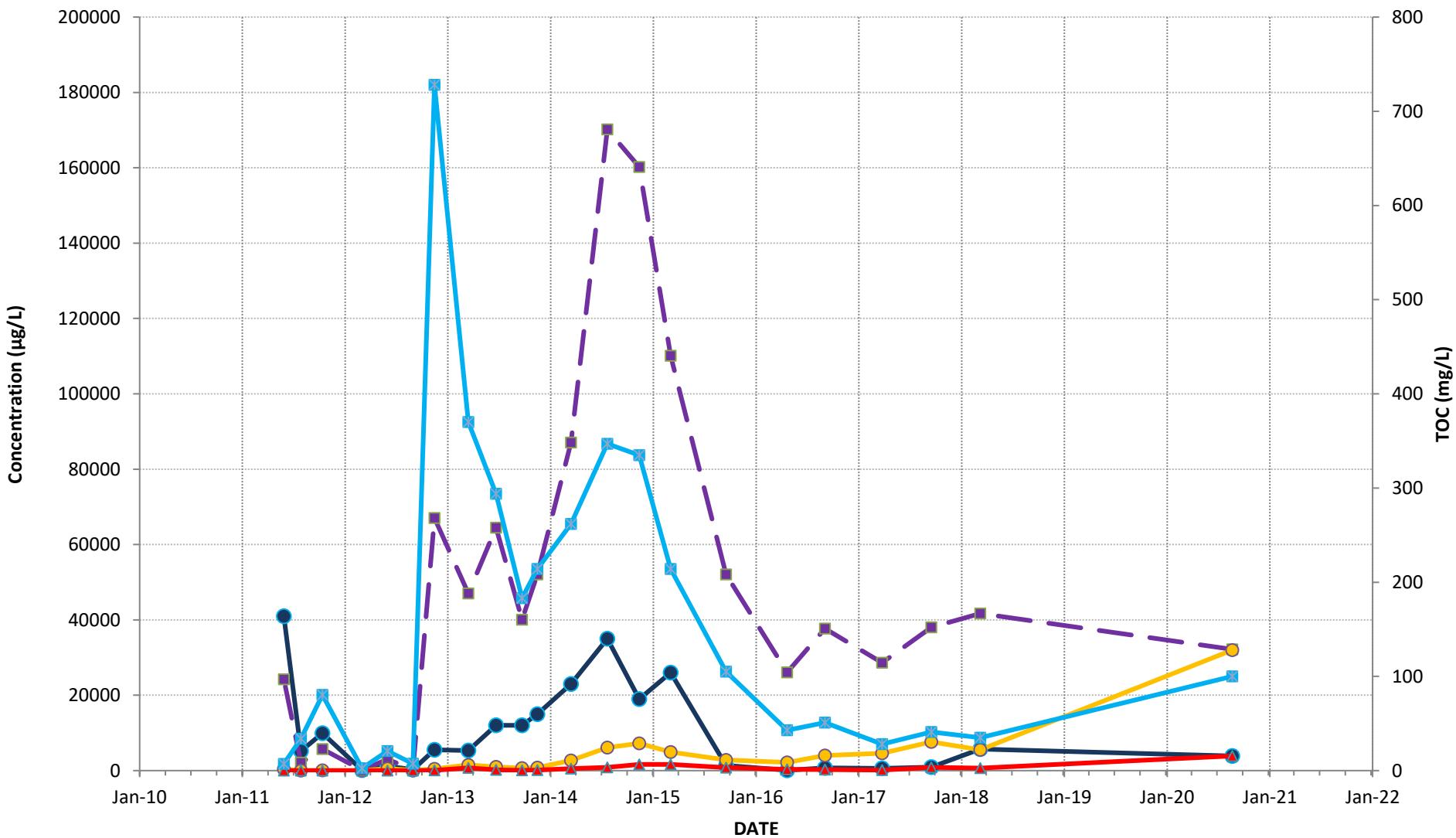
CONCENTRATIONS OF CHLOROETHENES PMW-15D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC

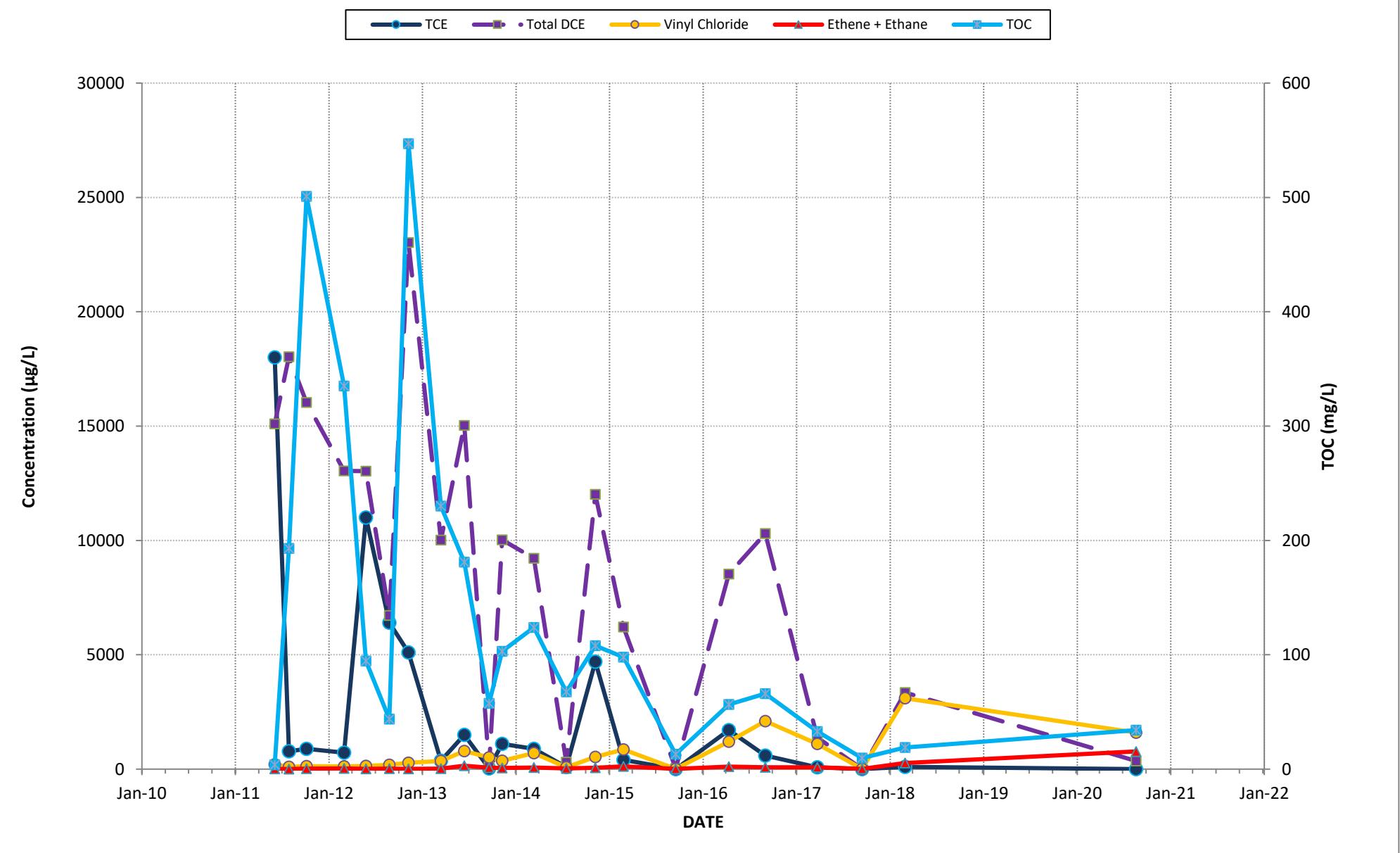


CONCENTRATIONS OF CHLOROETHENES PMW-16D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane ■ TOC

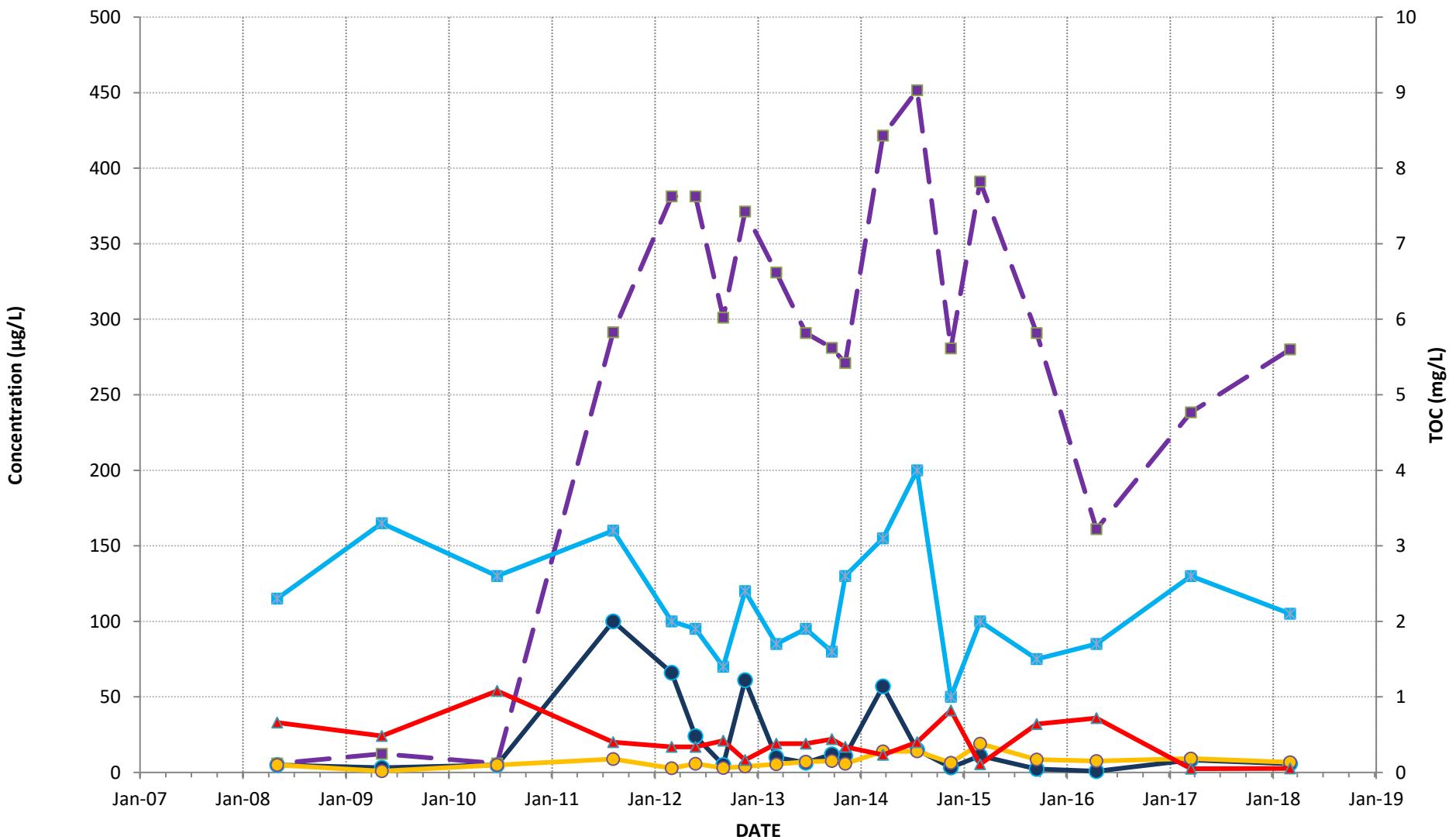


CONCENTRATIONS OF CHLOROETHENES PMW-17D



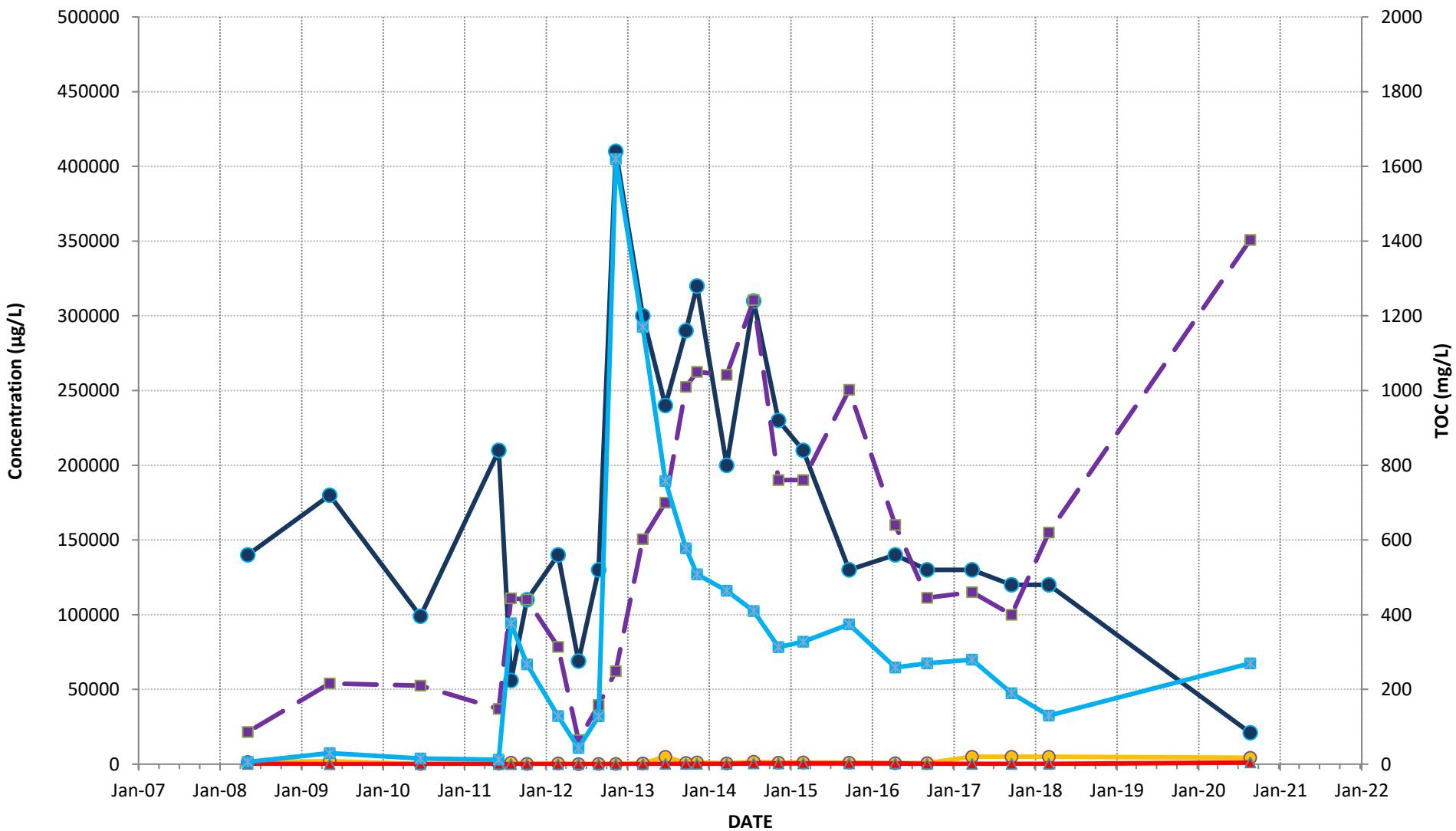
CONCENTRATIONS OF CHLOROETHENES RMW- 1D

● TCE
 ■ Total DCE
 ○ Vinyl Chloride
 △ Ethene + Ethane
 ✖ TOC



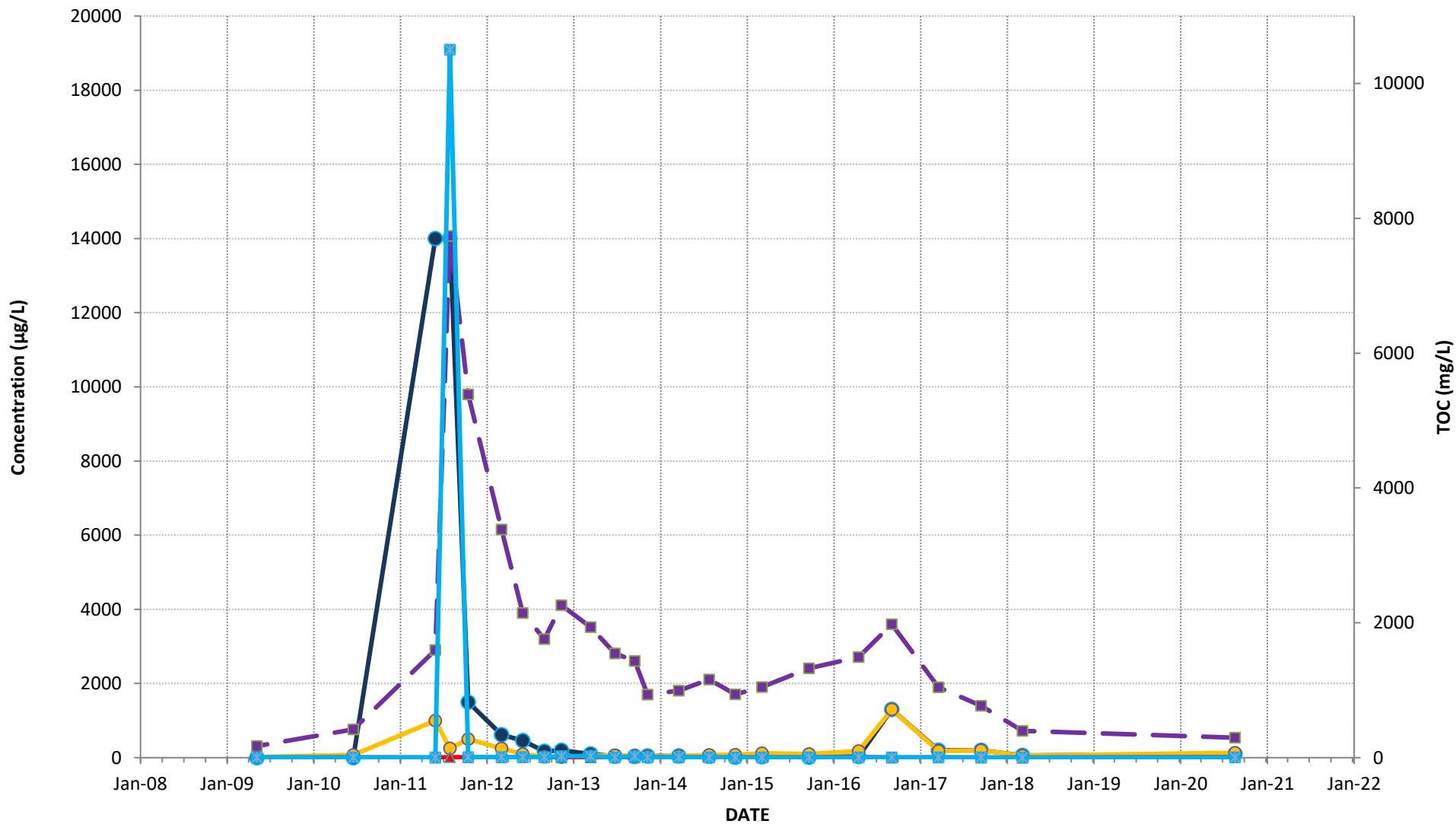
CONCENTRATIONS OF CHLOROETHENES RMW- 2D

● TCE ■ Total DCE ○ Vinyl Chloride △ Ethene + Ethane □ TOC



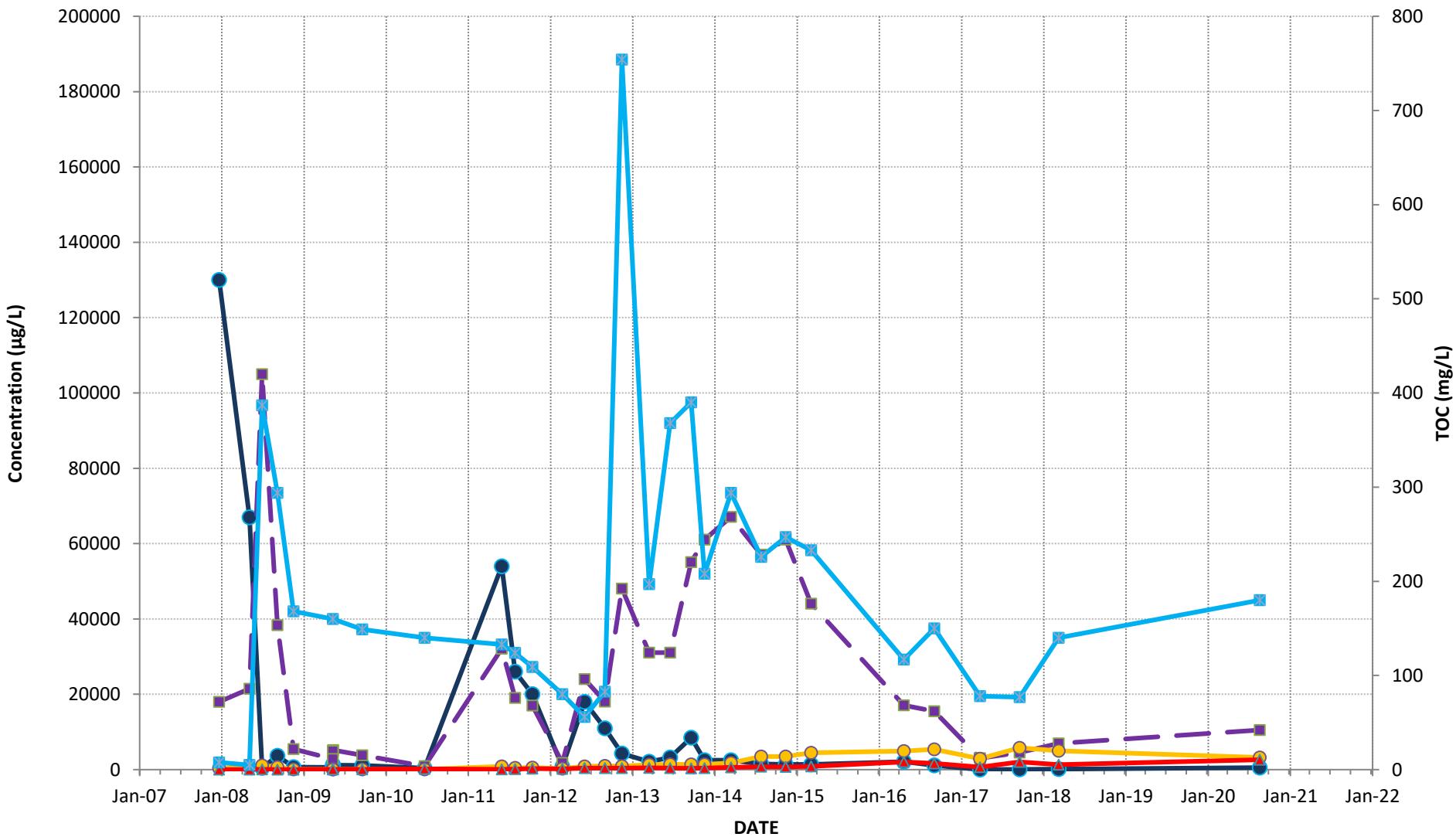
CONCENTRATIONS OF CHLOROETHENES RMW- 3D

—●— TCE ■ Total DCE ○ Vinyl Chloride ▲ Ethene + Ethane —□— TOC



CONCENTRATIONS OF CHLOROETHENES RMW- 4D

● TCE
■ Total DCE
○ Vinyl Chloride
△ Ethene + Ethane
✖ TOC



Appendix B

Cost Estimate Summary

APPENDIX B
EKONOL POLYESTER RESINS FACILITY
ALTERNATIVES ANALYSIS REPORT
COST ESTIMATE SUMMARY

CAPITAL COSTS			ALTERNATIVE 1: No Action	ALTERNATIVE 2: Enhanced Bioremediation of Overburden, Monitored Natural Attenuation and Land Use Controls	ALTERNATIVE 3: Enhanced Bioremediation of Overburden and Bedrock, Monitored Natural Attenuation and Land Use Controls
Item	Description	Unit	COST	COST	COST
1	General Conditions and Site Services	LS	\$0	\$33,760	\$33,760
2	Enhanced Bioremediation	LS	\$0	\$0	\$200,871
	Capital Cost Subtotal:		\$0	\$33,760	\$234,631
	Total Remediation Cost:		\$0	\$33,760	\$234,631
3	MNA Present Worth (See Note 1)	LS	\$0	\$497,674	\$237,402
	TOTAL COST:		\$0	\$531,434	\$472,033

Notes:

- 1 Present worth for Monitored Natural Attenuation is calculated for the number of years indicated, based on an annual rate of 5%

Appendix C

Cost Estimate Backup

TABLE C1
EKONOL POLYESTER RESINS BCP SITE
ALTERNATIVES ANALYSIS REPORT
DETAILED COST ESTIMATE
ALTERNATIVE 2 - Enhanced Bioremediation in Overburden, Monitored Natural Attenuation, and Institutional Controls

No.	DESCRIPTION	QTY	UNIT	LABOR				MATERIAL/OTHER		EQUIPMENT				PRESENT WORTH				
				HRS/UNIT	Calculated Crew Hours	\$/HR	UNIT COST	TOTAL	UNIT COST	TOTAL	HRS/UNIT	\$/HR	UNIT COST	TOTAL	UNIT COST	SUBTOTAL	SUB MARKUP (5%)	TOTAL
1	General Conditions and Site Services								\$ 2,000.00	\$ 2,000.00					\$ 2,000.00	\$ 2,000.00		\$ 2,000.00
	Health and Safety Allowance	1.00	ls						\$ 2,000.00	\$ 2,000.00					\$ 2,000.00	\$ 2,000.00		\$ 2,000.00
	Develop Site Management Plan (including GW Monitoring Plan)	1.00	ls						\$ 20,000.00	\$ 20,000.00					\$ 20,000.00	\$ 20,000.00		\$ 20,000.00
	Project Manager	4.00	wk	20.0	80.00	\$ 147.00	\$ 2,940.00	\$ 11,760.00	\$ -					\$ 2,940.00	\$ 11,760.00		\$ 11,760.00	
	SUBTOTAL				80.00			\$ 11,760.00		\$ 22,000.00					\$ -			\$ 33,760.00
2	Monitored Natural Attenuation (see note 2)														Annual Cost	Duration (yrs)	PW Rate	Present Worth
	Semi-annual Groundwater Sampling, 40 hrs per event for 30 years (inc. cap and SSDS inspections)	60	ea	80.0	4,800.00	\$ 90.00	\$ 7,200.00	\$ 432,000.00	\$ 200.00	\$ 12,000.00	80.0	\$ 20.37	\$ 1,629.80	\$ 97,788.00	\$ 18,059.60	30	5%	\$ 277,620.32
	Analyze Groundwater Samples for MNA and VOCs (assume 10 per event)*	600	ea						\$ 308.00	\$ 184,800.00					\$ 7,114.80	30	5%	\$ 109,371.91
	Semi-annual Groundwater Monitoring Reports (40 hr ea)	60	ea	40.0	2,400.00	\$ 90.00	\$ 3,600.00	\$ 216,000.00							\$ 7,200.00	30	5%	\$ 110,681.65
	SUBTOTAL				7,200.00			\$ 648,000.00		\$ 196,800.00					\$ 97,788.00	\$ 32,374.40		\$ 497,673.88
TOTALS				Crew Hours 7280.00				Labor \$ 659,760.00		Mat'l/Other \$ 218,800.00		Equipment \$ 97,788.00		Total \$ 531,433.88				

Notes

- 1 This work will be performed by the consultant
- 2 Present worth for Monitored Natural Attenuation is calculated for the number of years indicated, based on an annual rate of 5%
- 3 Costs for Enhanced Bioremediation for Trenches includes pre-design sampling and amendment evaluation; potentially includes bioaugmentation; enhancement targets overburden only
- * Subcontractor markup of 15.5% added to unit cost

TABLE C2
EKONOL POLYESTER RESINS FACILITY
ALTERNATIVES ANALYSIS REPORT
DETAILED COST ESTIMATE
ALTERNATIVE 3 - Enhanced Bioremediation in Overburden and Bedrock, Monitored Natural Attenuation, and Institutional Controls

No.	DESCRIPTION	QTY	UNIT	LABOR					MATERIAL/OTHER		EQUIPMENT				TOTAL COST				
				HRS/UNIT	Calculated Crew Hours	\$/HR	UNIT COST	TOTAL	UNIT COST	TOTAL	HRS/UNIT	\$/HR	UNIT COST	TOTAL	UNIT COST	SUBTOTAL	SUB MARKUP (5%)	TOTAL	
1	General Conditions and Site Services								\$ 2,000.00	\$ 2,000.00					\$ 2,000.00	\$ 2,000.00		\$ 2,000.00	
	Health and Safety Allowance	1.00	ls																
	Develop Site Management Plan (including GW Monitoring Plan)	1.00	ls						\$ 20,000.00	\$ 20,000.00					\$ 20,000.00	\$ 20,000.00		\$ 20,000.00	
	Project Manager	4.00	wk	20.0	80.00	\$ 147.00	\$ 2,940.00	\$ 11,760.00	\$ -						\$ 2,940.00	\$ 11,760.00		\$ 11,760.00	
	SUBTOTAL				80.00			\$ 11,760.00		\$ 22,000.00					\$ -			\$ 33,760.00	
2	Enhanced Bioremediation Injections																		
	Bedrock Injection (Work Plan)	1.00	ls						\$ 15,000.00	\$ 15,000.00					\$ 15,000.00	\$ 15,000.00	5%	\$ 15,750.00	
	Bedrock Injection (Labor)	10.00	day	8.0	80.00	\$ 130.56	\$ 1,044.44	\$ 10,444.43	\$ -						\$ 1,044.44	\$ 10,444.43		\$ 10,444.43	
	Bedrock Injection (Subcontractor & Amendment/Bioaugment)	1	ls						\$ 150,000.00	\$ 150,000.00					\$ 150,000.00	\$ 150,000.00	5%	\$ 157,500.00	
	Geophysical Survey - assumes need for install of addn. injection points	1.00	ls						\$ 2,500.00	\$ 2,500.00					\$ 2,500.00	\$ 2,500.00	5%	\$ 2,625.00	
	Well Installation (labor) - assumes need for install of one addn. injection point	2.00	day	8.0	16.00	\$ 127.91	\$ 1,023.31	\$ 2,046.63	\$ -						\$ 1,023.31	\$ 2,046.63		\$ 2,046.63	
	Well Installation (driller) - assumes need for install of one addn. injection point & materials	1.00	ea						\$ 7,500.00	\$ 7,500.00					\$ 7,500.00	\$ 7,500.00	5%	\$ 7,875.00	
	Community Air Monitoring Program - assumes need for install of addn. injection points	1.00	ls						\$ 1,750.00	\$ 1,750.00					\$ 1,750.00	\$ 1,750.00		\$ 1,750.00	
	Health and Safety Officer	4.00	wk	8.0	32.00	\$ 90.00	\$ 720.00	\$ 2,880.00	\$ -						\$ 720.00	\$ 2,880.00		\$ 2,880.00	
	SUBTOTAL				128.00			\$ 15,371.06		\$ 176,750.00					\$ -			\$ 200,871.06	
3	Monitored Natural Attenuation														Annual Cost	Duration (yrs)	PW Rate	Present Worth	
	Semi-annual Groundwater Sampling, 40 hrs per event for 20 years (inc. cap and SSDS inspections)	40	ea	80.0	3,200.00		\$ 7,200.00	\$ 288,000.00	\$ 200.00	\$ 8,000.00	40.0	\$ 20.37	\$ 814.90	\$ 32,596.00	\$ 16,429.80	10	5%	\$ 126,866.56	
	Analyze Groundwater Samples for MNA and VOCs (assume 10 per event)*	400	ea				\$ 90.00		\$ 308.00	\$ 123,200.00					\$ 7,114.80		10	5%	\$ 54,938.60
	Semi-annual Groundwater Monitoring Reports (40 hr ea)	40	ea	40.0	1,600.00	\$ 90.00	\$ 3,600.00	\$ 144,000.00							\$ 7,200.00		10	5%	\$ 55,596.49
	SUBTOTAL				4,800.00			\$ 432,000.00		\$ 131,200.00					\$ 32,596.00	\$ 30,744.60			\$ 237,401.65
	TOTALS																		
					Crew Hours	5008.00		Labor	\$459,131.06	Mat'l/Other	\$329,950.00		Equipment	\$32,596.00		Total			\$472,032.71

Notes

- 1 This work will be performed by the consultant
- 2 Present worth for Monitored Natural Attenuation is calculated for the number of years indicated, based on an annual rate of 5%
- 3 Costs for Enhanced Bioremediation for Trenches includes pre-design sampling and amendment evaluation; potentially includes bioaugmentation; enhancement targets overburden only
- 4 Costs for Deep Zone Injection includes pre-design sampling and amendment evaluation; potentially includes bioaugmentation; targets bedrock zone
- 5 Assume installation of additional 4 injection locations to supplement existing injection well locations