AECOM
257 West Genesee Street, Suite 400
Buffalo, New York 14202

716-856-5636 tel
716-856-2545 fax

SUBMITTED VIA ELECTRONIC MAIL

July 14, 2016

Mr. Michael J. Hinton, P.E.
New York State Department of Environmental Conservation
Region 9
270 Michigan Avenue
Buffalo, NY 14203

Subject: Spring 2016 Semi-Annual Performance Monitoring Report
Ekonol Polyester Resins Site
Town of Wheatfield, Niagara County, New York
NYSDEC Site No. V00653-9

Dear Mr. Hinton,

On behalf of Elm Holdings Inc., AECOM Technical Services, Inc. (AECOM) is pleased to provide the attached Spring 2016 Semi-Annual Performance Monitoring Report for the subject facility (Site). The semi-annual monitoring data in EQuIS format will be submitted separately.

Please feel free to contact me via e-mail or at (716) 923-1300 if you have any questions regarding this submittal.

Sincerely yours,

James L. Kaczor

James L. Kaczor, PG
Ekonol Site Task Leader
james.kaczor@aecom.com

Attachment

cc: Mike Kolar, Patriot Equities
G. Brown, RT Environmental
J. Sabbatis, Saint-Gobain
M. Forcucci, NYSDOH (electronic copy)
Project File 60481767/Ekonol

AECOM Environment

Prepared by:
AECOM
Buffalo, NY
60481767
July 2016

Performance Monitoring Report, Spring 2016, *In-situ* Treatment Using Enhanced Bioremediation

Ekonol Polyester Resins Site, NYSDEC Voluntary Cleanup Program Site No. V00653-9 6600 Walmore Road, Wheatfield, NY

Submitted to:

New York State Department of Environmental Conservation
Division of Hazardous Waste Remediation
270 Michigan Avenue
Buffalo, NY 14203

On behalf of:

Elm Holdings Inc.

AECOM Environment

Prepared by:
AECOM
Buffalo, NY
60481767
July 2016

Performance Monitoring Report, Spring 2016, *In-situ* Treatment Using Enhanced Bioremediation

Ekonol Polyester Resins Site, NYSDEC Voluntary Cleanup Program Site No. V00653-9 6600 Walmore Road, Wheatfield, NY

Submitted to:

New York State Department of Environmental Conservation

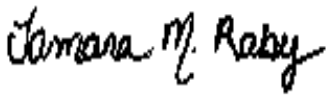
Division of Hazardous Waste Remediation

270 Michigan Avenue

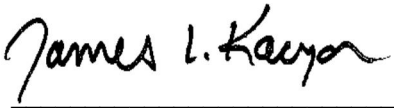
Buffalo, NY 14203

On behalf of:

Elm Holdings Inc.



Prepared By Tamara Raby



Reviewed By James L. Kaczor, P.G.

Contents

1.0 Introduction 1-1

2.0 Bioreactor and Injection / Monitoring Well Inspection 2-1

3.0 Sub-slab Depressurization System Operations and Maintenance 3-1

4.0 Semi-Annual Performance Monitoring 4-1

4.1 Groundwater Elevation Measurements 4-1
4.2 Groundwater Sampling 4-1
4.3 Investigative Derived Waste Management 4-2
4.4 Data Validation 4-2

5.0 Bioreactor Performance and Monitoring Results 5-1

5.1 Overburden Groundwater Elevations and Flow Directions 5-1
5.2 Overburden Observations Inside the Bioreactor Trenches 5-1
5.3 Overburden Observations Outside the Bioreactor Trenches 5-2
5.4 Overburden Observations – Other Wells 5-3
5.5 Summary of Biodegradation Observations in Overburden 5-3

6.0 Bedrock Remediation Performance and Monitoring Results 6-1

6.1 Bedrock Groundwater Elevations and Flow Directions 6-1
6.2 Bedrock Bioremediation Performance Summary 6-1
6.3 Performance Enhancement Testing 6-2
6.4 Summary of Biodegradation Observations in Bedrock 6-3

7.0 General Site Conclusions and Anticipated Future Activities 7-1

7.1 Site Inspections 7-1
7.2 Overburden Bioreactor 7-1
7.3 Bedrock Bioremediation 7-1

List of Tables

Table 1 Well Condition Observations and Headspace Readings (Spring 2016)

Table 2 Sample Matrix (Spring 2016)

Table 3 Water Level Measurements (Spring 2016)

Table 4 Summary of Groundwater Sampling (Spring 2016)

Table 5 Groundwater Sampling Field Parameter Results (Spring 2016)

Table 6 Summary of Analytical Specifications (Spring 2016)

Table 7 Monitoring Well Groundwater Analytical Result Summary - Spring 2016

List of Figures

Figure 1 Project Location Plan

Figure 2 Site Plan

Figure 3 Groundwater Contours, Overburden Wells (May 4, 2016)

Figure 4 Groundwater Contours, Bedrock Wells (May 4, 2016)

Figure 5A Overburden Trichloroethene Isopleths (May 2016)

Figure 5B Overburden cis-1,2-Dichloroethene Isopleths (May 2016)

Figure 5C Overburden Vinyl Chloride Isopleths (May 2016)

Figure 5D Overburden Total VOCs Isopleths (May 2016)

Figure 6A Bedrock Trichloroethene Isopleths (May 2016)

Figure 6B Bedrock cis-1,2-Dichloroethene Isopleths (May 2016)

Figure 6C Bedrock Vinyl Chloride Isopleths (May 2016)

Figure 6D Bedrock Total VOCs Isopleths (May 2016)

List of Appendices

Appendix A Inspection Records

Appendix B Field Sampling Records

Appendix C Data Usability Summary Report

Appendix D Historical Analytical Data

Appendix E Time Series Plots for Wells Sampled

1.0 Introduction

This Spring 2016 Performance Monitoring Report summarizes groundwater monitoring activities and periodic inspections of remedial components completed at the Ekonol Polyester Resins Site (Site), 6600 Walmore Road, Wheatfield, NY (see Figure 1 – Project Location Plan), New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program (VCP) Site No. V00653-9.

This report provides the results from Spring 2016 groundwater sampling for the analysis of chlorinated volatile organic compounds (CVOCs), select dissolved inorganics, and natural attenuation parameters conducted from May 4 through 18, 2016, the sub-slab depressurization operation, monitoring and maintenance (OM&M) inspection, and the bioreactor trench pavement cover inspection.

The scope of work is defined in the February 2010 NYSDEC-approved “Remedial Action Work Plan (RAWP) for In Situ Treatment Using Enhanced Bioremediation,” the NYSDEC-approved (April 10, 2012) changes to the reporting scope and schedule, and the Site Management Plan, submitted to the NYSDEC on July 21, 2015.

Figure 2 – Site Plan presents monitoring well locations, injection well locations, performance monitoring well locations, and site features.

2.0 Bioreactor and Injection / Monitoring Well Inspection

As part of the Spring 2016 event, the pavement surface conditions above the bioreactor trenches were inspected for settlement, and the protective casings were inspected for integrity. The pavement inspection form is included in Appendix A. A summary of well condition observations is included in the Table 1. No need for pavement repair or maintenance of any protective casings or wells associated with the bioreactor was observed or noted.

In addition, well headspace concentrations were monitored for methane (lower explosive limit, or "LEL") and hydrogen sulfide vapor concentrations within source area wells in May 2016. Locations that exhibited elevated levels of methane and/or hydrogen sulfide (within the well casings) were documented (see Table 1). In May 2016, each well that exhibited elevated methane and/or hydrogen sulfide levels had a vented plug already installed.

3.0 Sub-slab Depressurization System Operations and Maintenance

During the Spring 2016 sampling event, the SSD system was inspected in accordance with NYSDEC-approved operations and maintenance plan dated December 5, 2011.

Results of the inspection identified that the system was in proper working order. The inspection included a visual inspection of the system's interior and exterior components, recording of U-tube manometer measurements, and smoke stick testing. Additionally, the system was shut down temporarily to confirm that the audible alarm functions as designed. The May 2016 inspection checklist for the SSD system is included in Appendix A. In May 2016, repairs and maintenance to the sub-slab depressurization system were not needed.

In October 2015, sub-slab vapor samples were collected in accordance with the Ekonol SSD Operations, Maintenance, and Monitoring Plan (December 2011) to help determine if cessation of operation of the SSD system is feasible. A sub-slab vapor sample was collected in August 2015 with the SSD system running, and in October 2015 with the SSD system shut down for 24 hours prior. Samples were submitted for volatile organic compound (VOC) analysis using EPA Method TO-15. Sampling results for both events were below method detection limits for all constituents of concern. Summary of the SSD sampling activities and recommendations were provided to NYSDEC under letter dated January 26, 2016. The letter requested approval to decommission the SSD; the letter is currently under NYSDEC review.

4.0 Semi-Annual Performance Monitoring

In addition to the OM&M activities discussed above, Spring 2016 semi-annual groundwater sampling was completed May 4 through 18, 2016 in accordance with the submitted Site Management Plan (July 2015), approved work plans and previously reported procedures. In addition to monitoring the overall groundwater conditions, performance monitoring was completed to assist in evaluating the effectiveness of the groundwater remediation from the overburden bioreactor and in the bedrock groundwater treatment area.

The Spring 2016 semi-annual groundwater monitoring program included water level measurements at all Site wells, groundwater sampling of 57 wells, and submission of groundwater samples for analysis of chlorinated VOCs and natural attenuation parameters. A copy of the groundwater sampling logs is provided in Appendix B. Quality assurance/quality control (QA/QC) samples, including three field duplicates, three matrix spike/matrix spike duplicate samples, and 10 trip blanks were also collected and submitted for analysis. Table 2 presents a summary of groundwater sample locations and associated QA/QC samples.

The analytical results for these samples were reviewed for usability with respect to NYSDEC quality assurance and quality control requirements as discussed in the data usability summary report (DUSR) included in Appendix C.

4.1 Groundwater Elevation Measurements

Water levels were measured on May 4, 2016 in the monitoring wells, injection wells, and performance monitoring wells relative to the top of the inner well casing using an electronic water level tape accurate to 0.01 foot (ft). The depth to water was measured in each well from a surveyed point on the casing. The water levels were then converted to elevations presented as feet above mean sea level (ft AMSL, NAVD 88 datum). The groundwater elevations were used to construct groundwater elevation contour maps in both the overburden and bedrock zones. Table 3 provides a summary of the groundwater level measurements and calculated groundwater elevations. Figure 3 presents overburden groundwater contours and Figure 4 presents bedrock groundwater contours. Additional discussion regarding overburden and bedrock groundwater elevations and flow directions is presented in Section 5.1 and Section 6.1, respectively.

4.2 Groundwater Sampling

The locations of the monitoring wells are shown on Figure 2. Wells were sampled following the methodology outlined in the approved work plan, approved revisions per subsequent correspondence with NYSDEC. A list of wells, dates sampled, sample IDs, and purge volumes is provided in Table 4. Groundwater sampling logs are provided in Appendix B.

The 57 wells were purged and sampled following low-flow procedures with dedicated tubing and a peristaltic pump. During purging, groundwater was monitored for temperature, specific conductivity, pH, dissolved oxygen (DO), oxidation-reduction potential (ORP), and turbidity. An aliquot of the groundwater sample was tested in the field for alkalinity, ferrous iron, and hydrogen sulfide using Hach™ test kits. Table 5 presents a summary of the groundwater sampling field parameter results.

Table 2 presents a summary of scheduled analyses for each well sampled. Samples from each well were analyzed for select CVOCs, including tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (DCE), trans-1,2- DCE, 1,1-DCE, 1,1-dichloroethane (DCA), 1-1-1-,trichloroethane, vinyl chloride (VC), and chloroethane and dissolved gases methane, ethane, ethene, and carbon dioxide[1]. Samples from 49 of 57 wells were also analyzed for dissolved iron and potassium, total sulfate and sulfide, and total organic carbon (TOC). Samples for these analyses were shipped under approved chain of custody procedures to Eurofins/Lancaster Laboratories, Inc. (LLI) in Lancaster, PA (an approved New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory.

In addition, samples from 16 of 57 wells were also collected for microbial population analyses for measurement of *Dehalococcoides spp.* (DHC), including functional genes tceA Reductase, BAV1 Vinyl Chloride Reductase, and Vinyl Chloride Reductase, and *Dehalobacter* (DHB). Samples for these analyses were shipped under approved chain-of-custody procedures to Microbial Insights, Inc. Knoxville, TN.

Table 6 provides a summary of sample collection and analysis specifications for each analysis type including sample containers, preservation methods, analytical methods, and other quality control information.

4.3 Investigative Derived Waste Management

Purge water and decontamination water were contained and staged in appropriate containment in new, closed-head 55-gallon drums pending characterization for disposal. Purge water from monitoring wells historically below hazardous waste disposal criteria was segregated and staged separately from purge water from wells historically greater than hazardous waste disposal criteria. Drums containing potentially hazardous waste were labeled and stored in accordance with the Site's hazardous waste management plan. Hazardous and non-hazardous purge water will be transported in accordance with appropriate regulations and disposed at an appropriately licensed facility(s).

Segregating the purge water as potentially hazardous versus non-hazardous reduced the volume of water for hazardous disposal by approximately 75 gallons, or 30 percent as compared to October 2015.

4.4 Data Validation

Analytical results for samples collected May 5 through 18, 2016 were reviewed by AECOM for usability with respect to the following requirements:

- Site Management Plan,
- NYSDEC Analytical Services Protocol (ASP), and
- USEPA Region II Standard Operating Procedures (SOPs).

The data submitted by the laboratory have been reviewed and validated. All sample analyses were found to be compliant with the method criteria, except as noted within the DUSR. Those results

[1] Carbon dioxide analyses were performed by the analytical laboratory due to a shortage of carbon dioxide field test kits from the manufacturer at the time of sampling.

qualified ‘R’ (rejected) are not usable (see Appendix C - DUSR, Section IV; consists of three VOC samples reported non-detect at the quantitation limit). Those results qualified ‘J’ (estimated value) or ‘UJ’ (estimated reporting limit) during the data review are considered conditionally usable. All other sample results are usable as reported. AECOM does not recommend the re-collection of any samples.

5.0 Bioreactor Performance and Monitoring Results

This section presents the most recent concentrations and data trends for the overburden bioreactor and site overburden wells through the Spring 2016 sampling event. Data trends for selected wells are discussed herein. A summary of Spring 2016 analytical data is provided as Table 7. Figures 5A through 5D provide isopleths of TCE, cis-1,2-DCE, VC, and total CVOCs (sum of TCE, DCE, and VC), respectively. Historical analytical data tables for all site overburden wells can be found in Appendix D. Time series plots depicting historical CVOC data for all wells sampled are provided in Appendix E.

5.1 Overburden Groundwater Elevations and Flow Directions

A summary of groundwater elevation data collected May 4, 2016 is provided in Table 3, including location coordinates, top of casing, depth to water and groundwater elevations for the monitoring wells, injection wells, and performance monitoring wells.

Figure 3 presents an overburden groundwater contour map based on the May 4, 2016 water level data. Overburden groundwater was measured at elevations between 579.95 ft AMSL (MW-1S) and 583.49 ft AMSL (PMW-3S). An overburden groundwater mound is present in the bioreactor portion of the Site (especially the western portion where bedrock injections were performed), with flow outward from this mound. Further from this mound, there is a slight eastward flow from wells MW-7S, MW-8S, and MW-9S located west and southwest of the bioreactor trenches towards the area of the bioreactors. However, these gradients are slight and with the exception of the bedrock injection areas in the western part of the bioreactor portion, gradients are relatively flat in the overburden.

5.2 Overburden Observations Inside the Bioreactor Trenches

With the exception of location OR-6SM, CVOC concentrations within the bioreactor trenches remain significantly decreased compared to samples taken within the first three to six months after installation of the bioreactors (April 2011). TCE, the primary CVOC, was generally depleted from the shallow groundwater within approximately the first six months of completion of the bioreactor installations. In October 2015, TCE was below detection limits at all locations within the bioreactor. Concentrations of cis-1,2 DCE and VC declined during the first year of monitoring and have remained below pre-treatment concentrations, with the exception of OR-6SM (both cis-1,2 DCE and VC) and OR-10SM (VC only).

At OR-6SM, cis-1,2 DCE increased from 1,700 µg/L in October 2015 to 4,600 µg/L in May 2016, and has shown a cyclical increase and corresponding decrease in DCE concentrations from April 2013 to present. VC has shown a similar trend in this well as it has increased from 500 µg/L in October 2015 to 1,100 µg/L in May 2016, with the same cyclical increase and decrease since April 2013 (see Appendix D). A similar, but less pronounced pattern can be seen in OR-10SM. Concentrations of both cis-1,2 DCE and VC in OR-10SM increased from below the detection limit in October 2015 to 77 µg/L and 65 µg/L respectively in May 2016. An increase and subsequent decrease in DCE and VC concentrations has been observed since July 2014 in OR-10SM. This cyclical pattern of CVOC concentrations has been observed at other locations in the overburden.

In May 2016, microbial counts of DHC, which degrade chlorinated solvent compounds, ranged from one to four orders of magnitude higher than concentrations measured after bioreactor installation in July 2011. The DHC data results are included in Appendix D.

The geochemical conditions in the bioreactor wells indicate that the bioreactors remain anaerobic. Average ORP in May 2016 was -237 mV, a decrease from an average ORP of -173 mV in October 2015, maintaining a level conducive to anaerobic biodegradation (Appendix D). TOC concentrations in the bioreactor wells have decreased substantially from initial concentrations in July 2011 (an average of 1,325 mg/L) to May 2016 (an average of 25 mg/L) (see Appendix D). Despite the decrease in TOC concentrations in the bioreactor wells there remains adequate TOC to act as an electron donor for anaerobic biodegradation of chlorinated solvents.

5.3 Overburden Observations Outside the Bioreactor Trenches

In all overburden performance monitoring wells (PMW) outside the bioreactors, the average total molar concentration of chlorinated ethenes (sum of TCE, DCE, and VC) in overburden groundwater decreased from 179 µM/L in July 2011 to 72 µM/L in May 2016. At individual PMW wells, CVOC concentrations are variable, with some wells showing increases, some showing decreases and others remaining relatively unchanged.

Although there is an overall decreasing trend in CVOCs, at some locations CVOCs are more persistent. The highest and most persistent CVOC concentrations in the overburden remain at:

- well MW-2S, approximately 8 feet north of the bioreactor trenches and immediately south of the former secondary containment excavation,
- PMW-5S, PMW-9S, and PMW-11S, located between the bioreactor trenches, and
- PMW-3S and PMW-6S located downgradient of the southernmost trenches.

Downgradient of the trenches, PMW-3S continued to decrease whereas PMW-6S experienced a sharp increase in CVOC concentrations.

At the locations between the bioreactor trenches (PMW-5S, PMW-9S, and PMW-11S), TOC concentrations have never been elevated above background (approximately 12 mg/L). Thus, CVOC concentrations are expected to remain persistent without additional treatment.

With the exception of PMW-6S, TOC concentrations are less than 10 mg/L indicating a deficiency of electron donors in the shallow areas. While PMW-6S had a slightly higher TOC of 17 mg/L, total CVOC concentrations in this well increased sharply compared to October 2015 (Table 7 and Appendix D).

Due to the low hydraulic conductivity of the fine-grained soils (less than 0.5 feet/day), horizontal transport of TOC and associated lateral expansion of the treatment zone was anticipated to be slow. Empirical data have demonstrated this to be the case; however, due to mounding in the former excavation area (observed throughout the investigation and remediation) the calculated transport rates are variable, and therefore, variations in the horizontal expansion of the treatment zone could also be variable.

Due to the persistent CVOC concentrations in the above specified wells, the lack of TOC outside of the bioreactors in the overburden, and the variable transport rates of the substrate in the bioreactor, additional substrate injections in the overburden may be warranted.

5.4 Overburden Observations – Other Wells

Downgradient wells MW-11S and MW-12S show a decreasing CVOC trend over the long term, but with little change since the October 2015 sampling. The ORP of MW-11S and MW-12S decreased after each bedrock injection event but have increased since the October 2015 sampling. Methane increases were noted at MW-11S and MW-12S in the months following the bedrock injection events.

At MW-1S, located approximately 150 feet upgradient of the overburden reactors, concentrations of CVOCs, specifically DCE and VC, showed an order of magnitude decrease in the last 4 sampling events (since August 2014) relative to historical concentrations, although cis-1,2-DCE rebounded to 58 µg/L in May 2016 (Appendix D).

5.5 Summary of Biodegradation Observations in Overburden

Although the overburden bioreactor wells have performed well with CVOC concentrations decreasing in most OR wells, further degradation appears to have stalled in other overburden wells. In general, the wells with higher CVOC concentrations correspond to higher ORP levels and lower extents of sulfate reduction (which would occur with active bioactivity). TOC also remains low throughout these wells. These conditions reflect the difficulty of electron donors to migrate through the low permeability soil. 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.

.

6.0 Bedrock Remediation Performance and Monitoring Results

This section presents the most recent concentrations and data trends for the bedrock wells through the Spring 2016 sampling event. Data trends for selected wells are discussed herein. A summary of Spring 2016 analytical data is provided as Table 7. Figures 6A through 6D provide isopleths of TCE, cis-1,2-DCE, VC, and total CVOCs (sum of TCE, DCE, and VC), respectively. Historical analytical data tables for all site overburden wells can be found in Appendix D. Time series plots depicting historical CVOC data for all wells sampled are provided in Appendix E.

6.1 Bedrock Groundwater Elevations and Flow Directions

A summary of groundwater elevation data collected May 4, 2016 is provided in Table 3, including location coordinates, top of casing, depth to water and groundwater elevations for the monitoring wells, injection wells, and performance monitoring wells.

Figure 4 presents a bedrock groundwater potentiometric surface contour map based on the May 4, 2016 water level data. Bedrock groundwater was measured at elevations between 577.25 ft AMSL (MW-16D) and 580.97 AMSL ft (INJ-13D) bgs. In general groundwater flows to the south; however there is a localized mounding of groundwater in the injection area as represented by INJ-13D.

Downward vertical gradients were commonly observed throughout the overburden bioreactor portion of the site, and were more pronounced in the injection area located in the eastern part of the bioreactor portion.

6.2 Bedrock Bioremediation Performance Summary

The data indicate a continuation of CVOC biodegradation attributed to the November 2012 substrate injection (Appendix E). Although the highly contaminated well INJ-7D showed increased concentrations of all CVOC compounds, other wells, including INJ-7D, INJ-8D, INJ-13D, RMW-2D, PMW-9D, PMW-10D, PMW-11D, PMW-12D and PMW-15D all showed decreases in DCE concentrations, coupled with flat or decreasing TCE concentrations. VC concentrations showed a range of behavior, balancing production from DCE degradation and removal from anaerobic biodegradation.

All monitored bedrock wells show increased ethene and ethane concentrations (one to three orders of magnitude) from September 2012 (prior to the November 2012 injections) to May 2016.

DHC populations (sampled from wells INJ-7D, PMW-2D, PMW-6D, PMW-11D, PMW-15D, PMW-17D, and RMW-2D) have increased one to three orders of magnitude in the bedrock treatment area after the November 2012 injections (Appendix E).

After the injection events, total molar CVOCs initially increased likely due to the release of CVOCs from DNAPL, sorbed contaminants, and increase in solubility, which is common at injection remediation sites. Among the wells INJ-7D, INJ-8D, PMW-9D, PMW-10D, PMW-11D, PMW-12D, PMW-15D, PMW-16D, PMW-17D, MW-20D, MW-21D, RMW-2D, RMW-3D, the average total molar CVOC concentration is now at approximately the same value (roughly 1,050 µM/L) in May 2016 as

July 2011 prior to injections. However, the distribution of species has shifted from 72 percent PCE and TCE to only 17 percent PCE and TCE. Although the total DCE concentration has increased, so has the VC concentration, and more importantly, ethene concentrations (not included in the average CVOC value listed above) have increased from essentially zero to 90 µM/L.

Over the long term, ethene and ethane concentrations are proving an important indicator of bioremediation progress at the Site. At multiple locations, ethene and ethane concentrations have increased by orders of magnitude over the last three years, indicating that although the CVOC concentrations are currently higher than baseline conditions in the source area, biodegradation is continuing in the source area. Additionally, ORP levels remain very low, and sulfate concentrations have been reduced and sulfide levels increased compared to background wells such as MW-18D (an indication of bioactivity) providing further evidence of active biodegradation.

6.3 Performance Enhancement Testing

Previous sampling results indicated that bedrock remediation was dependent on geochemical conditions. Wells with the highest degradation rates had a pH above approximately 6.5 SU and/or hydrogen sulfide less than 30 mg/L approximately. As discussed in previous reports, tests were conducted during the November 2012 substrate injections to mitigate potential limitations to the performance of the bedrock remediation system. The tests included adding vegetable oil substrate and calcium carbonate buffer (instead of sodium bicarbonate) throughout the 2012 injection area to raise the pH, and adding iron at INJ-7D to remove hydrogen sulfide by precipitating the sulfide with iron. The following observations are relevant to these 2012 injections:

- pH: The additional calcium carbonate appeared to lack sufficient buffering capacity to prevent the initial pH drop (5.5 – 6.0). The pH at all wells in May 2016 has recovered and are above 6.5 SU.
- TOC: TOC concentrations which measure both added substrate and degradation intermediates, had stayed above 100 mg/L for bedrock wells in the vicinity of the injections since the November 2012 injection up to October 2015 but have decreased in several wells (INJ-11D, MW-7D, PMW-17D, PMW-11D) during the May 2016 sampling (Appendix E).
- Iron and Sulfide Concentration: Iron (soluble and mineral sources) was injected into INJ-7D during the November 2012 substrate injection event to precipitate sulfide produced by the anaerobic biodegradation process; sulfide can be toxic to further bacterial growth. This injection resulted in an increase in iron and a decrease in sulfide at INJ-7D and the downgradient wells PMW-9D, PMW-12D, and RMW-2D. May 2016 data suggest iron concentrations at these locations continue to deplete, relative to post-2012 injection concentrations. A slight increase in iron concentration is observed in INJ-13D, downgradient from INJ-7D, in October 2015 remains elevated relative to historical data, but has decreased slightly in the May 2016 sampling. Iron concentrations have fluctuated at elevated levels in cross-gradient well INJ-8D since the November 2012 injection and have increased somewhat during the May 2016 sampling. The November 2012 iron injections in INJ-7D may have influenced iron and sulfide concentrations in side-gradient well PMW-1D. Concentrations of iron increased and concentrations of sulfide decreased from pre-November 2012 levels at PMW-1D.

  In wells further downgradient (PMW-2D, PMW-3D, PMW-4D, PMW-5D, PMW-6D, PMW-7D, PMW-8D, PMW-16D, PMW-17D, RMW-4D, and MW-7D), iron concentrations have remained low, and hydrogen sulfide and DCE concentrations have remained elevated.

- Ethene and Ethane Concentration: Ethene and ethane increased in INJ-7D as well as locations downgradient of this well (INJ-9D, INJ-13D, PMW-9D, PMW-10D, PMW-12D, PMW-14D, PMW-15D, PMW-16D, and RMW-2D) although the concentrations of these compounds has decreased somewhat in May 2016. The increased ethene and ethane concentration indicates biodegradation of VC, despite the increased VC concentration in some of these wells. Based on the continued results from the iron injections at INJ-7D, it appears that sulfide can be effectively controlled with iron, and that iron improves the rate of CVOC biodegradation.

As initially reported in the October 2015 semi-annual performance monitoring report, a laboratory treatability study conducted under anoxic conditions was conducted to optimize field treatments to enhance CVOC biodegradation in bedrock at the site. Groundwater samples used for the treatability study were collected in December 2013 from wells PMW-14D and PMW-2D. At the time of sampling, hydrogen sulfide concentrations (159 mg/L and 24.5 mg/L) and/or low pH (6.6 and 6.1) at PMW-2D and PMW-14D respectively, were potentially limiting the biodegradation of chloroethenes. The treatments tested in combination with emulsified vegetable oil (EVO) substrate include: 1) ferrous iron to reduce hydrogen sulfide concentration, 2) ferrous iron with sodium bicarbonate to raise pH, and 3) a combination of sodium bicarbonate, ferrous iron, and nutrients (ammonium chloride and sodium tripolyphosphate). Test bottles that received only EVO served as the untreated active control for comparison.

The results of this study indicate that the injection of organic substrate, ferrous iron, and nutrients in combination with appropriately buffering the pH to approximately 6.5 and above has the potential to enhance the biodegradation of chloroethenes, including DCE to ethene at the site.

6.4 Summary of Biodegradation Observations in Bedrock

Biodegradation activities continue in the bedrock as demonstrated by elevated degradation products, low ORP levels, high DHC populations, and continued sulfate depletion. Despite this active bioactivity, CVOC concentrations remain high especially in wells INJ-7D, INJ-11D, INJ-13D, MW-7D, PMW-2D, PMW-8D, PMW-9D, PMW-10D, PMW-12D, PMW-16D, PMW-17D, RMW-2D, and RMW-4D.

The November 2012 injection of iron has been successful in decreasing sulfide concentrations which has allowed increased bioactivity as indicated by increased ethene concentrations over the past year.

7.0 General Site Conclusions and Anticipated Future Activities

7.1 Site Inspections

As part of the Spring 2016 event, the pavement surface conditions above the bioreactor trenches were inspected for settlement, and the protective casings were inspected for integrity. No need for pavement repair or maintenance of any protective casings or wells associated with the bioreactor was observed or noted.

In addition, the SSD system was inspected in accordance with NYSDEC-approved operations and maintenance plan dated December 5, 2011. Results of the Spring 2016 inspection identified that the system was in proper working order. In October 2015, sub-slab vapor samples were collected in accordance with the Ekonol SSD Operations, Maintenance, and Monitoring Plan (December 2011) to help determine if cessation of operation of the SSD system is feasible. A sub-slab vapor sample was collected in August 2015 with the SSD system running, and in October 2015 with the SSD system shut down for 24 hours prior. Samples were submitted for volatile organic compound (VOC) analysis using EPA Method TO-15. Sampling results for both events were below method detection limits for all constituents of concern. Summary of the SSD sampling activities and recommendations were provided to NYSDEC under letter dated January 26, 2016. The letter requested approval to decommission the SSD; the letter is currently under NYSDEC review.

7.2 Overburden Bioreactor

The October 2015 data indicate CVOCs are mostly depleted in the bioreactor. The addition of bioremediation treatments to the bioreactor trenches and/or other selected locations with elevated and persistent CVOC concentrations is considered while monitoring continues. Methane and hydrogen sulfide will continue to be monitored.

7.3 Bedrock Bioremediation

The data to date continue to suggest that biodegradation is improving, but can be further optimized. The iron injection test demonstrated that sulfide can be effectively controlled, thus improving CVOC biodegradation. Increasing downgradient concentrations of ethene and ethane, combined with decreasing concentrations of CVOCs downgradient, indicate an overall positive performance of the bedrock remediation system. Sulfide concentrations remain elevated in the vicinity of INJ-01 and INJ-04 extending to PMW-7D. DCE concentrations are elevated and stable in these wells. Supplemental injections are contemplated to optimize the treatment by controlling sulfide concentrations and increasing nutrients. Methane and hydrogen sulfide will continue to be monitored.

Tables

Table 1
Well Condition Observations and Headspace Readings
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield , New York

Well ID	CO (ppm)	H2S (ppm)	Oxygen (%)	LEL (%)	VOCs (ppm)	Well Condition
INJ-01	8	0	20.9	0	2.8	Good
INJ-02	84	0	20.9	0	3.1	Good
INJ-03	58	0	20.5	2	2.2	Good
INJ-04	48	0	20.6	1	0	Good
INJ-05	165	0	20.1	0	257	Good
INJ-06D	0	0	20.9	0	0	Good
INJ-07D	0	0	20.9	0	8.1	Good
INJ-08D	0	0	20.9	0	0	Good
INJ-09D	3	0	17.8	3	0	Good
INJ-10D	5	0	14.9	57	0	Good
INJ-11D	0	0	19.3	0	0	Good
INJ-12D	123	0	20.2	53	0.7	Good
INJ-13D	0	0	17.8	0	0	Good
MW-1S	0	0	17.4	0	0	Good
MW-2S	0	0	20.5	0	3.4	Good
MW-3S	0	0	19.6	0	0	Good
MW-4S	5	0	20	0	0	Good
MW-5S	0	0	20.9	0	0	Good
MW-6S	0	0	20.5	0	0	Good
MW-7S	0	0	20.9	0	0	Good
MW-7D	42	0	19.9	0	0.1	Good
MW-8S	0	0	20.9	0	0	Good
MW-9S	15	0	20.5	0	0	Good
MW-10S	0	0	19.9	7	0	Good
MW-10D	0	0	20.5	0	0	Good
MW-11S	0	0	20.3	0	0	Good
MW-11D	0	0	20.9	0	0	Good
MW-12S	14	0	19.7	0	20.1	Good
MW-12D	0	0	20.3	0	0	Good
MW-13D	0	0	20.9	0	0	Good
MW-14D	0	0	20.9	0	0	Good
MW-15D	0	0	20.9	0	0	Good
MW-16D	0	0	20.7	0	0	Good
MW-17D	0	0	20.9	0	0	Good
MW-18D	0	0	20.9	0	0	Good
MW-19D	0	0	20.5	0	0	Good
MW-20D	18	0	18.4	0	6.8	Good
MW-21D	0	0	20.9	0	0	Good
OR-1SI	0	0	20.6	0	0	Good
OR-2SI	2	0	20.9	0	0	Good
OR-3SM	0	0	20.2	6	0	Good
OR-4SM	0	0	20.6	0	0	Good
OR-5SM	0	0	20.3	0	0	Good
OR-6SM	20	2	20.2	99	0	Good
OR-7SI	0	0	17.4	99	0	Good
OR-8SI	0	0	20.9	0	0	Good
OR-9SM	10	0	20.9	0	0	Good
OR-10SM	2	0	20.5	0	0	Good
OR-11SI	0	0	16.8	2	0	Good
OR-12SI	0	0	19	32	0	Good
OR-13SM	0	0	20.2	0	0	Good
OR-14SM	0	0	20.6	0	0	Good
OR-15SM	0	0	20.7	0	0	Good

Table 1
Well Condition Observations and Headspace Readings
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield , New York

Well ID	CO (ppm)	H2S (ppm)	Oxygen (%)	LEL (%)	VOCs (ppm)	Well Condition
OR-16SI	0	0	17.7	99	0	Good
OR-17SI	0	0	19.2	28	0	Good
OR-18SM	0	0	20.3	0	0	Good
PMW-1S	0	0	20.9	0	0	Good
PMW-1D	568	0	20.9	0	4	Good
PMW-2S	0	0	20.9	0	0	Good
PMW-2D	12	11	20.9	0	37	Good
PMW-3S	0	0	20.9	99	0	Good
PMW-3D	105	0	17.4	37	7.7	Good
PMW-4S	0	0	20.9	0	0	Good
PMW-4D	0	0	20.9	0	0	Good
PMW-5S	24	0	20.5	2	21.3	Good
PMW-5D	396	0	19.3	30	4.7	Good
PMW-6S	0	0	20.9	0	0.1	Good
PMW-6D	1084	51	17.7	99	7	Good
PMW-7S	3	0	20.9	0	0	Good
PMW-7D	11	0	20.6	0	0	Good
PMW-8S	0	0	20.5	0	0	Good
PMW-8D	73	0	19.9	0	51	Good
PMW-9S	0	0	20.5	0	0	Good
PMW-9D	118	0	20.5	0	7.2	Good
PMW-10S	0	0	20.2	0	0	Good
PMW-10D	544	0	20.5	18.4	19.1	Good
PMW-11S	0	0	20.7	0	0.7	Good
PMW-11D	5	0	20.5	0	0	Good
PMW-12D	42	0	20.9	0	2.8	Good
PMW-13D	14	0	20.6	0	0	Good
PMW-14D	0	0	20.9	0	0	Good
PMW-15D	19	0	17.7	0	16.7	Good
PMW-16D	0	0	20.6	0	0	Good
PMW-17D	0	0	20.6	0	0	Good
RMW-1D	0	0	19.8	0	0	Good
RMW-2D	32	0	20.5	0	332	Good
RMW-3D	0	137	19.1	0	12.3	Good
RMW-4D	183	0	16.3	99	0	Good
TP-1	0	0	20.9	0	0	Good
TP-2	0	0	20.9	0	0	Good

Notes: Shaded values indicate detections by the 4-gas and VOC meters.
ppm - parts per million

Table 2
Sample Matrix
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield, New York

Location	Synoptic Water Level Measurement[H/]	VOCs[A/] (SW8260C)	Methane, Ethane, Ethene (RSK SOP-175 Modified)[B/]	Dissolved Inorganics[C/D/] (6010C)	Total Organic Carbon (5310C)	Well Head Analyses [E/]	Sulfate[C/] (300.0)	Sulfide[C/] (SM 4500-S2)	Microbial Population[F/] (CENSUS)	Mobile Lab Analyses (Hach kits)[G/]
	Semi-Annual	Semi-Annual	Semi-Annual	Semi-Annual	Semi-Annual	Annual Only	Annual Only	Annual Only	Annual Only	
Overburden Bioreactor Monitoring Wells										
OR-3SM	1	1	1	1	1	1	1	1		1
OR-4SM	1	1	1	1	1	1	1	1		1
OR-5SM	1	1	1	1	1	1	1	1	1	1
OR-6SM	1	1	1	1	1	1	1	1	1	1
OR-9SM	1	1	1	1	1	1	1	1		1
OR-10SM	1	1	1	1	1	1	1	1		1
OR-13SM	1	1	1	1	1	1	1	1	1	1
OR-14SM	1	1	1	1	1	1	1	1	1	1
OR-15SM	1	1	1	1	1	1	1	1		1
OR-18SM	1	1	1	1	1	1	1	1		1
PMW-1S	1	1	1	1	1	1	1	1	1	1
PMW-2S	1	1	1	1	1	1	1	1	1	1
PMW-3S	1	1	1	1	1	1	1	1	1	1
PMW-4S	1	1	1	1	1	1	1	1		1
PMW-5S	1	1	1	1	1	1	1	1		1
PMW-6S	1	1	1	1	1	1	1	1		1
PMW-7S	1	1	1	1	1	1	1	1		1
PMW-9S	1	1	1	1	1	1	1	1	1	1
PMW-11S	1	1	1	1	1	1	1	1		1
Bedrock Injection/Withdrawal Wells										
INJ-7D	1	1	1	1	1	1	1	1	1	1
INJ-8D	1	1	1	1	1	1	1	1		1
INJ-11D	1	1	1	1	1	1	1	1		1
INJ-13D	1	1	1	1	1	1	1	1		1
Bedrock Monitoring Wells										
PMW-9D	1	1	1	1	1	1	1	1		1
PMW-10D	1	1	1	1	1	1	1	1		1
PMW-11D	1	1	1	1	1	1	1	1	1	1
PMW-12D	1	1	1	1	1	1	1	1		1
PMW-15D	1	1	1	1	1	1	1	1	1	1
PMW-16D	1	1	1	1	1	1	1	1		1
PMW-17D	1	1	1	1	1	1	1	1	1	1
Pilot Test Wells										
PMW-1D	1	1	1	1	1	1	1	1		1
PMW-2D	1	1	1	1	1	1	1	1	1	1
PMW-6D	1	1	1	1	1	1	1	1	1	1
RMW-4D	1	1	1	1	1	1	1	1		1
PMW-8D	1	1	1	1	1	1	1	1		1
MW-7D	1	1	1	1	1	1	1	1		1
Site Investigation Wells										
MW-1S	1	1	1	1	1	1	1	1		1
MW-2S	1	1	1	1	1	1	1	1	1	1
MW-4S	1	1	1	1	1	1	1	1		1
MW-6S	1	1	1			1				1
MW-10S	1	1	1			1				1
MW-11S	1	1	1			1				1
MW-12S	1	1	1			1				1
RMW-2D	1	1	1	1	1	1	1	1	1	1
RMW-3D	1	1	1	1	1	1	1	1		1
MW-11D	1	1	1			1				1
MW-17D	1	1	1			1				1
MW-20D	1	1	1			1				1
MW-21D	1	1	1			1				1
Investigative Monitoring Wells										
RMW-1D	1	1	1	1	1	1	1	1		1
MW-15D	1	1	1	1	1	1	1	1		1
MW-16D	1	1	1	1	1	1	1	1		1
MW-18D	1	1	1	1	1	1	1	1		1
MW-19D	1	1	1	1	1	1	1	1		1
MW-13D	1	1	1	1	1	1	1	1		1
MW-9S	1	1	1	1	1	1	1	1		1
MW-7S	1	1	1	1	1	1	1	1		1
Monitoring Subtotal	57	57	57	49	49	57	49	49	16	57
QA/QC										
Duplicates		3	3	3	3		3	3		
Matrix Spike		3								
Matix Spike Duplicate		3								
Trip Blanks		10								
Total per sampling Event:		76	60	52	52	57	52	52	16	57

Notes:

Matrix spike/matrix spike duplicate pair and field duplicates collected at the rate of 1 per 20 samples.

Field duplicates were named blind, using a similar scheme but non-existent well, such as MW-190B or MW-60.

[A/] VOCs = volatile organic compounds, including aromatic and chlorinated aliphatic hydrocarbons.

[B/] Analytical method for dissolved gases will be a laboratory-specific standard operating procedure (RSK-175).

[C/] All metal and cation samples were field filtered and immediately preserved (Fe, K).

[D/] Dissolved inorganic compounds consist of iron (Fe) and Potassium (K). Samples were field filtered.

[E/] Well head analyses include dissolved oxygen, oxidation-reduction potential, pH, temperature, electrical conductivity, turbidity and visual appearance.

[F/] Wanalysis of microbial population composition included concentration measurements of *Dehalococcoides* (DHC) and *Dehalobacte* r (DHB) species in cells per milliliter as well as DHC functional genes.

[G/] Field analyses include alkalinity, hydrogen sulfide, and ferrous iron. Carbon dioxide was laboratory analyzed for the May 2016 sampling event by RSK 175.

[H/] All Site water levels were recorded in May 2016.

Table 3
Water Level Measurements
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield , New York

Well ID	Elevation Top of Casing	Easting	Northing	5/4/2016	
				Depth to Water (ft btoc)	Groundwater Elevation
INJ-01	585.70	1056172.53	1132217.92	6.00	579.70
INJ-02	585.54	1056179.53	1132230.81	5.72	579.82
INJ-03	585.35	1056164.47	1132230.97	5.43	579.92
INJ-04	585.58	1056185.83	1132211.60	5.77	579.81
INJ-05	585.60	1056159.24	1132212.19	5.81	579.79
INJ-06D	585.67	1056256.92	1132295.04	5.62	580.05
INJ-07D	585.89	1056227.95	1132328.21	5.75	580.14
INJ-08D	585.85	1056283.56	1132319.81	5.77	580.08
INJ-09D	585.74	1056236.21	1132260.58	5.74	580.00
INJ-10D	585.24	1056280.55	1132262.71	5.64	579.60
INJ-11D	585.76	1056185.26	1132328.88	5.70	580.06
INJ-12D	585.59	1056193.71	1132261.54	5.82	579.77
INJ-13D	585.78	1056199.78	1132296.96	4.81	580.97
MW-1S	585.06	1056192.71	1132468.53	5.11	579.95
MW-2S	585.11	1056254.14	1132311.92	2.65	582.46
MW-3S	584.83	1056317.60	1132228.17	4.35	580.48
MW-4S	585.79	1056183.51	1132220.46	5.83	579.96
MW-5S	585.66	1056429.00	1132454.91	5.30	580.36
MW-6S	585.64	1056266.92	1132123.45	4.60	581.04
MW-7S	586.46	1056161.35	1132148.61	4.44	582.02
MW-7D	586.16	1056173.63	1132156.49	6.27	579.89
MW-8S	586.19	1056062.61	1132192.87	4.37	581.82
MW-9S	586.10	1056094.38	1132273.82	4.80	581.30
MW-10S	585.77	1056442.61	1132303.24	4.35	581.42
MW-10D	585.47	1055990.20	1132241.44	5.88	579.59
MW-11S	586.00	1056372.98	1132005.83	5.75	580.25
MW-11D	588.42	1056434.68	1132119.94	8.47	579.95
MW-12S	586.11	1056235.49	1132057.93	5.63	580.48
MW-12D	585.85	1055849.97	1132286.53	6.21	579.64
MW-13D	587.89	1056401.65	1131373.46	8.92	578.97
MW-14D	587.70	1056477.88	1132399.34	7.61	580.09
MW-15D	585.76	1055873.33	1131333.59	7.06	578.70
MW-16D	586.96	1056393.84	1131176.05	9.71	577.25
MW-17D	587.31	1056444.40	1131980.99	7.61	579.70
MW-18D	587.07	1056621.36	1132083.84	7.03	580.04
MW-19D	585.44	1055674.08	1131339.31	6.15	579.29
MW-20D	586.17	1056045.44	1131530.44	6.65	579.52
MW-21D	585.90	1055862.75	1131532.09	6.52	579.38
OR-1SI	585.80	1056211.28	1132307.96	2.60	583.20
OR-2SI	585.61	1056221.00	1132286.30	2.73	582.88
OR-3SM	585.81	1056238.75	1132303.07	2.79	583.02
OR-4SM	585.70	1056237.61	1132286.58	2.78	582.92
OR-5SM	585.73	1056264.58	1132305.39	2.56	583.17
OR-6SM	585.74	1056264.08	1132285.79	4.21	581.53
OR-7SI	585.76	1056281.74	1132304.69	2.60	583.16
OR-8SI	585.70	1056281.88	1132285.61	3.81	581.89
OR-9SM	585.69	1056317.88	1132305.78	4.72	580.97
OR-10SM	585.57	1056322.03	1132285.34	4.92	580.65
OR-11SI	585.91	1056339.81	1132305.64	4.95	580.96
OR-12SI	585.63	1056340.88	1132285.72	4.96	580.67
OR-13SM	585.80	1056357.56	1132303.89	4.98	580.82
OR-14SM	585.68	1056359.10	1132284.59	5.08	580.60
OR-15SM	585.85	1056405.58	1132304.29	4.55	581.30

Table 3
Water Level Measurements
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield , New York

Well ID	Elevation Top of Casing	Easting	Northing	5/4/2016	
				Depth to Water (ft btoc)	Groundwater Elevation
OR-16SI	585.74	1056408.53	1132289.87	4.61	581.13
OR-17SI	585.74	1056407.40	1132314.38	4.59	581.15
OR-18SM	585.51	1056425.90	1132308.77	4.37	581.14
PMW-1S	586.01	1056275.66	1132313.81	2.56	583.45
PMW-1D	585.66	1056173.74	1132291.16	6.17	579.49
PMW-2S	585.75	1056264.68	1132299.07	2.73	583.02
PMW-2D	585.85	1056180.62	1132220.74	5.81	580.04
PMW-3S	585.67	1056264.01	1132279.87	2.18	583.49
PMW-3D	585.98	1056172.04	1132210.57	6.67	579.31
PMW-4S	585.48	1056260.67	1132263.59	4.10	581.38
PMW-4D	585.73	1056156.77	1132199.23	6.14	579.59
PMW-5S	585.84	1056236.26	1132295.37	3.23	582.61
PMW-5D	585.73	1056200.45	1132209.88	5.93	579.80
PMW-6S	585.57	1056236.48	1132279.64	4.80	580.77
PMW-6D	585.86	1056187.65	1132197.91	6.61	579.25
PMW-7S	585.62	1056318.31	1132297.88	4.81	580.81
PMW-7D	585.82	1056171.23	1132181.82	6.26	579.56
PMW-8S	585.64	1056319.11	1132277.98	5.16	580.48
PMW-8D	585.46	1056158.56	1132222.87	5.82	579.64
PMW-9S	585.76	1056358.19	1132295.53	5.10	580.66
PMW-9D	585.92	1056208.44	1132275.49	6.41	579.51
PMW-10S	585.53	1056359.62	1132277.02	4.47	581.06
PMW-10D	585.68	1056257.10	1132275.14	6.14	579.54
PMW-11S	585.71	1056413.36	1132305.16	4.41	581.30
PMW-11D	585.76	1056311.43	1132273.20	5.88	579.88
PMW-12D	585.87	1056205.69	1132244.92	6.03	579.84
PMW-13D	585.68	1056235.09	1132247.22	5.87	579.81
PMW-14D	585.79	1056257.22	1132247.18	5.84	579.95
PMW-15D	585.63	1056279.65	1132246.82	5.82	579.81
PMW-16D	585.49	1056232.42	1132218.93	5.79	579.70
PMW-17D	585.77	1056255.43	1132226.60	5.77	580.00
RMW-1D	585.93	1056171.00	1132461.00	5.64	580.29
RMW-2D	586.14	1056235.00	1132291.00	5.75	580.39
RMW-3D	586.01	1056302.00	1132214.00	6.14	579.87
RMW-4D	585.76	1056171.69	1132203.28	5.97	579.79
TP-1	NA	NA	NA	6.08	NA
TP-2	NA	NA	NA	6.25	NA

Notes:
ft btoc - feet below top of casing
NA - not applicable

Table 4
Summary of Groundwater Sampling
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield , New York

Well ID	Date Sampled	Volume Purged (gallons)
Overburden Bioreactor Monitoring Wells		
OR-3SM	5/6/2016	2.5
OR-4SM	5/6/2016	2.5
OR-5SM	5/5/2016	3.0
OR-6SM	5/5/2016	3.0
OR-9SM	5/6/2016	6.0
OR-10SM	5/6/2016	4.0
OR-13SM	5/5/2016	4.0
OR-14SM	5/5/2016	4.0
OR-15SM	5/13/2016	4.5
OR-18SM	5/6/2016	4.0
PMW-1S	5/5/2016	2.5
PMW-2S	5/9/2016	4.0
PMW-3S	5/9/2016	3.0
PMW-4S	5/12/2016	4.0
PMW-5S	5/18/2016	3.0
PMW-6S	5/13/2016	5.0
PMW-7S	5/12/2016	3.0
PMW-9S	5/9/2016	3.5
PMW-11S	5/13/2016	3.0
Bedrock Injection/Withdrawal Wells		
INJ-7D	5/10/2016	6.0
INJ-8D	5/16/2016	3.0
INJ-11D	5/16/2016	10.0
INJ-13D	5/6/2016	8.0
Bedrock Monitoring Wells		
PMW-9D	5/16/2016	4.0
PMW-10D	5/17/2016	8.0
PMW-11D	5/5/2016	5.0
PMW-12D	5/17/2016	8.0
PMW-15D	5/9/2016	4.0
PMW-16D	5/18/2016	5.0
PMW-17D	5/9/2016	3.0
Pilot Test Wells		
PMW-1D	5/10/2016	9.0
PMW-2D	5/10/2016	3.0
PMW-6D	5/10/2016	4.0
RMW-4D	5/17/2016	4.0
PMW-8D	5/10/2016	3.0
MW-7D	5/17/2016	4.0

Table 4
Summary of Groundwater Sampling
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield , New York

Well ID	Date Sampled	Volume Purged (gallons)
Site Investigation Wells		
MW-1S	5/12/2016	3.0
MW-2S	5/9/2016	4.5
MW-4S	5/16/2016	3.0
MW-6S	5/12/2016	3.0
MW-10S	5/13/2016	4.0
MW-11S	5/11/2016	3.0
MW-12S	5/13/2016	5.0
RMW-2D	5/10/2016	4.0
RMW-3D	5/12/2016	6.0
MW-11D	5/13/2016	5.0
MW-17D	5/11/2016	4.0
MW-20D	5/12/2016	2.5
MW-21D	5/12/2016	4.0
Investigative Monitoring Wells		
RMW-1D	5/12/2016	3.0
MW-15D	5/11/2016	5.5
MW-16D	5/11/2016	3.0
MW-18D	5/17/2016	5.0
MW-19D	5/11/2016	3.0
MW-13D	5/11/2016	5.0
MW-9S	5/13/2016	4.0
MW-7S	5/6/2016	2.0

Table 5
Groundwater Sampling Field Parameter Results
Spring 2016 Sampling Event
Ekonol Polyester Resins Site
Wheatfield , New York

Monitoring Well ID	Sample Date	Temperature (deg C)	Specific Conductivity (mS/cm)	Dissolved Oxygen [+] (mg/L)	pH (standard units)	ORP (mV)	Turbidity (NTU)	Alkalinity (mg/L)	Carbon Dioxide* (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
Overburden Bioreactor Monitoring Wells											
OR-3SM	5/6/2016	13.71	11.030	3.51	6.25	-48.7	6.12	1540	640	3.30	0.30
OR-4SM	5/6/2016	14.51	4.392	1.60	6.43	-201.3	3.14	1890	640	1.90	2.00
OR-5SM	5/5/2016	12.57	7.503	2.55	6.31	-219.3	3.26	770	330	0.56	2.00
OR-6SM	5/5/2016	13.44	6.083	2.69	6.44	-322.5	2.73	1925	580	0.19	1.00
OR-9SM	5/6/2016	13.69	8.549	1.12	7.51	-332.1	4.02	425	65	0.02	-
OR-10SM	5/6/2016	13.83	5.519	0.28	7.33	-337.3	5.71	1335	480	1.51	5.00
OR-13SM	5/5/2016	11.93	6.868	0.36	6.65	-215.3	3.96	1355	480	3.30	5.00
OR-14SM	5/5/2016	12.29	4.136	0.39	6.90	-294.9	13.60	725	250	1.46	>5.00
OR-15SM	5/13/2016	12.19	4.931	0.25	6.80	-88.9	7.07	1925	690	1.68	0.30
OR-18SM	5/6/2016	13.89	2.902	0.31	7.09	-314.4	2.06	745	200	0.04	5.00
PMW-1S	5/5/2016	13.03	7.865	0.63	7.31	-263.8	2.74	120	< 4	0.54	1.00
PMW-2S	5/9/2016	12.27	9.033	0.79	6.83	-189.3	3.26	625	230	0.21	1.50
PMW-3S	5/9/2016	13.15	8.992	0.20	7.04	-281.1	4.49	685	220	0.72	1.50
PMW-4S	5/12/2016	15.44	1.469	0.81	7.05	-29.9	9.84	100	12	0.80	-
PMW-5S	5/18/2016	15.45	4.285	2.99	6.73	30.8	30.60	765	290	0.51	0.00
PMW-6S	5/13/2016	14.23	5.365	0.87	6.45	-200.8	4.06	1315	460	3.30	1.00
PMW-7S	5/12/2016	15.38	10.980	4.75	6.94	5.2	6.90	505	94	0.02	-
PMW-9S	5/9/2016	12.60	7.379	1.12	7.11	-20.5	0.81	440	54	0.07	0.00
PMW-11S	5/13/2016	13.26	5.676	0.44	6.50	53.5	4.47	485	220	0.64	0.00
Bedrock Injection/Withdrawal Wells											
INJ-7D	5/10/2016	14.42	3.562	0.16	7.05	-243.0	4.30	625	260	1.60	0.30
INJ-8D	5/16/2016	13.76	2.886	0.24	7.41	-181.3	14.70	705	54	0.91	0.30
INJ-11D	5/16/2016	15.31	3.495	0.14	8.17	-346.4	8.43	465	89	1.30	2.00
INJ-13D	5/6/2016	15.07	3.322	1.22	7.82	-248.5	11.32	465	75	1.94	1.50
Bedrock Monitoring Wells											
PMW-9D	5/16/2016	15.42	4.519	0.16	7.24	-210.4	13.00	545	49	1.83	0.00
PMW-10D	5/17/2016	15.18	5.815	0.15	6.96	-321.3	641	770-1155	300	>3.30	5.00
PMW-11D	5/5/2016	13.54	2.220	1.32	7.60	-342.8	2.30	525	39	0.08	5.00
PMW-12D	5/17/2016	14.57	5.336	Instrument Error	6.83	-318.9	3.99	1010	340	0.50	5.00
PMW-15D	5/9/2016	12.11	1.896	1.49	7.78	-196.9	7.12	625	24	1.20	1.00
PMW-16D	5/18/2016	15.06	2.092	0.28	7.24	-367.0	3.84	625	80	0.08	5.00
PMW-17D	5/9/2016	13.89	2.024	2.18	9.16	-237.6	2.74	770	23	0.03	2.00

Table 5
Groundwater Sampling Field Parameter Results
Spring 2016 Sampling Event
Ekonol Polyester Resins Site
Wheatfield , New York

Monitoring Well ID	Sample Date	Temperature (deg C)	Specific Conductivity (mS/cm)	Dissolved Oxygen + (mg/L)	pH (standard units)	ORP (mV)	Turbidity (NTU)	Alkalinity (mg/L)	Carbon Dioxide* (mg/L)	Ferrous Iron (mg/L)	Hydrogen Sulfide (mg/L)
Pilot Test Wells											
PMW-1D	5/10/2016	14.24	4.477	0.21	7.80	-265.0	26.90	660	30	3.03	0.00
PMW-2D	5/10/2016	13.54	4.796	0.72	6.68	-333.6	3.42	770	140	0.11	1.00
PMW-6D	5/10/2016	13.00	6.600	1.45	6.90	-322.4	5.24	1540	120	0.35	1.00
RMW-4D	5/17/2016	13.53	3.650	0.57	6.74	-349.6	5.53	990	130	0.13	5.00
PMW-8D	5/10/2016	14.14	5.144	0.98	6.93	-334.1	3.04	1010	200	0.04	2.00
MW-7D	5/17/2016	13.59	7.394	0.24	7.00	-375.1	2.93	910	98	0.00	5.00
Site Investigation Wells											
MW-1S	5/12/2016	13.78	2.705	2.49	7.26	-183.7	4.64	300	30	0.99	0.10
MW-2S	5/9/2016	14.31	5.542	0.34	6.78	5.3	1.03	770	110	1.79	-
MW-4S	5/16/2016	13.63	6.452	0.82	6.79	-124.7	1.17	605	120	0.52	1.00
MW-6S	5/12/2016	15.89	8.393	4.23	7.33	-119.9	7.12	380	37	1.67	0.00
MW-10S	5/13/2016	13.18	3.049	0.28	6.83	0.0	4.70	360	59	1.05	0.00
MW-11S	5/11/2016	12.86	5.470	1.31	6.92	-94.8	4.60	240	64	0.00	0.00
MW-12S	5/13/2016	14.13	10.440	0.84	7.12	-205.2	5.82	440	94	0.89	1.00
RMW-2D	5/10/2016	13.72	3.814	0.41	7.32	-336.8	23.30	1010	270	0.09	0.50
RMW-3D	5/12/2016	15.83	2.195	2.55	7.19	-330.8	1.82	385	44	0.07	2.00
MW-11D	5/13/2016	12.73	3.002	0.48	6.94	-267.2	1.32	360	53	0.10	0.10
MW-17D	5/11/2016	12.72	3.648	0.08	7.36	-157.4	0.93	380	57	0.00	1.00
MW-20D	5/12/2016	15.74	2.404	1.11	7.44	-240.8	2.51	360	43	0.70	1.00
MW-21D	5/12/2016	13.45	2.211	1.77	7.22	-149.6	13.31	280	36	1.12	-
Investigative Monitoring Wells											
RMW-1D	5/12/2016	13.60	2.940	1.77	7.40	-248.3	1.98	320	44	0.18	2.00
MW-15D	5/11/2016	14.10	4.198	0.66	7.52	-179.6	1.84	180	18	0.13	0.50
MW-16D	5/11/2016	11.99	1.978	1.77	7.15	-152.7	3.34	340	52	0.17	0.30
MW-18D	5/17/2016	9.59	2.987	0.31	6.92	-137.7	3.14	380	66	0.06	2.00
MW-19D	5/11/2016	14.28	5.127	1.88	6.65	13.2	3.17	485	200	0.73	0.00
MW-13D	5/11/2016	12.81	2.816	0.15	7.48	-227.1	0.70	380	64	0.16	2.00
MW-9S	5/13/2016	15.03	3.490	0.53	9.24	-111.8	14.40	-	< 4	0.00	0.00
MW-7S	5/6/2016	14.36	9.708	1.77	6.64	24.0	16.20	445	78	1.27	0.00

Notes: * Carbon Dioxide was run as a laboratory analysis in May 2016.
+ Elevated dissolved oxygen readings in some cases conflict with negative oxidation/reduction potential readings.
mS/cm - milliSiemen per centimeter
mg/L - milligram per liter
mV - millivolt
NTU - nephelometric turbidity unit
ORP - oxidation-reduction potential
- Not Measured

Table 6
Summary of Analytical Specifications
Spring 2016 Monitoring Event
Ekonol Polyester Resins Site
Wheatfield, New York

Sample Type	Container Type	Sample Volume	Preservation Method	Max. Holding Time	Analytical Method
Constituents of Concern					
Select VOCs	40 mL glass vial with septum top	3x40 mL	Hydrochloric acid, Cool 4°C	14 days	SW846 Method 8260C
Natural Attenuation Parameters					
Methane, Ethene, Ethane, Carbon Dioxide	40 mL glass vial with septum top	2x40 mL	Hydrochloric acid, Cool 4°C	14 days	USEPA RSK SOP-175 Modified
TOC	40 mL amber glass vial with septum top	2x40 mL	Phosphoric acid, Cool 4°C	28 days	USEPA 5310 C-2000
Dissolved Metals*	250 mL plastic	250 mL	Nitric Acid	6 months	USEPA 6010C
Sulfate	40 mL glass vial with septum top	2x40 mL	None	28 days	USEPA 300.0
Sulfide	250 mL glass	250 mL	Sodium hydroxide and zinc acetate	7 days	Standard Method (SM) 4500-S2 D-2000
Microbial Population	In-line Filter	Filter 1L	Cool 4°C	24-48 hours	CENSUS (DHC, DHB, & DHC functional genes)

Notes:
VOC - volatile organic compound
TOC - total organic carbon
*Iron and Potassium
mL - milliliter
L - liter

Table 7
Monitoring Well Groundwater Analytical Result Summary - Spring 2016
Ekonol Polyester Resins Site
Wheatfield, New York

Parameter	Criteria[1]	INJ- 7D	INJ- 8D	INJ-11D	INJ-13D	MW- 1S	MW- 2S	MW- 4S	MW- 6S	MW- 7D	MW- 7S	MW- 9S	MW-10S	MW-11D	MW-11S	MW-12S
Volatile Organic Compounds																
PCE (µg/L)	5	220	1.0 U	200 U	10 U	1.0 U	50 U	1.0 U	1.0 U	94 J	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
TCE (µg/L)	5	110000 D	2.4	27000	33	1.7	320	5.1	1.0 U	560	1.0 U	1.0 U	11	2.7	32	2300 D
Cis-1,2-DCE (µg/L)	5	540000 D	170	120000 D	4300 D	58	240000 D	320 D	25	67000 D	1.0 U	1.0 U	530 D	15	260	1600 D
Trans-1,2-DCE (µg/L)	5	410	13	140 J	38	2.6	1600	1.8	1.0 U	130	1.0 U	1.0 U	11	1.0 U	7.6	44
1,1-DCE (µg/L)	5	670	0.95 J	260	15	0.55 J	520	1.2	1.0 U	69 J	1.0 U	1.0 U	1.7	1.6	2	3.8 J
Vinyl Chloride (µg/L)	2	11000	210	4500	2500	10	14000	230	91	2500	1.0 U	1.0 U	160	17	65	420
1,1,1-Trichloroethane (µg/L)	5	100 U	14	200 U	10 U	1.0 U	50 U	1.0 U	1.0 U	100 U	1.0 U	1.0 U	1.0 U	65	1.0 U	8.5
1,1-Dichloroethane (µg/L)	5	100 U	320 D	200 U	10 U	1.0 U	29 J	0.79 J	1.4	150	1.0 U	1.0 U	1.0 U	12	12	20
Chloroethane (µg/L)	5	100 U	2.8	200 U	10 U	1.0 U	50 U	1.0 U	1.0 U	100 U	1.0 U	1.0 U	1.0 U	0.65 J	1.1	2.7 J
Dissolved Metals																
Dissolved Iron (mg/L)	--	25.2	26.1	0.167 J	9.13	1.01	2.23	0.639	NA	0.4 U	1.53	0.400 U	NA	NA	NA	NA
Dissolved Gases																
Ethane (µg/L)	--	19	20	82	380	5.0 U	22	9.3	11	12	5.0 U	5.0 U	4.4 J	36	1.9 J	29
Ethene (µg/L)	--	1200 D	1400 D	980 D	2300 D	5.0 U	180	24	12	260	5.0 U	5.0 U	12	1.3 J	36	820 D
Methane (µg/L)	--	1800 D	14000 D	16000 D	17000 D	240	310	480 D	88	9600 D	15	26	1300 D	190	390	4400 D
Miscellaneous Parameters																
TOC (mg/L)	--	187	465	83.2	101	2.2	2.3	5.6	NA	84.8	1.2	7.6	NA	NA	NA	NA
Sulfate (mg/L)	250	250	5.0 U	266	10.5	1460	1220	4110	NA	31.6	2010	1390	NA	NA	NA	NA
Sulfide (mg/L)	0.05	1.1	0.095 J	56.7	3.3	0.39	0.10 U	2.4	NA	159	0.10 U	0.10 U	NA	NA	NA	NA
pH (s.u.)	--	7.05	7.41	8.17	7.82	7.26	6.78	6.79	7.33	7	6.64	9.24	6.83	6.94	6.92	7.12
CENSUS																
BVC (cells/ml)	--	2.6E+05	NA	NA	NA	NA	2.3E+03	NA	NA	NA	NA	NA	NA	NA	NA	NA
DHBt (cells/ml)	--	1.6E+04	NA	NA	NA	NA	1.6E+03	NA	NA	NA	NA	NA	NA	NA	NA	NA
DHC (cells/ml)	--	9.1E+05	NA	NA	NA	NA	4.6E+03	NA	NA	NA	NA	NA	NA	NA	NA	NA
TCEr (cells/ml)	--	8.1E+03	NA	NA	NA	NA	2.1E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA
VCR (cells/ml)	--	1.1E+05	NA	NA	NA	NA	1.9E+00	NA	NA	NA	NA	NA	NA	NA	NA	NA

See Page 4 of 4 for notes.

Table 7
Monitoring Well Groundwater Analytical Result Summary - Spring 2016
Ekonol Polyester Resins Site
Wheatfield, New York

Parameter	Criteria[1]	MW-13D	MW-15D	MW-16D	MW-17D	MW-18D	MW-19D	MW-20D	MW-21D	OR- 3SM	OR- 4SM	OR- 5SM	OR- 6SM	OR- 9SM	OR-10SM	OR-13SM
Volatile Organic Compounds																
PCE (µg/L)	5	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 UR	1.0 U	1.0 UR	1.0 U	1.0 U	1.0 U
TCE (µg/L)	5	1.3	4.1	0.78 J	1.0 U	1.0 U	1.0 U	14	1.9	1.0 U	1.0 UR	1.0 U	2.8 J	1.0 U	1.0 U	1.0 U
Cis-1,2-DCE (µg/L)	5	180	290 D	140	4.6	1.0 U	7	450	350 D	1.0 U	1.0 UR	1.0 U	4600 DJ	2.8	77	1.0 U
Trans-1,2-DCE (µg/L)	5	1.4	4.7	0.53 J	1.0 U	1.0 U	0.66 J	4.1 J	3.1	1.0 U	1.2 J	0.52 J	100 J	1.0 U	3.9	1.0 U
1,1-DCE (µg/L)	5	0.64 J	5.4	0.88 J	1.0 U	1.0 U	1.0 U	37	4.1	1.0 U	1.0 UR	1.0 U	1.5 J	1.0 U	1.0 U	1.0 U
Vinyl Chloride (µg/L)	2	180	280	65	4.7	1.0 U	0.51 J	740	460 D	1.0 U	1.0 UR	1.0 U	1100 DJ	3.2	65	1.0 U
1,1,1-Trichloroethane (µg/L)	5	1.0 U	140	1.0 U	5.5	1.0 U	1.0 U	2000 J	45	1.0 U	1.0 UR	1.0 U	1.0 UR	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane (µg/L)	5	9.6	37	1.8	7.5	1.0 U	1.0 U	170	23	1.0 U	0.52 J	1.0 U	4.4 J	0.53 J	5.3	1.0 U
Chloroethane (µg/L)	5	1.0 U	1.0 U	1.0 U	2.1	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U	1.0 UR	1.0 U	4.9 J	1.0 U	6.4	1.3
Dissolved Metals																
Dissolved Iron (mg/L)	--	0.0694 J	0.154 J	0.107 J	NA	0.4 U	0.579	NA	NA	31.8	16.9	3.57	3.97	0.400 U	2.25	8.01
Dissolved Gases																
Ethane (µg/L)	--	4.2 J	5.0 U	1.8 J	2.2 J	5.0 U	5.0 U	5.0 UJ	1.1 J	63	3.4 J	190	410 D	17	55	5.5
Ethene (µg/L)	--	65	3.4 J	5.9	1.5 J	5.0 U	5.0 U	8 J	11	5.0 U	2 J	19	280 D	7.2	200	1.4 J
Methane (µg/L)	--	1100 D	32	61	65	39	17	57 J	57	13000 D	13000 D	19000 D	12000 D	8500 D	18000 D	18000 D
Miscellaneous Parameters																
TOC (mg/L)	--	2.7	2.1	2	NA	5.1	6.2	NA	NA	32.3	36.1	9	32.9	4.8	13.4	24.3
Sulfate (mg/L)	250	704	364	721	NA	1570	2870	NA	NA	2.2 J	36.4	25	125	185	153	8.1
Sulfide (mg/L)	0.05	2.6	1.9	1.3	NA	2.5	0.10 U	NA	NA	0.34	2.4 J	16.2	30.5	28.9	64	13.8
pH (s.u.)	--	7.48	7.52	7.15	7.36	6.92	6.65	7.44	7.22	6.25	6.43	6.31	6.44	7.51	7.33	6.65
CENSUS																
BVC (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.4E+03	2.1E+04	NA	NA	1.4E+01
DHBt (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.5E+03	3.9E+03	NA	NA	3.4E+03
DHC (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.7E+04	6.0E+05	NA	NA	1.6E+04
TCEr (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0E+01	1.4E+03	NA	NA	3.6E+01
VCR (cells/ml)	--	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	1.8E+04	1.0E+05	NA	NA	1.6E+03

See Page 4 of 4 for notes.

Table 7
Monitoring Well Groundwater Analytical Result Summary - Spring 2016
Ekonol Polyester Resins Site
Wheatfield, New York

Parameter	Criteria[1]	OR-14SM	OR-15SM	OR-18SM	PMW- 1D	PMW- 1S	PMW- 2D	PMW- 2S	PMW- 3S	PMW- 4S	PMW- 5S	PMW- 6D	PMW- 6S	PMW- 7S	PMW- 8D	PMW- 9D
Volatile Organic Compounds																
PCE (µg/L)	5	1.0 U	10 UR	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	20 U	1.0 U	10 U	1.0 U	17	5.0 U
TCE (µg/L)	5	1.0 U	10 UR	1.0 U	3.1	1.2	50	0.55 J	13	12	1200	8.5	13	0.58 J	4400 D	120
Cis-1,2-DCE (µg/L)	5	2.1	10 UR	5.1	67	560 D	28000 D	38	5800 D	500 D	19000 D	2400 D	5500 D	8.1	27000 D	4200 D
Trans-1,2-DCE (µg/L)	5	1.0 U	10 UR	1.5	1.8	19	130	3.9	160	18	420	68	150	1.0 U	88	14
1,1-DCE (µg/L)	5	1.0 U	10 UR	1.0 U	1.0 U	1.5	33	1.0 U	14	1.3	36	1.4	9.4 J	1.0 U	63	10
Vinyl Chloride (µg/L)	2	4.1	10 UR	1.0 U	36	280 D	20000 D	35	2100	25	2500	410 D	1600	3.8	1700 DJ	700
1,1,1-Trichloroethane (µg/L)	5	1.0 U	10 UR	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U	20 U	1.0 U	10 U	1.0 U	3.9 J	5.0 U
1,1-Dichloroethane (µg/L)	5	1.0 U	10 UR	1.0 U	3.1	1.8	21	0.58 J	5.6	0.77 J	20 U	43	10 U	100	25	7
Chloroethane (µg/L)	5	1.0 U	10 UR	1.0 U	5.5	1.1	5.0 U	0.76 J	2.0 U	1.0 U	20 U	3.7	10 U	1.0 U	5.0 U	5.0 U
Dissolved Metals																
Dissolved Iron (mg/L)	--	1.79	57.1	0.400 U	62.1	0.914	0.0807 J	0.222 J	0.638	0.583	0.157 J	0.821	4.77	0.400 U	0.400 U	70.9
Dissolved Gases																
Ethane (µg/L)	--	2 J	2.2 J	16	850 D	130	28	130	200	2.8 J	110	33	42	5.0 U	14	54
Ethene (µg/L)	--	5.8	5.0 U	40	450	250	3900 D	73	600 D	5.1	340	4700 D	270	5.0 U	550 D	8700 D
Methane (µg/L)	--	16000 D	12000 D	14000 D	19000 D	3500 D	16000 D	20000 D	15000 D	230	9600 D	14000 D	12000 D	5.0 U	3600 D	13000 D
Miscellaneous Parameters																
TOC (mg/L)	--	8.5	81.8	6.6	398	5.1	222	6.5	5.6	5.4	6.2	482	17.1	5	109	402
Sulfate (mg/L)	250	189	3.2 J	189	2.3 J	73.5	23.1	13.5	569	129	1390	92.7	366	3300	1690	5.0 U
Sulfide (mg/L)	0.05	12.4	0.14	52	0.15	7.1	146	17.1	18.5	0.10 U	0.10 U	12.6	5.7	0.10 U	154	0.15
pH (s.u.)	--	6.9	6.8	7.09	7.8	7.31	6.68	6.83	7.04	7.05	6.73	6.9	6.45	6.94	6.93	7.24
CENSUS																
BVC (cells/ml)	--	2.8E+01	NA	NA	NA	8.1E+03	2.6E+05	1.2E+03	1.7E+04	NA	NA	8.2E+02	NA	NA	NA	NA
DHBt (cells/ml)	--	1.6E+04	NA	NA	NA	1.5E+04	3.6E+03	2.6E+03	3.3E+03	NA	NA	4.2E+04	NA	NA	NA	NA
DHC (cells/ml)	--	4.4E+03	NA	NA	NA	5.1E+05	1.5E+06	2.5E+04	9.5E+04	NA	NA	1.6E+05	NA	NA	NA	NA
TCEr (cells/ml)	--	9.7E+00	NA	NA	NA	4.5E+02	5.3E+04	2.5E+02	2.8E+02	NA	NA	7.1E+03	NA	NA	NA	NA
VCR (cells/ml)	--	4.1E+02	NA	NA	NA	2.2E+05	2.7E+04	1.1E+04	2.4E+04	NA	NA	2.3E+04	NA	NA	NA	NA

See Page 4 of 4 for notes.

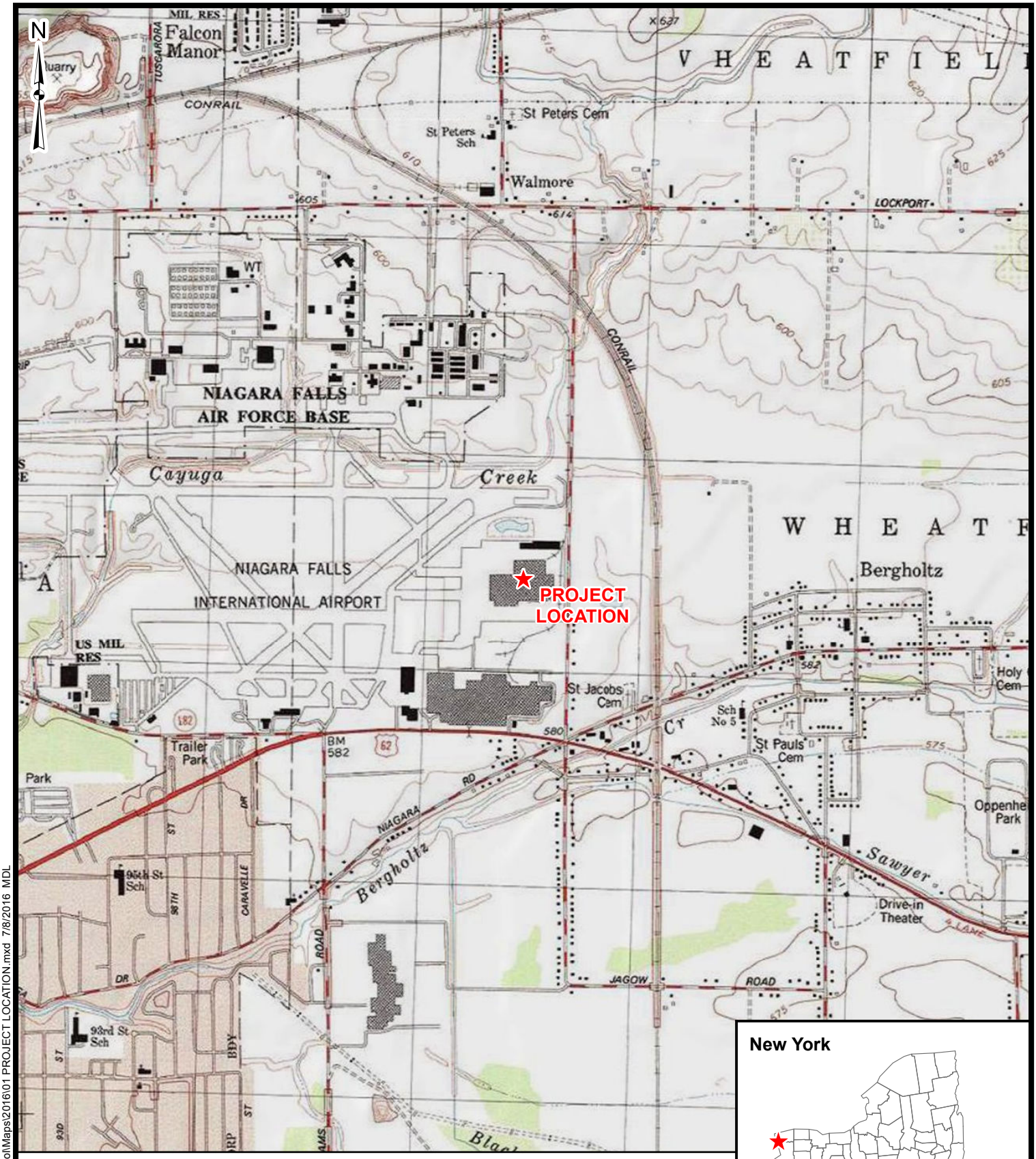
Table 7
Monitoring Well Groundwater Analytical Result Summary - Spring 2016
Ekonol Polyester Resins Site
Wheatfield, New York

Parameter	Criteria[1]	PMW- 9S	PMW-10D	PMW-11D	PMW-11S	PMW-12D	PMW-15D	PMW-16D	PMW-17D	RMW- 1D	RMW- 2D	RMW- 3D	RMW- 4D
Volatile Organic Compounds													
PCE (µg/L)	5	1.0 U	15	36	20 U	340	40	21	19	1.0 U	1100	10 U	20 U
TCE (µg/L)	5	2400 D	1300 D	240	150	52000 D	50	83	1700 J	0.83 J	140000 D	32	2100
Cis-1,2-DCE (µg/L)	5	3400 D	19000 D	3100	11000 D	220000 D	1400 D	26000 D	8500 J	160	160000 D	2700	17000 D
Trans-1,2-DCE (µg/L)	5	28	55	15	190	560 D	11	82	25	1.0 U	100	10	57
1,1-DCE (µg/L)	5	7.6	42	250	22	390	140	150	68	1.2	240	310	27
Vinyl Chloride (µg/L)	2	11	4100 D	540	1800	38000 D	830 D	2200	1200 J	7.5	630	180	4900
1,1,1-Trichloroethane (µg/L)	5	1.0 U	110	10000	20 U	12	1700 D	3500	1400 J	11	17 J	12000 D	20 U
1,1-Dichloroethane (µg/L)	5	1.0 U	350	730	33	140	3100 D	360	350	2.6	120	230	32
Chloroethane (µg/L)	5	0.64 J	2.0 U	10 U	20 U	2.0 U	35	20 U	2.0 U	1.0 U	20 U	10 U	20 U
Dissolved Metals													
Dissolved Iron (mg/L)	--	0.400 U	19.4	0.037 J	0.736	0.435	0.206 J	0.400 U	0.0478 J	0.272 J	0.0719 J	0.400 U	0.400 U
Dissolved Gases													
Ethane (µg/L)	--	1.3 J	25	4.9 J	24	24	160	4.2 J	7.6	31	68	8.1	23
Ethene (µg/L)	--	5.0 U	9600 D	42	150	12000 D	110	350	97	5.0 U	380	7.3	2000 D
Methane (µg/L)	--	17	9600 D	1100 D	6500 D	5900 D	1300 D	1100 D	930 D	130	510 D	260	9800 D
Miscellaneous Parameters													
TOC (mg/L)	--	6.1	488	5.4	2.6	365	115	42.8	56.6	1.7	259	2.4	117
Sulfate (mg/L)	250	1710	12.4	440	2120	23.8	16.5	165	16.3	934	400	630	547
Sulfide (mg/L)	0.05	0.10 U	21.4	73.1	0.10 U	118	57.2	98.5	52.4	7.8	172	27.9	60.2
pH (s.u.)	--	7.11	6.96	7.6	6.5	6.83	7.78	7.24	9.16	7.4	7.32	7.19	6.74
CENSUS													
BVC (cells/ml)	--	0.5 U	NA	5.6E+04	NA	NA	1.4E+05	NA	1.4E+05	NA	1.1E+04	NA	NA
DHBt (cells/ml)	--	1.2E+03	NA	9.3E+03	NA	NA	1.6E+05	NA	1.1E+05	NA	1.4E+05	NA	NA
DHC (cells/ml)	--	9.5E+01	NA	3.2E+05	NA	NA	3.3E+05	NA	4.5E+05	NA	1.2E+05	NA	NA
TCEr (cells/ml)	--	0.2 J	NA	4.3E+03	NA	NA	1.0E+04	NA	1.3E+04	NA	2.6E+03	NA	NA
VCR (cells/ml)	--	2.2E+01	NA	5.9E+03	NA	NA	8.4E+03	NA	3.7E+04	NA	1.3E+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.

µg/L - micrograms per liter
mg/L - milligrams per liter
cells/ml - cells per milliliter
s.u. - standard units
NA - Not Analyzed
J - The reported concentration is an estimated value.
D - Result reported from a secondary dilution analysis.
U - Not detected above the reporting limit.
UJ - Not detected. The reporting limit is an estimated value.
R - Rejected. See DUSR, Section IV.

Figures



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

AECOM

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
PROJECT LOCATION PLAN

FIGURE 1

J:\Projects\60481767_BPIP\MISC\GIS\Ekonol\Maps\2016\01 PROJECT LOCATION.mxd 7/8/2016 MDL

N

BUILDING NO. 4

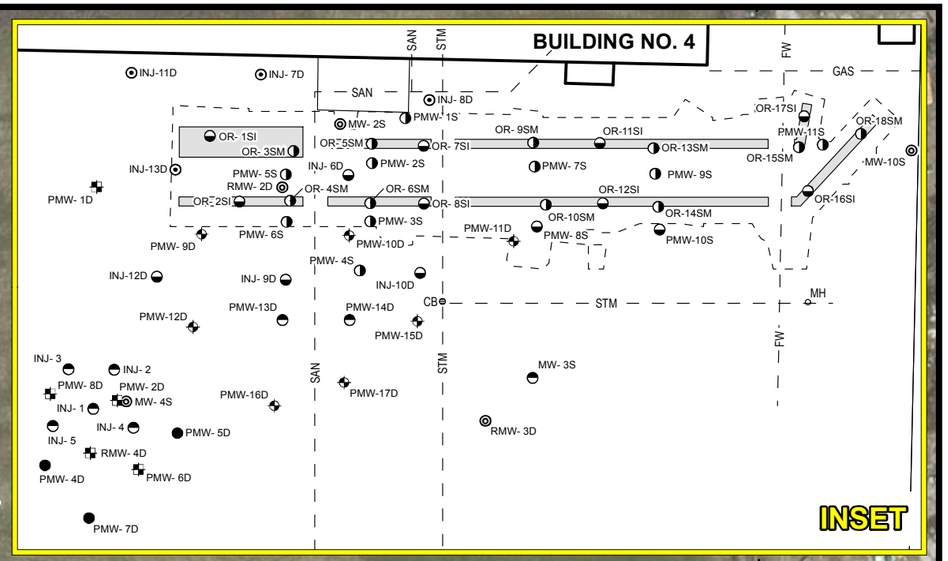
SEE INSET

SAINT-GOBAIN ABRASIVES BUILDING

BUILDING NO. 5

WALMORE RD

MW- 1S
RMW- 1D
MW- 5S
MW-14D
MW-12D
MW- 9S
MW-10D
MW- 8S
MW-7S
MW- 7D
MW- 6S
MW-11D
MW-12S
MW-18D
MW-11S
MW-17D
MW-21D
MW-20D
MW-13D
MW-19D
MW-15D
MW-16D



Legend

- Overburden Bioreactor Monitoring Well
- Bedrock Injection/Withdrawal Well
- Bedrock Monitoring Well
- Pilot Test Well
- Site Investigation Well
- Investigative Monitoring Well
- New Boring Well (Post-2010)
- Old Boring Well (Pre-2010)
- Replacement Bedrock Investigation Well

Source: ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
SITE PLAN

AECOM

FIGURE 2

J:\Projects\60481767_BPIPOM\MISC\GIS\Ekonol\Maps\20160202 SITE PLAN.mxd 7/8/2016

N

MW- 1S, 579.95

MW- 5S, 580.36

BUILDING NO. 4

MW- 9S, 581.30

MW- 8S, 581.82

SEE INSET

MW-7S, 582.02

MW- 6S, 581.04

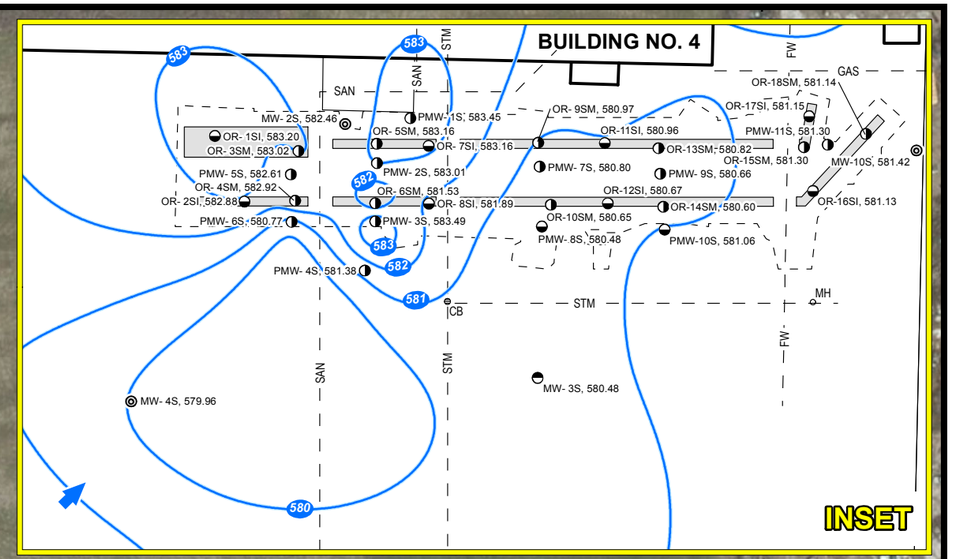
MW-12S, 580.48

MW-11S, 580.25

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD



Legend

- Overburden Bioreactor Monitoring Well
- Site Investigation Well
- Investigative Monitoring Well
- New Boring Well (Post-2010)
- Old Boring Well (Pre-2010)
- Groundwater Flow Direction
- Groundwater Elevation Contour

Source: ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
OVERBURDEN GROUNDWATER ELEVATIONS
(MAY 4, 2016)

AECOM

FIGURE 3

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\2016\03 GROUNDWATER CONTOURS - OVERBURDEN.mxd 7/8/2016

N

RMW- 1D, 580.29

MW-14D, 580.09

BUILDING NO. 4

MW-12D, 579.64

MW-10D, 579.59

SEE INSET

MW- 7D, 579.60

MW-11D, 579.95

MW-18D, 580.04

580

MW-17D, 579.70

WALMORE RD

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

MW-21D, 579.38

MW-20D, 579.52

579

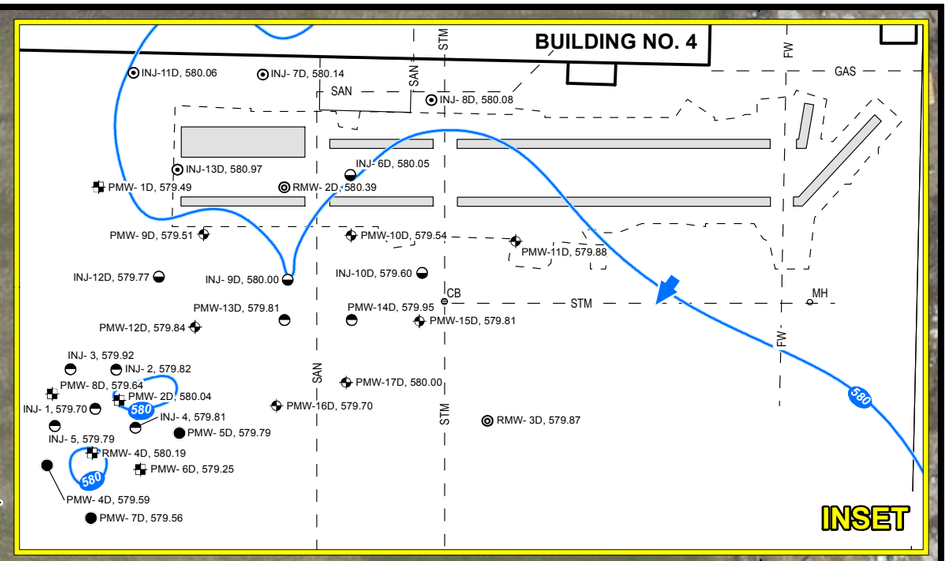
MW-13D, 578.97

MW-19D, 579.29

MW-15D, 578.70

578

MW-16D, 577.25



Legend

- Bedrock Injection/Withdrawal Well
- Bedrock Monitoring Well
- Pilot Test Well
- Site Investigation Well
- Investigative Monitoring Well
- New Boring Well (Post-2010)
- Old Boring Well (Pre-2010)
- Replacement Bedrock Investigation Well
- Groundwater Flow Direction
- Groundwater Elevation Contour

Source: ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
BEDROCK GROUNDWATER ELEVATIONS
(MAY 4, 2016)

AECOM

FIGURE 4

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\2016\04 GROUNDWATER CONTOURS - BEDROCK.mxd 7/8/2016

N

MW- 1S, 1.7

BUILDING NO. 4

MW- 9S, ND

SEE INSET

MW- 7S, ND

MW- 6S, ND

MW-12S, 2300

1000

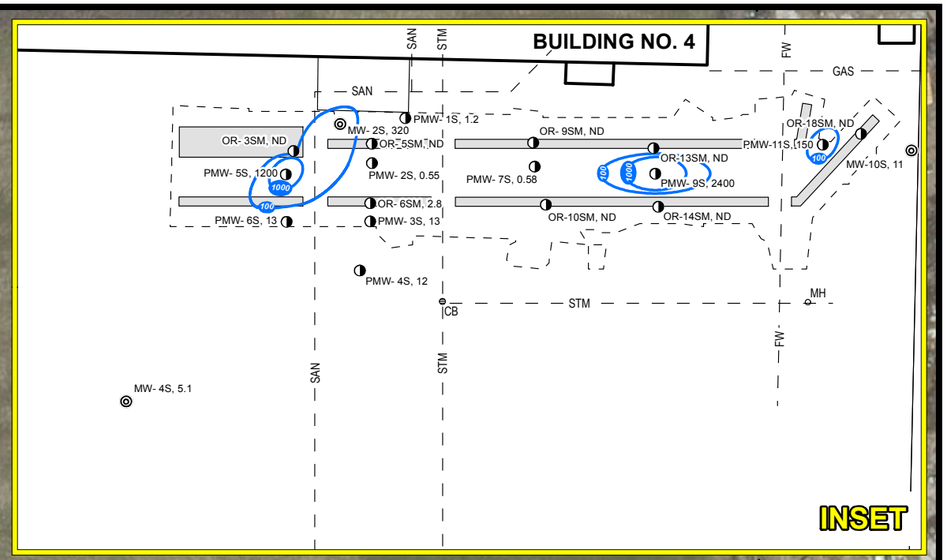
100

MW-11S, 32

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD



Legend

- Overburden Bioreactor Monitoring Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = 5 µg/L, as per NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
OVERBURDEN TRICHLOROETHENE ISOPLETHS
(MAY 2016)

AECOM

FIGURE 5A

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\20160\05A ISOPLETHS - TCE - OVERBURDEN.mxd 7/8/2016

N

MW- 1S, 58

BUILDING NO. 4

MW- 9S, ND

SEE INSET

MW- 7S, ND

MW- 6S, 25

100

MW-12S, 1600

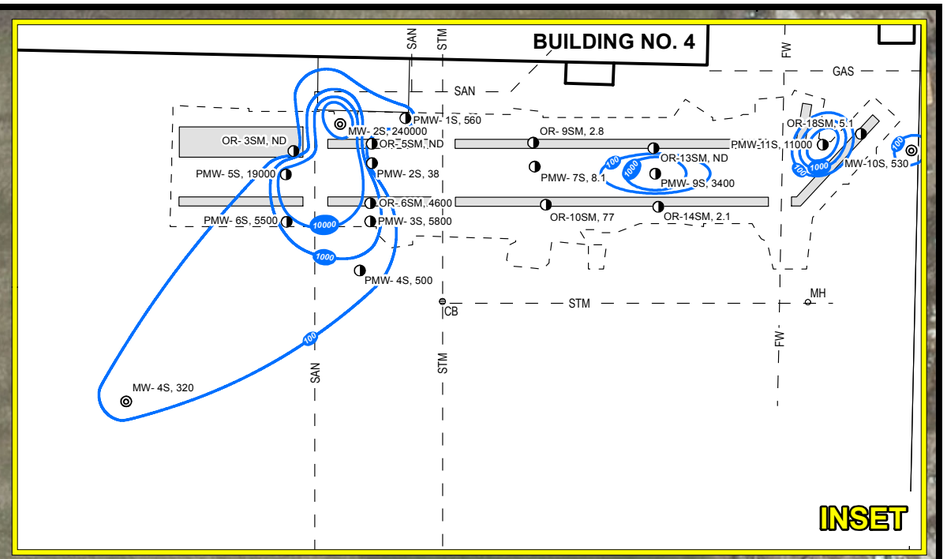
1000

MW-11S, 260

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD



Legend

- Overburden Bioreactor Monitoring Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = 5 µg/L, as per NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

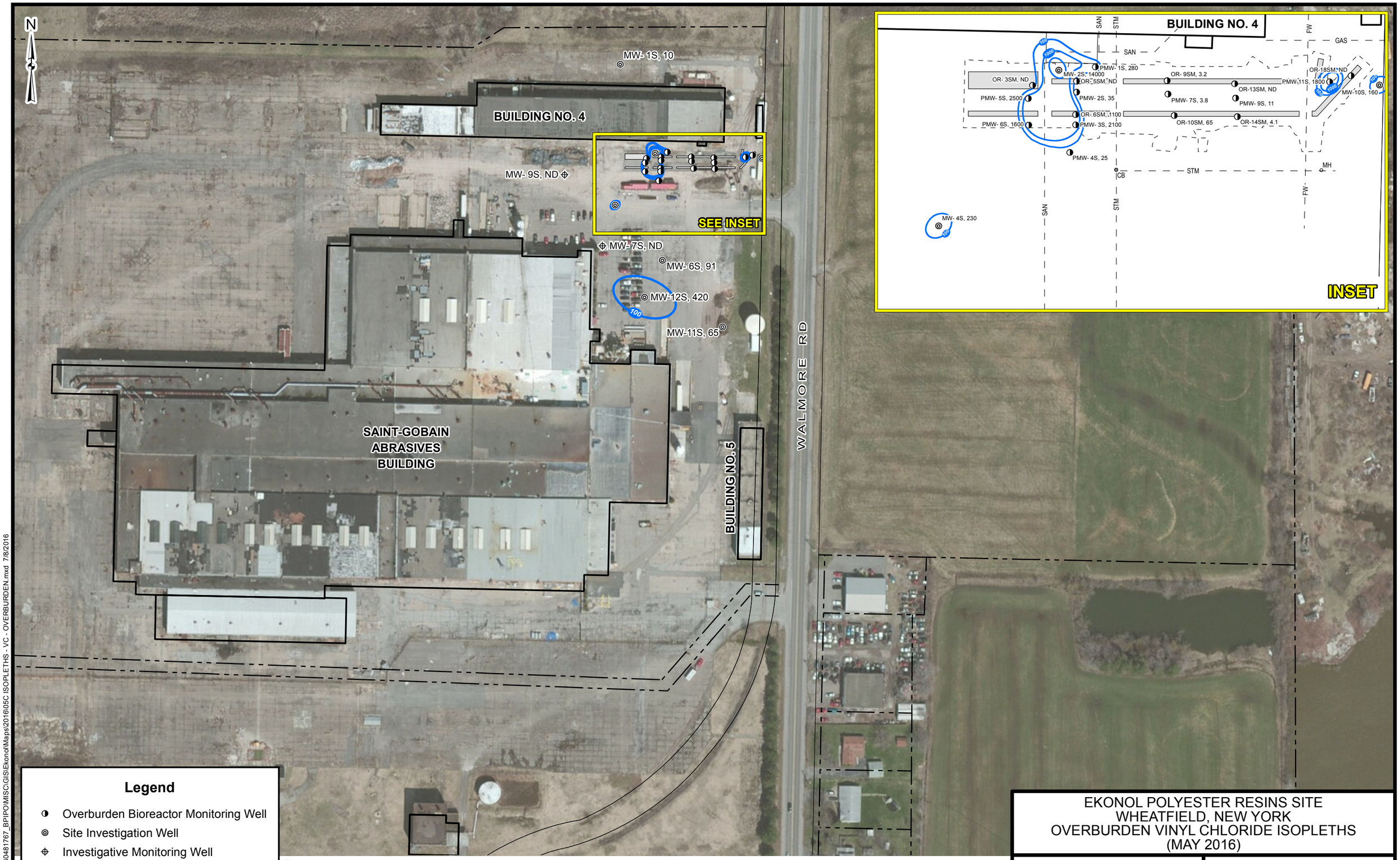
150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
OVERBURDEN CIS-1,2-DICHLOROETHENE ISOPLETHS
(MAY 2016)

AECOM

FIGURE 5B

J:\Projects\60481767_BP\PO\MISC\GIS\Ekonol\Maps\20160508 ISOPLETHS - CIS-1,2-DCE - OVERBURDEN.mxd 7/8/2016



Legend

- Overburden Bioreactor Monitoring Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = 2 µg/L, as per NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
OVERBURDEN VINYL CHLORIDE ISOPLETHS
(MAY 2016)

AECOM

FIGURE 5C

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\20160SC ISOPLETHS - VC - OVERBURDEN.mxd 7/8/2016

N

MW- 1S, 72.85

BUILDING NO. 4

MW- 9S, ND

SEE INSET

MW- 7S, ND

MW- 6S, 117.4

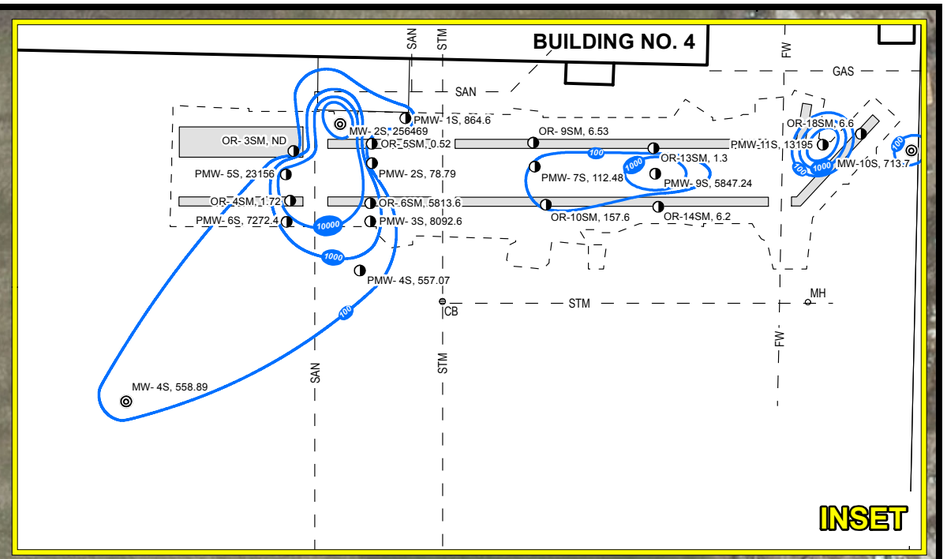
MW-12S, 4399

MW-11S, 379.7

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD



Legend

- Overburden Bioreactor Monitoring Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
OVERBURDEN TOTAL VOCs ISOPLETHS
(MAY 2016)

AECOM

FIGURE 5D

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\20160505 ISOPLETHS - TOTAL VOCS - OVERBURDEN.mxd 7/8/2016

N

RMW- 1D, 0.87

BUILDING NO. 4

SEE INSET

MW-7D, 560

MW-11D, 2.7

MW-17D, ND

MW-18D, ND

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD

MW-21D, 1.9

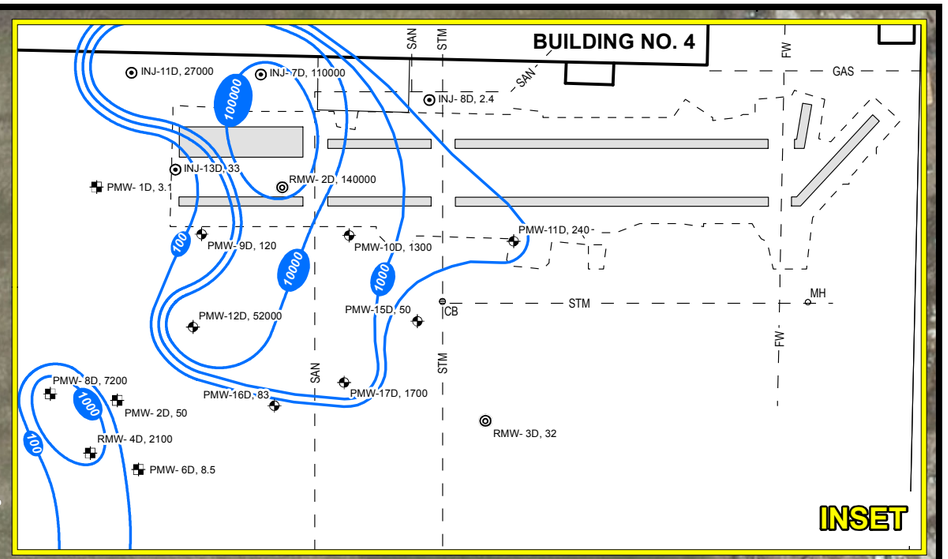
MW-20D, 14

MW-13D, 1.3

MW-19D, ND

MW-15D, 4.1

MW-16D, 0.78



Legend

- Bedrock Injection/Withdrawal Well
- Bedrock Monitoring Well
- Pilot Test Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = 5 µg/L, as per NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
BEDROCK TRICHLOROETHENE ISOPLETHS
(MAY 2016)

AECOM

FIGURE 6A

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\20160624 ISOPLETHS - TCE - BEDROCK.mxd 7/8/2016

N

BUILDING NO. 4

RMW- 1D, 170

100

SEE INSET

MW- 7D, 67000

MW-11D, 15

MW-18D, ND

MW-17D, 4.6

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD

MW-21D, 350

MW-20D, 450

MW-13D, 180

MW-19D, 7

MW-15D, 290

100

MW-16D, 140

INSET

BUILDING NO. 4

INJ-11D, 120000

INJ- 7D, 540000

INJ- 8D, 170

INJ-13D, 4300

RMW- 2D, 160000

PMW- 1D, 67

PMW- 9D, 4200

PMW-10D, 19000

PMW-11D, 3100

PMW-12D, 220000

PMW-15D, 1400

PMW- 8D, 36000

PMW-16D, 26000

PMW- 2D, 28000

PMW-17D, 8500

RMW- 3D, 2700

PMW- 4D, 17000

PMW- 6D, 2400

SAN

STM

FW

GAS

MH

CB

100000

40000

100

Legend

- Bedrock Injection/Withdrawal Well
- Bedrock Monitoring Well
- Pilot Test Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = 5 µg/L, as per NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
BEDROCK CIS-1,2-DICHLOROETHENE ISOPLETHS
(MAY 2016)

AECOM

FIGURE 6B

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\20160608 ISOPLETHS - CIS-1,2-DCE - BEDROCK.mxd 7/8/2016

N

RMW- 1D, 7.5

BUILDING NO. 4

SEE INSET

MW- 7D, 2500

MW-11D, 17

MW-17D, 4.7

MW-18D, ND

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD

100

MW-21D, 460

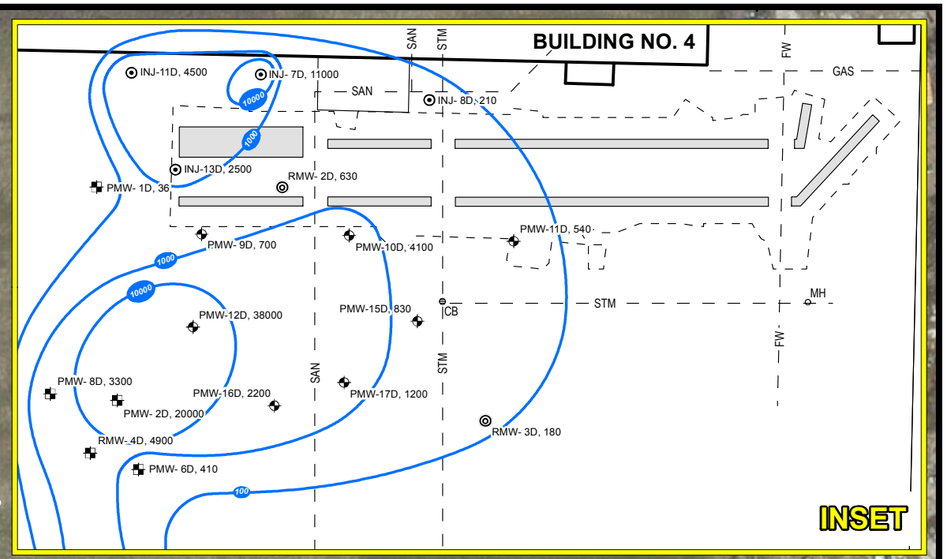
MW-20D, 740

MW-13D, 180

MW-19D, 0.51

MW-15D, 280

MW-16D, 65



Legend

- Bedrock Injection/Withdrawal Well
- Bedrock Monitoring Well
- Pilot Test Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = 2 µg/L, as per NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
BEDROCK VINYL CHLORIDE ISOPLETHS
(MAY 2016)

AECOM

FIGURE 6C

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\2016\06C ISOPLETHS - VC - BEDROCK.mxd 7/8/2016

N

BUILDING NO. 4

RMW- 1D, 194.27

SEE INSET

MW- 7D, 70503

MW-11D, 113.95

MW-17D, 24.4

MW-18D, ND

SAINT-GOBAIN
ABRASIVES
BUILDING

BUILDING NO. 5

WALMORE RD

MW-21D, 887.1

MW-20D, 3415.1

1000

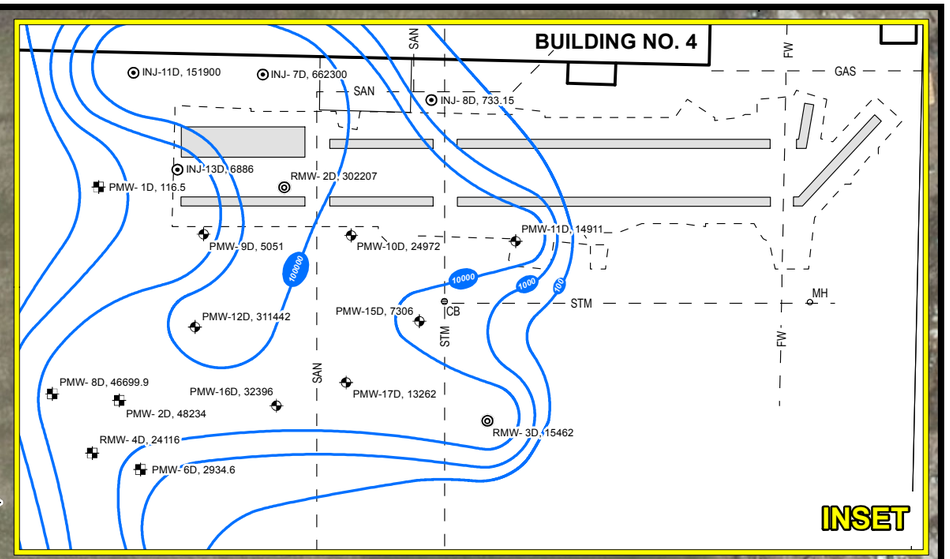
MW-13D, 372.94

MW-19D, 8.17

MW-15D, 761.2

100

MW-16D, 208.99



Legend

- Bedrock Injection/Withdrawal Well
- Bedrock Monitoring Well
- Pilot Test Well
- Site Investigation Well
- Investigative Monitoring Well
- Isopleth Contour

Notes:
1. Criteria = NYSDEC TOGS 1.1.1 Ambient Water Quality Standards, Class GA
2. Units are shown in µg/L
3. ND = Not Detected

Source:
ESRI World Imagery

150 0 150 Feet

EKONOL POLYESTER RESINS SITE
WHEATFIELD, NEW YORK
BEDROCK TOTAL VOCs ISOPLETHS
(MAY 2016)

AECOM

FIGURE 6D

J:\Projects\60481767_BPIPO\MISC\GIS\Ekonol\Maps\20160606D ISOPLETHS - TOTAL VOCS - BEDROCK.mxd 7/8/2016

Appendix A

Inspection Records

OPERATION, MONITORING AND MAINTENANCE CHECKLIST

Date: 5/17/16

Checklist Completed By: KSM

Project Number: 60481716

Property Location: 6600 WALMORE RD

System Installation Date: 11/17/10

The purpose of this form is to document the operation and maintenance of the sub-slab depressurization system to provide assurance that the system is functioning as designed or identify and execute any actions required to achieve the mitigation of subsurface vapor intrusion of volatile organic compounds to indoor air

1. MITIGATION SYSTEM INSPECTION

Occupant Interview

Any concerns identified by the building occupants? YES (NO)

Comments / Action Items

Occupant's Initials: _____

External Piping

Vent pipes securely fastened to building	(YES)	NO	
Are there any visible openings or breaks in the pipe system	YES	(NO)	
Is the rain cap present and intact at discharge point	(YES)	NO	N/A
Inspection of the exhaust point verified that no air intakes have been located nearby	(YES)	NO	
The sealing/caulking around wall penetrations is intact	(YES)	NO	

Comments / Action Items

Mitigation Fan

Fan is mounted securely to building (no excessive vibrations during operation)	(YES)	NO
Fan cover is installed	(YES)	NO
No visible damage to fan or cover	(YES)	NO

Comments / Action Items

OPERATION, MONITORING AND MAINTENANCE CHECKLIST

Internal Piping

Vertical and horizontal pipe runs are secured, including at all penetration points	YES	NO	
The sealing/caulking is intact around the extraction point or points through the basement floor, crawlspace floor, and/or crawlspace/basement wall interface.	YES	NO	
Vibration dampener installed and intact (pertains to fan mount)	YES	NO	N/A
Mitigation system operation placard present and visible/legible	YES	NO	
Contains description of major components, valid contact number and instructions for occupant inquiries and/or system failure	YES	NO	
Mitigation system maintenance tag present and filled out	YES	NO	
Date of last inspection shown on tag:_____			
U-tube manometer present and intact at each extraction point	YES	NO	

Comments / Action Items

Electrical

Electrical connections secured	YES	NO	
Junction boxes are closed	YES	NO	
Conduit is supported	YES	NO	
Circuit breakers controlling the mitigation fan and alarm circuits operate and are labeled "Mitigation System"	YES	NO	
Power switch tagged with intact tamper proof seal	YES	NO	
Audible alarm present	YES	NO	
Audible alarm switch in "on" position (light on alarm is green)	YES	NO	N/A

Comments / Action Items

2. OPERATIONAL CHECKS

Fan is operating			
Noise and Vibration within normal range	YES	NO	
Alarm sounds when fan is turned off	YES	NO	
U-Tube manometer indicating negative sub slab pressure	YES	NO	
U-Tube Manometer Reading: Location: OFFICE Vacuum 0.8 in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
U-Tube Manometer Reading: Location:_____ Vacuum _____ in H_2O			
Smoke test performed on internal penetrations and pipe joints			
Smoke test indicated no leaks	YES	NO	N/A
Smoke test confirms air flow into sump	YES	NO	N/A
Back draft test confirms proper air flow at combustion appliances	YES	NO	N/A
Smoke test indicated no leaks	YES	NO	N/A

OPERATION, MONITORING AND MAINTENANCE CHECKLIST

3. MAINTENANCE

Fan last replaced on (date): Summer 2015

Fan due to be replaced; N/A

Additional Maintenance Action Items Performed

4. ADDITIONAL ACTION ITEMS/ COMMENTS/COMPLETION DATES

5. CERTIFICATION

I certify that the information on this form is true, accurate and complete (all blanks filled in) to the best of my knowledge and ability, and that I have the appropriate training and experience to perform this monitoring/inspection:

Name: Kevin McGowan Affiliation: AECOM

Signature: Date (dd/mm/yy): 5/17/16 / 9 (am)/pm

EKONOL SITE PAVEMENT INSPECTION FORM
WHEATFIELD, NEW YORK

Date of Inspection: 05-18-2016 **Time:** 11:25

Inspector(s) Name/Title: Emily Laity/Staff Geologist

Inspection of	Condition Present?		Action Required?		Comments/Location	Correction Date
	Yes	No	Yes	No		
1. Site Pavement						
A. Surface cracks		X		X	Minor surface cracks not fully penetrating asphalt in parking lot area asphalt. Will monitor.	
B. Pits/divots	X			X	Minor divots (<1 sq. ft.): SW of PMW-9D and N of INJ-13 (edge of engineering control area.); facility repaired with asphalt patch. Will monitor. Minor pits SW of PMW-1D (outside of engineering control area). Will monitor.	
C. Sinking		X		X		
2. Well curb boxes					Satisfactory; several boxes recently repaired.	
A. Cracks	X		X		OR-2SI has hole in flushmount lid. Replaced with a surplus flushmount lid.	05/18/2016
B. Loose		X		X		
C. Well caps missing		X		X		
D. Settlement		X		X	New asphalt N & E of main Saint Gobain building. A few wells are a little low in the asphalt after the fresh layer put in place. Will monitor.	

Site Photo Log:



Site Photo Log:



Site Photo Log:





Appendix B

Field Sampling Records

Overburden Bioreactor Monitoring Wells

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-3SM	2" PVC

Samplers:
E. Thalhamer

Weather:
60°, sunny, slight breeze

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-6-16	10:58	2.85	12.43

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:00	3.41	200	0.3	14.00	11.110	4.61	6.36	-83.5	10.76	
11:05	3.85	200	0.5	13.95	11.040	3.08	6.28	-87.1	9.43	
11:10	3.83	200	0.8	13.81	11.040	2.93	6.27	-73.2	8.12	
11:15	3.81	200	1.1	13.78	11.030	2.85	6.26	-69.1	7.04	
11:20	3.82	200	1.3	13.84	11.040	3.37	6.26	-55.4	6.83	
11:25	3.82	200	1.6	13.95	11.040	3.51	6.26	-51.2	6.81	
11:30	3.82	200	1.8	14.03	11.030	3.63	6.25	-47.3	5.74	
11:35	3.82	200	2.1	13.71	11.030	3.51	6.25	-48.7	6.12	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-6-16	11:40	2.5

Hach Test Kits

Alkalinity (mg/L)	1540
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	3.3
Hydrogen Sulfide (mg/L)	0.3
DTW	3.82

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-4SM	2" PVC

Samplers: E. Thalhamer

Weather: 60°, windy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-6-16 | Time: 13:07 (hhmm) | Initial Depth to Water: 3.41 | Depth to Bottom: 12.32

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:10	3.47	175	0.2	14.85	4.479	4.00	6.46	-110.2	5.47	
13:15	3.48	175	0.5	14.69	4.415	1.77	6.43	-120.9	5.23	
13:20	3.49	175	0.7	14.37	4.401	1.24	6.42	-137.0	4.63	
13:25	3.49	175	0.9	14.41	4.393	1.32	6.42	-133.2	5.14	
13:30	3.49	175	1.2	14.37	4.390	1.42	6.42	-133.3	4.74	
13:35	3.49	175	1.4	14.39	4.389	1.61	6.42	-174.3	4.86	
13:40	3.49	175	1.6	14.42	4.388	1.73	6.41	-182.4	5.04	
13:45	3.49	175	1.8	14.35	4.384	1.73	6.40	-187.8	4.25	
13:50	3.49	175	2.1	14.45	4.379	1.72	6.43	-191.0	5.13	
13:55	3.50	175	2.3	14.47	4.384	1.65	6.43	-195.3	4.64	
14:00	3.50	175	2.5	14.49	4.387	1.63	6.43	-197.6	4.05	
14:05	3.51	175	2.8	14.51	4.392	1.60	6.43	-201.3	3.14	

Sample Collection Method: Peristaltic Pump | **Date:** 5-6-16 | **Time:** 14:05 | **Total Volume of Water Purged:** 2.5

Hach Test Kits

Alkalinity (mg/L)	1890
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.9
Hydrogen Sulfide (mg/L)	2
DTW	3.51

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-5SM	2"

Samplers: E. Thalhamer

Weather: 50°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-5-16 | Time: (hhmm) 9:21 | Initial Depth to Water: 2.69 | Depth to Bottom: 11.49

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:25	2.69	200	0.3	12.63	7.241	2.22	6.28	-191.6	3.22	clear w/ slight sulfur odor
9:30	2.69	200	0.5	12.57	7.314	2.63	6.29	-193.4	4.06	
9:35	2.69	200	0.8	12.51	7.426	2.84	6.30	-197.6	2.14	
9:40	2.69	200	1.1	12.56	7.450	2.85	6.31	-200.6	3.04	
9:45	2.69	200	1.3	12.61	7.467	2.60	6.31	-224.8	3.24	
9:50	2.69	200	1.6	12.59	7.498	2.56	6.31	-220.0	3.3	
9:55	2.69	200	1.8	12.57	7.503	2.55	6.31	-219.3	3.26	

Sample Collection Method: Peristaltic Pump | **Date:** 5-5-16 | **Time:** 9:55 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	770
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.56
Hydrogen Sulfide (mg/L)	2
DTW	2.69

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-6SM	2"

Samplers: E. Thalhamer

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-5-16 | Time: (hhmm) 11:46 | Initial Depth to Water: 4.11 | Depth to Bottom: 11.60

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:50	4.96	150	0.2	12.87	5.998	2.72	6.47	-220.3	7.88	
11:55	5.30	150	0.4	12.96	5.964	1.20	6.47	-230.4	6.25	
12:00	5.11	150	0.6	13.20	5.964	1.85	6.47	-238.1	5.34	
12:05	5.11	150	0.8	13.18	6.003	1.53	6.46	-266.6	6.13	
12:10	5.11	150	1.0	13.15	6.029	1.83	6.45	-274.4	5.36	
12:15	5.05	150	1.2	13.24	6.043	2.13	6.45	-283.7	4.15	
12:20	5.04	150	1.4	13.36	6.054	2.90	6.45	-296.2	3.95	
12:25	5.01	150	1.6	13.32	6.066	3.16	6.45	-302.5	3.65	
12:30	5.00	150	1.8	13.42	6.061	2.97	6.45	-310.2	2.64	
12:35	5.00	150	2.0	13.40	6.071	2.91	6.44	-320.5	2.83	
12:40	5.00	150	2.2	13.41	6.076	2.71	6.44	-320.3	3.17	
12:45	5.00	150	2.4	13.42	6.085	2.66	6.44	-321.4	3.54	
12:50	5.00	150	2.6	13.44	6.083	2.69	6.44	-322.5	2.73	sulfur odor, clear

Sample Collection Method: Peristaltic Pump | **Date:** 5-5-16 | **Time:** 12:50 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	1925
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.19
Hydrogen Sulfide (mg/L)	1
DTW	5

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-9SM	2" PVC

Samplers: M. Kuczka, E. Laity

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-6-16 | Time: 9:15 (hhmm) | Intial Depth to Water: 6 | Depth to Bottom: 12.07

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
9:15	6.65	150	0.2	14.73	23.360	1.81	7.25	-270.9	44.1	small black flecks
9:20	6.65	150	0.4	14.48	20.930	0.14	7.57	-303.6	44.1	
9:25	6.66	150	0.6	14.37	17.960	1.01	7.61	-313.8	34.9	
9:30	6.66	150	0.8	14.45	16.050	3.89	7.58	-316.0	29	
9:35	6.66	150	1.0	14.63	14.730	4.17	7.55	-322.7	24.1	
9:40	6.67	150	1.2	14.68	13.720	4.13	7.57	-317.5	19.7	
9:45	6.70	150	1.4	14.38	12.940	4.15	7.60	-327.5	18	
9:50	6.71	150	1.6	14.23	12.350	4.09	7.62	-329.1	14.3	
9:55	6.71	150	1.8	14.44	11.730	3.88	7.57	-318.6	12.4	
10:00	6.71	150	2.0	14.25	11.250	3.80	7.59	-323.7	11.4	
10:05	6.71	150	2.2	14.47	10.850	3.59	7.60	-323.3	9.7	
10:10	6.80	250	2.5	14.06	10.500	3.51	7.61	-328.2	8.11	
10:15	6.80	250	2.8	13.89	10.160	2.91	7.63	-326.9	8.65	
10:20	6.80	250	3.2	13.79	9.711	2.88	7.65	-330.0	7.09	
10:25	6.80	250	3.5	13.79	9.559	2.60	7.66	-332.6	5.95	
10:30	6.80	250	3.8	13.87	9.201	2.59	7.65	-330.9	6.58	
10:35	6.80	250	4.2	13.88	9.037	2.02	7.61	-333.2	5.40	
10:40	6.80	250	4.5	14.03	8.804	1.69	7.55	-331.8	3.73	
10:45	6.80	250	4.8	14.03	8.712	1.39	7.53	-333.8	3.59	
10:50	6.80	250	5.2	13.88	8.629	1.68	7.47	-325.6	6.8	
10:55	6.80	250	5.5	13.69	8.549	1.12	7.51	-332.1	4.02	

Sample Collection Method: Peristaltic Pump | **Date:** 5-6-16 | **Time:** 11:00 | **Total Volume of Water Purged:** 6

Hach Test Kits

Alkalinity (mg/L)	425
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.02
Hyrdogen Sulfide (mg/L)	NA
DTW	6.8

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: OR-10SM

Well Diameter: 2" PVC

Samplers: M. Kuczka, E. Laity

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-6-16 | **Time:** 11:45 (hhmm) | **Initial Depth to Water** 6.31 | **Depth to Bottom** 11.53

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:50	7.25	150	0.2	14.04	2.938	1.80	7.48	-211.3	49.2	cloudy w/ black flecks
11:55	7.38	150	0.4	14.10	2.878	6.22	7.02	-215.4	47.1	
12:00	7.38	150	0.6	13.63	2.978	6.05	7.16	-233.5	31	
12:05	7.38	150	0.8	13.65	3.653	2.59	7.23	-271.9	13.5	
12:10	7.38	150	1.0	13.66	4.098	1.07	7.26	-300.7	11.3	
12:15	7.38	150	1.2	13.61	4.594	0.67	7.34	-322.2	9.25	
12:20	7.38	150	1.4	13.59	4.882	0.52	7.37	-338.2	8.19	
12:25	7.43	150	1.6	13.59	5.112	0.40	7.37	-342.5	6.31	
12:30	7.46	150	1.8	13.44	5.278	0.34	7.40	-349.1	6.33	
12:35	7.46	150	2.0	13.70	5.383	0.26	7.37	-341.5	6.68	
12:40	7.46	150	2.2	13.59	5.473	0.25	7.34	-341.2	6.36	
12:45	7.46	150	2.4	13.83	5.519	0.28	7.33	-337.3	5.71	clear black flecks

Sample Collection Method: Peristaltic Pump | **Date:** 5-6-16 | **Time:** 12:50 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	1335
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.51
Hydrogen Sulfide (mg/L)	5
DTW	7.46

Comments: Alkalinity turned orange-ish instead of pink.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-13SM	2" PVC

Samplers: M. Kuczka, E. Laity

Weather: 50°, windy, cloudy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-5-16 | Time: (hhmm) 9:20 | Initial Depth to Water: 5.46 | Depth to Bottom: 12.58

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:20	6.00	150	0.2	11.83	5.998	1.26	6.14	-73.3	6.82	gray from black flecks
9:25	6.07	150	0.4	11.82	6.264	8.88	6.49	-154.8	7.41	bubble in DO
9:30	6.15	150	0.6	11.74	6.349	4.01	6.53	-161.5	7.62	
9:35	6.15	150	0.8	11.74	6.367	2.96	6.54	-164.3	8.68	clear w/ black flecks
9:40	6.15	150	1.0	11.72	6.432	1.50	6.55	-167.8	7.78	
9:45	6.15	150	1.2	11.76	6.557	0.87	6.57	-191.0	7.01	
9:50	6.15	150	1.4	11.81	6.642	0.62	6.59	-205.3	7.13	
9:55	6.15	150	1.6	11.85	6.731	0.51	6.61	-211.8	5.18	
10:00	6.17	150	1.8	11.95	6.768	0.41	6.64	-228.2	6.63	
10:05	6.17	150	2.0	11.94	6.832	0.33	6.64	-220.2	4.49	
10:10	6.18	150	2.2	11.93	6.868	0.36	6.65	-215.3	3.96	

Sample Collection Method: Peristaltic Pump | **Date:** 5-5-16 | **Time:** 10:15 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	1355
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	3.3
Hydrogen Sulfide (mg/L)	5
DTW	NA

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-14SM	2" PVC

Samplers: E. Laity, M. Kuczka

Weather: 50°, windy, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-5-16 | Time: 11:15 (hhmm) | Initial Depth to Water: 5.62 | Depth to Bottom: 11.50

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:20	6.64	150	0.2	12.30	-	-	-	-	-	turbid no readings
11:25	6.70	150	0.4	12.24	0.833	0.71	6.96	-52.9	1263	
11:30	6.73	150	0.6	12.31	1.009	3.62	6.82	-47.0	1016	
11:35	6.77	150	0.8	12.15	0.842	1.30	6.68	-51.2	825	Conductivity reading not specific cond.
11:40	6.74	150	1.0	12.11	1.052	1.48	6.70	-71.6	673	
11:45	6.76	150	1.2	12.47	1.848	0.95	6.78	-156.2	73.2	
11:50	6.78	150	1.4	12.29	3.036	0.79	6.85	-218.7	57.1	
11:55	6.82	150	1.6	12.43	3.471	0.58	6.83	-249.3	42.7	
12:00	6.80	150	1.8	12.53	3.585	0.49	6.88	-260.7	26.8	
12:05	6.81	150	2.0	12.62	3.613	0.61	6.93	-270.7	28.1	Specific conductivity reading
12:10	6.82	150	2.2	12.53	3.811	0.59	6.91	-280.0	16.2	
12:15	6.85	150	2.4	12.48	3.946	0.59	6.88	-287.4	21.3	
12:20	6.89	150	2.6	12.37	4.024	0.50	6.89	-295.9	16.8	
12:25	6.92	150	2.8	12.29	4.136	0.39	6.90	-294.9	13.6	

Sample Collection Method: Peristaltic Pump | **Date:** 5-5-16 | **Time:** 12:25 | **Total Volume of Water Purged:** 4.0

Hach Test Kits

Alkalinity (mg/L)	725
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.46
Hydrogen Sulfide (mg/L)	>5
DTW	6.95

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-15SM	2" PVC

Samplers: M. Kuczka

Weather: 55°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-13-16 | Time: (hhmm) 10:40 | Initial Depth to Water: 6.93 | Depth to Bottom: 11.92

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
10:45	7.20	250	0.3	12.38	5.269	5.00	6.84	-95.4	8.71	yellow tint
10:50	7.24	250	0.7	12.49	5.203	2.11	6.82	-93.2	11.87	
10:55	7.30	250	1.0	12.54	5.128	1.27	6.86	-94.6	11.07	
11:00	7.32	250	1.3	12.38	5.090	0.77	6.86	-91.9	10.3	
11:05	7.37	250	1.7	12.40	5.070	0.43	6.86	-90.4	8.54	
11:10	7.44	250	2.0	12.36	5.022	0.33	6.83	-89.7	7.85	
11:15	7.51	250	2.3	12.26	4.999	0.25	6.81	-89.3	7.2	
11:20	7.59	250	2.6	12.24	4.968	0.22	6.81	-89.4	6.43	
11:25	7.68	250	3.0	12.19	4.931	0.25	6.80	-88.9	7.07	still yellow, bubbly

Sample Collection Method: Peristaltic Pump | **Date:** 5-13-16 | **Time:** 11:30 | **Total Volume of Water Purged:** 4.5

Hach Test Kits

Alkalinity (mg/L)	1925
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.68
Hydrogen Sulfide (mg/L)	0.3
DTW	7.86

Comments:
Duplicate collection called OR-65SM at 9:00 (time listed.)

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	OR-18SM	2" PVC

Samplers: E. Laity, M. Kuczka

Weather: 60°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-6-16 | **Time:** 13:20 (hhmm) | **Initial Depth to Water** 5.75 | **Depth to Bottom** 12.04

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:25	5.85	200	0.3	14.28	2.373	3.50	7.95	-288.1	16.9	clear w/ white flecks
13:30	5.86	200	0.5	13.63	2.510	0.20	7.59	-304.8	11.75	
13:35	5.86	200	0.8	13.60	2.614	1.93	7.33	-312.8	4.51	
13:40	5.87	200	1.1	13.60	2.694	1.17	7.17	-310.7	3.08	
13:45	5.87	200	1.3	13.59	2.743	0.84	7.14	-310.5	2.9	
13:50	5.87	200	1.6	13.70	2.783	0.67	7.17	-310.5	4.9	
13:55	5.87	200	1.8	13.69	2.824	0.58	7.15	-308.8	4.84	
14:00	5.88	200	2.1	13.52	2.872	0.47	7.12	-310.0	2.51	
14:05	5.88	200	2.4	13.86	2.878	0.35	7.10	-312.2	2.48	
14:10	5.88	200	2.6	13.89	2.902	0.31	7.09	-314.4	2.06	

Sample Collection Method: Peristaltic Pump | **Date:** 5-6-16 | **Time:** 14:15 | **Total Volume of Water Purged:** 4.0

Hach Test Kits

Alkalinity (mg/L)	745
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.04
Hydrogen Sulfide (mg/L)	5
DTW	5.88

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-1S	2"

Samplers: E. Thalhamer

Weather: 50°, windy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-5-16	14:15	3.06	12.00

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
14:20	3.35	200	0.3	12.83	8.261	1.20	7.41	-255.4	3.69	
14:25	3.25	200	0.5	12.87	8.095	0.98	7.33	-283.2	3.27	
14:30	3.20	200	0.8	12.95	7.998	0.83	7.32	-265.9	3.67	
14:35	3.18	200	1.1	13.01	7.914	0.74	7.32	-265.1	2.84	
14:40	3.17	200	1.3	13.02	7.879	0.67	7.31	-264.0	2.25	
14:45	3.16	200	1.6	13.03	7.865	0.63	7.31	-263.8	2.74	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-5-16	14:45	2.5

Hach Test Kits

Alkalinity (mg/L)	120
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.54
Hydrogen Sulfide (mg/L)	1
DTW	3.14

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-2S	2" PVC

Samplers: E. Laity, M. Kuczka

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-9-16 | **Time:** (hhmm) 8:40 | **Initial Depth to Water** 3.18 | **Depth to Bottom** 11.32

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
8:45	3.82	150	0.2	12.00	10.120	2.61	6.51	-131.7	38.5	cloudy
8:50	4.11	150	0.4	12.07	10.340	0.64	6.70	-154.4	32.5	
8:55	4.35	150	0.6	12.12	10.290	4.59	6.81	-169.1	25.7	DO spike
9:00	4.49	150	0.8	12.22	10.120	6.72	6.85	-172.2	29.2	bubbles coming up tubing
9:05	4.56	150	1.0	12.27	9.944	7.29	6.88	-177.1	18.4	
9:10	4.65	150	1.2	12.29	9.786	7.74	6.86	-177.2	15.5	
9:15	4.72	150	1.4	12.38	9.621	7.88	6.83	-173.7	13.5	
9:20	4.77	150	1.6	12.44	9.528	7.49	6.82	-163.9	10.08	
9:25	4.80	150	1.8	12.37	9.466	6.65	6.80	-159.2	7.44	
9:30	4.83	150	2.0	12.30	9.336	4.93	6.81	-169.2	6.06	
9:35	4.85	150	2.2	12.17	9.281	3.68	6.81	-167.2	4.59	
9:40	4.85	150	2.4	12.26	9.182	2.65	6.81	-175.1	4.32	
9:45	4.87	150	2.6	12.31	9.082	1.54	6.82	-179.6	4.16	
9:50	4.91	150	2.8	12.18	9.081	1.05	6.83	-190.5	3.37	
9:55	4.92	150	3.0	12.27	9.030	0.79	6.83	-189.3	3.26	

Sample Collection Method: Peristaltic Pump | **Date:** 5-9-16 | **Time:** 10:00 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	625
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.21
Hydrogen Sulfide (mg/L)	1.5
DTW	4.97

Comments: Filtered 850ml for Microbial insights sample.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-3S	2" PVC

Samplers: E. Laity, M. Kuczka

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-9-16 | Time: 10:50 (hhmm) | Initial Depth to Water: 5.87 | Depth to Bottom: 11.70

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
10:55	6.72	150	0.2	12.49	9.770	2.37	6.93	-83.9	7.75	clear, odor
11:00	7.00	150	0.4	12.49	9.921	0.85	6.90	-90.4	6.54	
11:05	7.20	150	0.6	12.50	9.929	0.72	6.92	-121.2	8.15	
11:10	7.40	150	0.8	13.06	9.876	0.51	6.92	-112.3	6.46	
11:15	7.50	150	1.0	13.23	9.804	0.39	6.95	-160.8	7.63	
11:20	7.58	150	1.2	13.31	9.642	0.39	6.98	-201.1	7.71	
11:25	7.65	150	1.4	13.08	9.521	0.40	6.99	-224.8	6.22	
11:30	7.70	150	1.6	13.00	9.372	0.40	7.00	-233.8	6.70	
11:35	7.74	150	1.8	13.33	9.227	0.29	7.00	-243.3	5.04	
11:40	7.77	150	2.0	13.39	9.168	0.26	7.01	-256.4	6.88	
11:45	7.78	150	2.2	13.35	9.091	0.22	7.03	-276.9	5.31	
11:50	7.81	150	2.4	13.17	9.016	0.19	7.03	-273.1	3.71	
11:55	7.83	150	2.6	13.15	8.992	0.20	7.04	-281.1	4.49	clear, odor

Sample Collection Method: Peristaltic Pump | **Date:** 5-9-16 | **Time:** 12:00 | **Total Volume of Water Purged:** 3.0

Hach Test Kits

Alkalinity (mg/L)	685
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.72
Hydrogen Sulfide (mg/L)	1.5
DTW	7.85

Comments: Filtered 750 mL for Microbial Insights Sample.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-4S

Well Diameter: 2" PVC

Samplers: M. Kuczka

Weather: 75°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-12-16 | **Time:** (hhmm) 12:55 | **Initial Depth to Water** 5.70 | **Depth to Bottom** 11.40

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:00	6.30	150	0.2	15.62	0.565	1.90	8.00	-96.1	10.21	
13:05	6.54	150	0.4	14.92	0.417	0.91	7.80	-86.5	2.60	
13:10	6.63	150	0.6	15.17	0.390	0.81	7.70	-78.0	9.71	
13:15	6.80	150	0.8	15.24	0.407	0.76	7.54	-64.4	13.10	
13:20	7.00	150	1.0	15.44	0.543	0.61	7.40	-53.3	12.30	
13:25	7.25	150	1.2	15.36	0.654	0.60	7.27	-38.8	11.38	
13:30	7.67	150	1.4	15.45	0.725	0.62	7.22	-32.4	11.72	
13:35	7.97	150	1.6	15.60	0.750	0.71	7.17	-27.7	11.00	
13:40	8.14	150	1.8	15.74	0.752	0.78	7.14	-24.3	11.84	
13:45	8.30	150	2.0	15.71	0.737	0.82	7.12	-22.7	11.15	
13:50	8.46	150	2.2	15.62	0.814	0.82	7.05	-16.7	9.92	
13:55	8.60	150	2.4	15.68	0.852	0.88	7.03	-15.6	10.80	
14:00	8.60	150	2.6	16.39	0.998	1.41	7.01	-17.1	13.70	
14:05	8.81	150	2.8	15.55	1.560	1.69	7.04	-22.6	11.34	
14:10	9.06	200	3.0	14.82	1.561	0.66	7.19	-37.4	10.81	
14:15	9.27	250	3.4	14.76	1.503	0.63	7.15	-32.4	9.30	
14:20	9.40	150	3.6	15.53	1.488	0.68	7.04	-23.1	9.21	
14:25	9.55	150	3.8	15.66	1.480	0.73	7.07	-25.6	9.40	
14:30	9.75	150	4.0	15.44	1.469	0.81	7.05	-29.9	9.84	

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 14:35 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	100
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.8
Hydrogen Sulfide (mg/L)	NA
DTW	10

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-5S	2" PVC

Samplers: M. Kuczka

Weather: 45°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-17-16 | **Time:** 8:50 (hhmm) | **Initial Depth to Water** 3.75 | **Depth to Bottom** 9.90

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
8:55	4.59	200	0.3	12.66	4.272	2.50	6.46	62.0	14.4	yellow tint
9:00	5.18	200	0.5	12.74	4.308	4.02	6.55	47.2	8.63	
9:05	5.99	200	0.8	12.91	4.323	2.65	6.60	43.7	8.62	
9:10	6.50	200	1.1	13.03	4.305	3.49	6.63	42.3	7.57	
9:15	6.98	200	1.3	12.75	4.370	3.51	6.65	42.5	13.28	
9:20	7.44	200	1.6	12.54	4.383	3.66	6.61	46.1	14.1	
9:25	7.76	200	1.8	12.57	4.377	3.39	6.61	49.2	31.0	
9:30	8.10	200	2.1	12.56	4.375	3.19	6.60	50.2	21.0	
9:35	8.60	200	2.4	12.58	4.366	3.00	6.61	52.3	23.2	
9:40	9.15	200	2.6	12.60	4.355	2.88	6.61	53.6	29.30	
9:45	9.50	200	2.9	12.55	4.350	3.15	6.65	44.9	-	unhooked flow thru
										Dry @ 9:47
8:55	3.98	200	3.2	15.45	4.285	2.99	6.73	30.8	30.6	5/18/2016

Sample Collection Method: Peristaltic Pump | **Date:** 5-18-16 | **Time:** 9:00 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	765
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.51
Hydrogen Sulfide (mg/L)	0.0
DTW	6.1

Comments: Grab sample after ran dry. Sampled on 5/18/16, purged 5/17/16.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-6S

Well Diameter: 2" PVC

Samplers: E. Thalhamer

Weather: 65°, slight drizzle

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-13-16 | **Time:** (hhmm) 11:10 | **Initial Depth to Water:** 6.54 | **Depth to Bottom:** 11.96

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:15	7.59	150	0.2	14.99	4.581	1.43	6.56	-97.3	11.6	
11:20	7.92	150	0.4	15.44	4.562	2.88	6.55	-111.0	9.42	
11:25	7.96	150	0.6	15.57	4.556	2.70	6.56	-134.8	7.34	
11:30	8.04	150	0.8	15.60	4.561	2.27	6.57	-139.0	6.24	
11:35	8.13	150	1.0	15.77	4.567	1.84	6.56	-142.1	12.50	
11:40	8.16	150	1.2	15.52	4.571	1.63	6.56	-143.4	11.04	
11:45	8.20	150	1.4	15.50	4.582	1.46	6.56	-147.0	11.73	
11:50	8.25	150	1.6	15.62	4.579	1.35	6.57	-160.6	8.64	
11:55	8.29	150	1.8	15.37	4.587	1.20	6.55	-132.4	8.47	
12:00	8.29	150	2.0	15.59	4.584	1.16	6.55	-129.1	6.31	
12:05	8.34	150	2.2	14.97	4.614	1.10	6.53	-104.3	6.01	
12:10	8.36	150	2.4	15.06	4.624	1.05	6.54	-128.2	6.52	
12:15	8.37	150	2.6	15.34	4.700	0.97	6.53	-130.2	5.47	
12:20	8.38	150	2.8	15.41	4.792	0.95	6.54	-127.8	4.83	
12:25	8.39	150	3.0	15.05	4.924	0.85	6.53	-175.7	5.31	
12:30	8.35	150	3.2	15.18	5.023	1.47	6.53	-193.7	4.93	
12:35	8.36	150	3.4	15.30	5.097	1.73	6.53	-202.2	4.84	
12:40	8.51	150	3.6	14.93	5.113	1.13	6.52	-199.3	4.63	
12:45	8.64	150	3.8	14.20	5.182	0.92	6.51	-195.4	4.48	
12:50	8.72	150	4.0	14.20	5.246	0.92	6.48	-202.8	4.17	
12:55	8.76	150	4.2	14.21	5.251	0.91	6.47	-201.7	4.74	
13:00	8.80	150	4.4	14.23	5.365	0.87	6.45	-200.8	4.06	

Sample Collection Method: Peristaltic Pump | **Date:** 5-13-16 | **Time:** 13:05 | **Total Volume of Water Purged:** 5

Hach Test Kits

Alkalinity (mg/L)	1315
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	3.3
Hydrogen Sulfide (mg/L)	1.0
DTW	8.80

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-7S	2" PVC

Samplers: M. Kuczka, E. Laity

Weather: 60°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-11-16 | Time: (hhmm) 14:10 | Initial Depth to Water: 7.21 | Depth to Bottom: 11.3

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
14:15	7.73	200	0.3	13.12	8.841	1.93	6.99	10.2	2.97	clear
14:20	8.14	200	0.5	13.11	8.760	1.67	6.91	7.2	3.28	
14:25	8.45	200	0.8	13.08	8.709	1.63	6.86	2.8	2.56	
14:30	8.90	200	1.1	12.92	8.625	0.97	6.83	1.9	2.69	
14:35	9.35	200	1.3	12.81	8.623	0.69	6.82	3.0	2.2	
14:40	9.63	200	1.6	12.93	8.664	0.95	6.80	9.5	2.43	stable, next reading bottom of tubing
14:45	9.64	200	1.8	14.53	8.712	4.17	6.80	21.6	4.25	lowered tubing
14:50	10.03	200	2.1	13.07	9.291	4.39	6.84	-13.6	23.7	
14:55	10.38	200	2.4	12.67	9.082	3.46	6.79	-0.2	11.66	
15:00	10.71	200	2.6	13.06	8.974	2.21	6.77	8.1	5.25	
15:05	11.01	200	2.9	12.98	9.052	2.06	6.74	17.6	5.24	
15:10	11.20	200	3.2	12.93	9.355	1.51	6.72	20.2	3.3	
15:12	11.30									DRY
12:20	8.83	200	3.4	15.38	10.980	4.75	6.94	5.2	6.9	5/12/16 parameters from cup reading after sample done

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 12:20 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	505
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.02
Hydrogen Sulfide (mg/L)	NA
DTW	9.75

Comments: On 5/12/16 DO in grab sample may be off.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-9S	2"

Samplers: M. Kuczka, E. Laity

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-9-16 | Time: 12:30 (hhmm) | Initial Depth to Water: 7.70 | Depth to Bottom: 12.20

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
12:35	8.15	150	0.2	12.64	6.908	1.79	7.31	-110.9	3.32	faint odor, clear
12:40	8.17	150	0.4	12.31	5.652	1.97	7.36	-103.1	2.39	
12:45	8.35	150	0.6	12.35	4.765	2.10	7.41	-94.9	2.39	
12:50	8.56	150	0.8	11.98	4.573	1.86	7.40	-84.2	1.57	
12:55	8.80	150	1.0	12.10	4.617	1.91	7.37	-75.9	1.52	
13:00	9.00	150	1.2	12.06	5.207	1.66	7.30	-67.3	2.77	
13:05	9.15	150	1.4	12.19	5.177	1.49	7.28	-62.4	2.54	
13:10	9.35	150	1.6	12.22	5.584	1.41	7.25	-54.4	2.10	
13:15	9.45	150	1.8	12.33	5.949	1.28	7.20	-46.6	1.65	
13:20	9.56	150	2.0	12.38	6.296	1.30	7.18	-40.8	1.07	
13:25	9.64	150	2.2	12.43	6.542	1.27	7.16	-35.4	0.68	
13:30	9.73	150	2.4	12.40	6.694	1.21	7.16	-32.4	1.42	
13:35	9.85	150	2.6	12.47	6.863	1.21	7.14	-27.7	1.19	
13:40	9.95	150	2.8	12.51	7.120	1.18	7.12	-23.5	1.17	
13:45	10.05	150	3.0	12.60	7.379	1.12	7.11	-20.5	0.81	

Sample Collection Method: Peristaltic Pump | **Date:** 5-9-16 | **Time:** 13:50 | **Total Volume of Water Purged:** 3.5

Hach Test Kits

Alkalinity (mg/L)	440
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.07
Hydrogen Sulfide (mg/L)	0.0
DTW	10.36

Comments: Everything stable besides specific conductivity, been close for several readings. Grab sampled.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-11S	2" PVC

Samplers: M. Kuczka

Weather: 55°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-13-16 | **Time:** 12:00 (hhmm) | **Initial Depth to Water:** 6.74 | **Depth to Bottom:** 11.67

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
12:05	7.79	200	0.3	13.53	5.758	1.61	6.63	31.3	9.24	clear
12:10	7.75	150	0.5	13.15	5.729	0.90	6.60	31.0	7.79	
12:15	7.80	150	0.7	13.62	5.730	0.78	6.57	32.5	7.79	
12:20	7.95	150	0.9	13.99	5.712	0.90	6.55	35.6	9.04	
12:25	8.15	150	1.1	13.76	5.737	0.76	6.56	39.6	5.94	
12:30	8.36	150	1.3	13.20	5.705	0.54	6.52	47.7	4.48	
12:35	8.49	150	1.5	13.18	5.695	0.50	6.51	50.3	4.63	
12:40	8.67	150	1.7	13.46	5.686	0.47	6.52	50.6	5.06	
12:45	8.88	150	1.8	13.40	5.685	0.45	6.51	52.6	4.88	
12:50	9.00	150	2.0	13.26	5.676	0.44	6.50	53.5	4.47	

Sample Collection Method: Peristaltic Pump | **Date:** 5-13-16 | **Time:** 12:55 | **Total Volume of Water Purged:** 3.0

Hach Test Kits

Alkalinity (mg/L)	485
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.64
Hydrogen Sulfide (mg/L)	0.0
DTW	9.35

Comments: Well drawing down slightly.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

Bedrock Injection/Withdrawal Wells

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	INJ-7D	4" Steel

Samplers: M. Kuczka, E. Laity

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-10-16 | Time: (hhmm) 11:00 | Initial Depth to Water: 7.70 | Depth to Bottom: 23.45

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:05	7.95	200	0.3	14.42	1.834	2.59	7.85	-212.2	7.42	black flecks, odor
11:10	8.15	200	0.5	14.33	1.948	0.53	7.94	-218.9	11.1	
11:15	8.63	200	0.8	14.42	1.973	0.26	7.99	-221.7	9.48	
11:20	9.01	200	1.1	14.52	1.978	0.26	8.05	-228.7	5.92	
11:25	9.39	200	1.3	14.49	1.982	0.32	8.04	-229.1	5.41	
11:30	9.67	200	1.6	14.84	1.976	0.39	8.03	-236.1	5.45	
11:35	9.88	200	1.8	14.66	1.981	0.42	8.05	-231.6	4.76	
11:40	9.90	200	2.1	14.56	1.979	0.37	8.10	-235.7	3.88	
11:45	9.93	200	2.4	14.79	1.975	0.57	8.11	-233.9	4.15	
11:50	9.95	200	2.6	14.31	2.324	0.58	7.68	-255.6	34.8	
11:55	9.98	200	2.9	14.16	2.676	2.28	7.37	-273.9	35.2	
12:00	10.02	200	3.2	14.24	2.865	1.14	7.29	-274.9	23.0	
12:05	10.05	200	3.4	14.24	3.084	0.44	7.21	-266.6	12.1	
12:10	10.07	200	3.7	14.20	3.141	0.36	7.17	-254.4	9.93	
12:15	10.08	150	3.9	14.27	3.214	0.23	7.14	-253.3	6.29	
12:20	9.98	150	4.1	14.51	3.359	0.20	7.15	-263.7	5.48	
12:25	9.90	150	4.3	14.83	3.460	1..05	7.02	-263.4	18.20	
12:30	9.89	150	4.5	14.48	3.501	0.33	7.08	-258.0	9.94	
12:35	9.83	150	4.7	14.38	3.521	0.20	7.07	-247.9	7.07	
12:40	9.82	150	4.9	14.32	3.550	0.17	7.07	-249.9	4.11	
12:45	9.80	150	5.1	14.42	3.562	0.16	7.05	-243.0	4.30	

Sample Collection Method: Peristaltic Pump | **Date:** 5-10-16 | **Time:** 12:50 | **Total Volume of Water Purged:** 6

Hach Test Kits

Alkalinity (mg/L)	625
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.6
Hydrogen Sulfide (mg/L)	0.3
DTW	9.32

Comments: Filtered 500 mL for Microbial Insights sample.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	INJ-8D	4" Steel

Samplers:
E. Thalhamer

Weather:
50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-16-16 | Time: (hhmm) 14:03 | Intial Depth to Water: 7.72 | Depth to Bottom: 22.10

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
14:10	8.16	200	0.3	13.97	2.895	1.60	7.33	-174.2	30.5	
14:15	8.30	200	0.5	13.97	2.890	1.30	7.38	-171.9	34.3	
14:20	8.49	200	0.8	13.93	2.886	0.96	7.50	-203.8	27.4	
14:25	8.51	200	1.1	13.92	2.885	0.77	7.54	-182.1	25.7	
14:30	8.53	200	1.3	13.87	2.887	0.54	7.51	-182.3	19.3	
14:35	8.56	200	1.6	13.83	2.889	0.39	7.46	-182.5	17.6	
14:40	8.57	200	1.8	13.76	2.889	0.32	7.44	-179.8	16.7	
14:45	8.59	200	2.1	13.73	2.890	0.27	7.42	-178.5	15.4	
14:50	8.61	200	2.4	13.76	2.886	0.24	7.41	-181.3	14.7	

Sample Collection Method: Peristaltic Pump | **Date:** 5-16-16 | **Time:** 14:55 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	705
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	0.91
Hyrdogen Sulfide (mg/L)	0.3
DTW	8.66

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: INJ-11D

Well Diameter: 4" Steel

Samplers: M. Kuczka

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-16-16 | **Time:** 12:05 (hhmm) | **Intial Depth to Water:** 7.89 | **Depth to Bottom:** 21.74

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
12:10	8.19	250	0.3	14.25	0.428	1.34	8.64	-185.5	51.2	black flecks/brown flecks
12:15	8.41	250	0.7	14.05	0.423	0.39	8.88	-202.2	48.8	odor
12:20	8.40	250	1.0	14.29	0.439	0.21	8.73	-196.6	34.6	
12:25	8.33	250	1.3	14.27	0.463	0.07	8.63	-205.1	26	
12:30	8.31	250	1.7	14.24	0.488	0.35	8.53	-211.2	17.5	
12:35	8.31	250	2.0	14.33	0.520	0.43	8.51	-223.6	12.1	
12:40	8.31	250	2.3	14.44	0.561	0.46	8.46	-234.2	10.49	
12:45	8.31	250	2.6	14.65	0.712	0.47	8.40	-255.7	9.18	
12:50	8.30	250	3.0	14.79	0.796	0.47	8.37	-274.7	8.56	
12:55	8.28	250	3.3	14.92	0.953	0.49	8.37	-284.5	9.22	
13:00	8.27	250	3.6	14.94	1.179	0.48	8.33	-295.4	8.40	
13:05	8.28	250	4.0	14.98	1.324	0.51	8.33	-305.4	8.36	
13:10	8.26	250	4.3	15.09	1.492	0.63	8.33	-309.1	8.31	
13:15	8.26	250	4.6	15.01	1.618	0.38	8.35	-316.4	8.52	
13:20	8.26	250	5.0	15.08	1.772	0.43	8.35	-318.7	8.54	
13:25	8.26	250	5.3	14.98	1.900	0.40	8.36	-324.0	8.45	
13:30	8.26	250	5.6	15.03	2.072	0.37	8.36	-333.2	8.77	
13:35	8.26	250	5.9	15.05	2.241	0.30	8.36	-337.2	8.58	
13:40	8.23	250	6.3	15.09	2.399	0.29	8.34	-336.2	8.98	
13:45	8.22	250	6.6	15.10	2.530	0.26	8.34	-341.8	8.44	
13:50	8.22	250	6.9	15.17	2.583	0.23	8.34	-343.6	9.67	
13:55	8.22	250	7.3	15.19	2.706	0.20	8.36	-347.5	9.75	
14:00	8.21	250	7.6	15.08	2.788	0.16	8.33	-341.6	9.95	
14:05	8.21	250	7.9	15.14	2.875	0.17	8.33	-343.5	8.52	
14:10	8.21	250	8.3	15.11	2.928	0.20	8.32	-345.1	9.63	
14:15	8.21	250	8.6	15.24	2.966	0.18	8.31	-347.7	9.18	
14:20	8.21	250	8.9	15.07	3.066	0.15	8.27	-346.0	8.34	
14:25	8.21	250	9.2	15.13	3.118	0.14	8.25	-348.1	8.06	
14:30	8.21	250	9.6	15.18	3.181	0.11	8.22	-345.6	7.43	
14:35	8.21	250	9.9	15.18	3.270	0.14	8.21	-349.1	8.21	
14:40	8.13	200	10.2	15.34	3.321	0.12	8.19	-346.2	8.20	
14:45	8.13	200	10.4	15.28	3.400	0.18	8.17	-343.9	8.88	
14:50	8.13	200	10.7	15.22	3.436	0.14	8.17	-346.4	7.11	still with black flecks
14:55	8.13	200	11.0	15.31	3.495	0.14	8.17	-346.4	8.43	still with black flecks

AECOM

GROUNDWATER SAMPLING LOG

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-16-16	15:00	10

Hach Test Kits

Alkalinity (mg/L)	4.65
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	1.3
Hyrdogen Sulfide (mg/L)	2.0
DTW	8.13

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: INJ-13D

Well Diameter: 4" Steel

Samplers:
M. Kuczka

Weather:
45°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-16-16 | **Time:** 9:05 (hhmm) | **Initial Depth to Water** 6.26 | **Depth to Bottom** 21.68

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:10	-	150	0.2	-	-	-	-	-	-	black, sludgy at start of pumping
9:15	6.55	150	0.4	-	-	-	-	-	-	cloudy w/ black flecks
9:20	6.88	150	0.6	12.78	5.300	2.55	8.04	-139.1	12	odor
9:25	7.31	150	0.8	13.04	5.401	0.34	8.17	-147.9	10.57	
9:30	7.67	200	1.1	13.18	5.398	0.36	8.24	-150.4	10.87	
9:35	8.11	200	1.3	13.58	5.321	0.32	8.25	-144.2	10.89	
9:40	8.34	200	1.6	13.59	5.123	0.35	8.33	-157.8	10.57	
9:45	8.78	200	1.8	13.72	4.291	0.47	8.52	-183.3	10.71	
9:50	9.10	200	2.1	13.76	3.511	0.55	8.53	-184.9	11.41	
9:55	9.42	200	2.4	13.80	3.042	0.56	8.67	-189.9	11.59	
10:00	9.67	200	2.6	14.10	2.737	0.42	8.65	-184.4	11.13	
10:05	9.82	200	2.9	13.78	2.636	0.56	8.67	-187.3	11.5	
10:10	10.06	200	3.2	13.84	2.564	0.60	8.59	-186.1	10.98	
10:15	10.24	200	3.4	13.90	2.548	0.62	8.53	-192.2	10.98	
10:20	10.44	200	3.7	14.12	2.581	0.70	8.41	-191.6	11.09	
10:25	10.70	200	4.0	13.97	2.653	0.82	8.30	-198.3	10.6	
10:30	10.95	200	4.2	14.15	2.694	0.92	8.22	-204.3	9.33	
10:35	11.14	200	4.5	14.36	2.696	0.98	8.17	-210.5	error	more black flecks
10:40	11.35	200	4.8	14.47	2.708	1.05	8.10	-214.1	error	clear, black flecks
10:45	11.60	200	5.0	14.53	2.746	1.08	8.03	-211.7	error	clear, black flecks
10:50	11.94	200	5.3	14.15	2.790	1.13	7.95	-211.6	10.5	
10:55	12.11	200	5.5	14.25	2.792	1.29	7.93	-208.7	error	
11:00	12.27	200	5.8	14.29	2.824	1.26	7.89	-207.4	11.10	
11:05	12.28	150	6.0	14.41	2.874	1.29	7.87	-218.3	error	
11:10	12.17	150	6.2	14.96	2.936	1.33	7.83	-225.0	11.2	
11:15	12.11	150	6.4	14.76	3.060	1.37	7.82	-233.3	error	
11:20	12.05	150	6.6	14.94	3.103	1.50	7.82	-237.5	11.19	
11:25	11.95	150	6.8	15.10	3.166	1.42	7.79	-239.7	9.89	
11:30	11.89	150	7.0	15.12	3.231	1.37	7.80	-244.4	10.1	
11:35	11.80	150	7.2	15.07	3.322	1.22	7.82	-248.5	11.32	clear w/ lots of black flecks, odor

AECOM

GROUNDWATER SAMPLING LOG

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-16-16	11:40	8

Hach Test Kits

Alkalinity (mg/L)	465
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.94
Hydrogen Sulfide (mg/L)	1.5
DTW	11.65

Comments: Specific conductivity slightly out of spec, after 2 hours purge sampled. Odor at sampling.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

Bedrock Monitoring Wells

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-9D

Well Diameter: 4"

Samplers: E. Thalhamer

Weather: 50°, Breezy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-16-16 | **Time:** 11:16 (hhmm) | **Initial Depth to Water:** 7.94 | **Depth to Bottom:** 14.0

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:20	8.34	200	0.3	14.49	4.607	0.73	7.35	-217.4	12.6	
11:25	8.79	200	0.5	14.59	4.564	0.56	7.37	-171.5	8.61	
11:30	9.09	200	0.8	14.61	4.542	0.45	7.33	-164.0	9.07	
11:35	9.45	200	1.1	14.45	4.538	0.32	7.38	-243.7	9.43	
11:40	9.73	200	1.3	14.51	4.524	0.30	7.37	-214.3	14.53	
11:45	9.89	200	1.6	14.67	4.528	0.27	7.36	-171.6	11.6	
11:50	10.07	200	1.8	14.58	4.528	0.22	7.39	-178.3	12.6	
11:55	10.39	200	2.1	14.51	4.527	0.22	7.43	-182.7	15.0	
12:00	10.52	200	2.4	14.31	4.527	0.20	7.43	-197.4	11.4	
12:05	10.79	200	2.6	14.08	4.528	0.18	7.44	-209.3	10.70	
12:10	11.02	200	2.9	14.60	4.527	0.17	7.44	-202.3	13.0	
12:15	11.14	200	3.2	14.80	4.524	0.16	7.39	-159.8	12.9	
12:20	11.27	200	3.4	15.20	4.523	0.13	7.32	-172.1	10.6	
12:25	11.39	200	3.7	15.25	4.525	0.12	7.33	-184.1	11.7	
12:30	11.52	200	4.0	15.28	4.526	0.12	7.35	-206.4	14.72	
12:35	11.57	200	4.2	15.11	4.535	0.14	7.35	-205.9	15.64	
12:40	11.65	200	4.5	15.04	4.527	0.11	7.34	-223.3	14.21	
12:45	-	200	4.8	-	-	-	-	-	-	
12:50	11.80	200	5.0	15.13	4.521	0.12	7.31	-181.5	12.7	
12:55	11.91	200	5.3	15.16	4.526	0.16	7.30	-197.3	16.0	
13:00	11.95	200	5.5	15.22	4.524	0.14	7.29	-204.1	17.5	
13:05	11.98	200	5.8	15.35	4.521	0.14	7.27	-210.4	16.3	
13:10	12.03	200	6.1	15.42	4.519	0.16	7.24	-210.4	13.0	

AECOM

GROUNDWATER SAMPLING LOG

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-16-16	13:15	4

Hach Test Kits

Alkalinity (mg/L)	545
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.83
Hydrogen Sulfide (mg/L)	0.0
DTW	12.15

Comments: Hydrogen sulfide test alka seltzer fizzed violently in the water but at the end of the test the result was zero. Unusually strong fizzing

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-10D

Well Diameter: 4" Steel

Samplers: M. Kuczka

Weather: 45°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-17-16 | **Time:** (hhmm) 10:05 | **Initial Depth to Water:** 7.68 | **Depth to Bottom:** 21.4

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
10:10	7.95	200	0.3	12.78	3.874	5.38	7.79	-179.7	11.74	clear w/ lots of black flecks
10:15	8.42	200	0.5	12.82	3.909	0.25	7.87	-178.2	9.81	
10:20	8.82	200	0.8	12.93	3.933	0.19	7.74	-164.4	11.94	
10:25	9.11	200	1.1	13.04	3.939	0.18	7.90	-214.2	14.16	
10:30	9.38	200	1.3	13.18	3.931	0.20	7.70	-196.3	error	(-27)
10:35	9.67	200	1.6	13.17	3.930	0.25	7.33	-189.3	error	(-27)
10:40	9.95	200	1.8	13.20	3.930	0.34	7.13	-195.7	error	(-28) flow thru is black
10:45	10.19	200	2.1	13.28	3.930	0.48	7.06	-207.7	error	(-30) flow thru is black
10:50	10.49	200	2.4	13.29	3.951	0.73	6.99	-217.1	error	(-30) flow thru is black
10:55	10.68	200	2.6	13.31	3.975	1.01	6.98	-232.7	error	(-31) flow thru is black
11:00	10.90	200	2.9	13.44	4.031	1.32	7.00	-263.2	error	(-30) flow thru is black
11:05	11.09	200	3.2	13.49	4.129	1.50	7.04	-297.8	616	cloudy w/ black flecks, odor
11:10	11.25	200	3.4	13.37	4.209	1.54	7.08	-315.7	627	
11:15	11.35	200	3.7	13.47	4.306	1.56	7.09	-323.0	error	(-31)
11:20	11.39	200	4.0	13.65	4.381	1.53	7.10	-330.5	error	(-31)
11:25	11.41	200	4.2	13.98	4.460	1.44	7.06	-332.7	error	(-30) dark, black flecks
11:30	11.46	200	4.5	14.58	4.443	1.30	7.00	-316.3	error	(-30) dark, black flecks
11:35	11.48	200	4.8	15.08	4.478	1.19	6.92	-298.7	error	(-30) dark, black flecks
11:40	11.52	200	5.0	14.65	4.690	1.09	7.01	-320.9	error	(-30) dark, black flecks
11:45	11.58	200	5.3	14.72	4.758	0.97	7.10	-340.9	error	(-30) dark, black flecks
11:50	11.61	200	5.5	14.41	5.051	0.95	7.12	-352.9	error	(-30) dark, black flecks
11:55	11.67	200	5.8	14.29	5.245	0.81	7.08	-350.9	error	(-31) dark, black flecks
12:00	11.72	200	6.1	14.80	5.368	0.61	7.14	-360.3	error	(-31) dark, black flecks
12:05	11.76	200	6.3	15.12	5.518	0.34	7.08	-346.6	error	(-31) dark, black flecks
12:10	11.80	200	6.6	15.38	5.648	0.23	7.06	-352.2	error	(-32) dark, black flecks
12:15	11.85	200	6.9	15.35	5.740	0.19	6.96	-322.3	error	(-32) dark, black flecks
12:20	11.91	200	7.1	15.21	5.793	0.16	6.96	-328.8	error	(-32) dark, black flecks
12:25	11.96	200	7.4	15.18	5.815	0.15	6.96	-321.3	641	

AECOM

GROUNDWATER SAMPLING LOG

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-17-16	12:30	8

Hach Test Kits

Alkalinity (mg/L)	770-1155
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	>3.30
Hydrogen Sulfide (mg/L)	5
DTW	11.96

Comments: Sulfide and sulfate dark even after filtering, dissolved iron looks clearer. Water almost too dark for alkalinity test, numbers are estimated somewhere between 770-1115.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-11D

Well Diameter: 4" Steel

Samplers: E. Laity, M. Kuczka

Weather: 50°, overcast, windy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-5-16 | **Time:** (hhmm) 13:45 | **Initial Depth to Water:** 6.43 | **Depth to Bottom:** 14.2

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:45	6.50	250	0.3	13.30	2.360	0.35	8.03	-295.3	647	water gray, lots of blacks flecks
13:50	6.50	250	0.7	13.23	2.387	0.29	8.07	-306.7	5.81	looks gray
13:55	6.50	250	1.0	13.16	2.419	0.30	8.07	-291.5	6.35	
14:00	6.50	250	1.3	13.35	2.434	0.31	8.08	-270.5	6.55	
14:05	6.50	250	1.7	13.37	2.437	0.34	8.07	-264.2	6.48	
14:10	6.50	250	2.0	13.34	2.384	0.56	7.89	-302.2	5.92	
14:15	6.50	250	2.3	13.42	2.342	1.25	7.74	-330.0	4.69	
14:20	6.50	250	2.6	13.41	2.274	1.29	7.68	-339.1	3.72	
14:25	6.50	250	3.0	13.54	2.237	1.36	7.63	-347.3	2.22	
14:30	6.51	250	3.3	13.54	2.220	1.32	7.60	-342.8	2.30	

Sample Collection Method: Peristaltic Pump | **Date:** 5-5-16 | **Time:** 14:35 | **Total Volume of Water Purged:** 5

Hach Test Kits

Alkalinity (mg/L)	525
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.08
Hydrogen Sulfide (mg/L)	5
DTW	6.51

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-12D

Well Diameter: 4" Steel

Samplers: M. Kuczka

Weather: 60°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-17-16 | **Time:** (hhmm) 13:10 | **Initial Depth to Water** 8.02 | **Depth to Bottom** 14.30

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:15	8.51	250	0.3	14.71	3.603	0.74	7.41	-179.5	9.01	black flecks
13:20	8.92	250	0.7	14.83	3.521	0.44	7.42	-191.7	9.76	air bubbles
13:25	9.20	200	0.9	15.05	3.532	0.46	7.44	-196.0	8.87	
13:30	9.45	200	1.2	15.04	3.593	0.70	7.33	-183.4	8.96	
13:35	9.64	200	1.5	15.10	3.762	0.81	7.20	-192.9	8.66	
13:40	9.80	200	1.7	15.10	4.040	1.09	7.11	-213.4	8.19	flow thru black
13:45	9.97	200	2.0	15.18	4.338	1.58	7.01	-237.4	error	(-31)
13:50	10.10	200	2.2	15.35	4.440	1.16	6.96	-281.9	1554	black in color
13:55	10.25	200	2.5	15.44	4.482	0.54	6.92	-291.9	1856	yellow bubbles
14:00	10.35	200	2.8	15.33	4.445	0.37	7.01	-332.1	1845	
14:05	10.41	200	3.0	15.38	4.519	0.29	6.99	-345.5	1790	
14:10	10.46	200	3.3	15.47	4.775	0.23	7.06	-380.7	1195	
14:15	10.49	200	3.6	15.51	5.054	0.23	7.09	-378.7	726	
14:20	10.50	200	3.8	15.58	5.107	0.24	7.07	-365.0	error	(-32)
14:25	10.52	200	4.1	15.51	4.884	0.19	7.02	-365.0	927	
14:30	10.53	200	4.4	15.47	4.858	0.26	7.03	-374.8	835	
14:35	10.54	200	4.6	15.41	5.071	0.30	7.05	-366.8	11.64	cleaned black residue out of turbidity cell
14:40	10.55	200	4.9	15.22	5.241	0.54	7.06	-355.8	8.32	
14:45	10.58	200	5.2	15.14	5.231	1.46	7.03	-343.7	7.83	
14:50	10.58	200	5.4	15.19	5.268	1.59	7.03	-341.9	8.38	
14:55	10.58	200	5.7	15.54	5.316	1.99	6.94	-341.7	7.79	
15:00	10.40	200	5.9	15.91	5.323	3.22	6.97	-340.0	7.08	clearer w/ lots black flecks still
15:05	10.38	250	6.3	15.21	5.361	1.18	7.01	-340.3	8.18	battery died/replaced w/ new
15:10	10.40	200	6.5	15.02	5.338	10.36	6.88	-332.6	8.18	DO malfunction
15:15	10.30	200	6.8	15.07	5.334	21.35	6.86	-321.2	9.51	DO malfunction
15:20	10.30	200	7.1	14.84	5.338	25.47	6.85	-321.1	4.84	DO malfunction
15:25	10.31	200	7.3	14.57	5.336	29.01	6.83	-318.9	3.99	DO malfunction

AECOM

GROUNDWATER SAMPLING LOG

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-17-16	15:30	8

Hach Test Kits

Alkalinity (mg/L)	1010
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.5
Hydrogen Sulfide (mg/L)	5
DTW	10.31

Comments: DO probably malfunctioned at end of purge.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-15D	4"

Samplers: E. Thalhamer

Weather: 50°, slight breeze

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-9-16 | Time: (hhmm) 9:22 | Initial Depth to Water: 7.60 | Depth to Bottom: 22.58

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:25	7.97	200	0.3	11.92	1.849	7.23	7.31	-167.3	10.43	clear w/ specks
9:30	8.05	200	0.5	11.96	1.863	5.13	7.43	-174.3	7.73	
9:35	5.10	200	0.8	12.03	1.880	2.86	7.75	-193.3	8.63	
9:40	-	200	1.1	12.08	1.881	2.80	7.76	-198.6	8.24	
9:45	8.15	200	1.3	12.08	1.886	2.37	7.72	-172.5	7.24	
9:50	8.20	200	1.6	12.04	1.889	2.29	7.76	-167.1	6.57	
9:55	8.20	200	1.8	12.16	1.886	2.10	7.78	-185.9	6.73	
10:00	8.20	200	2.1	12.15	1.890	1.99	7.79	-195.6	7.14	
10:05	8.20	200	2.4	12.15	1.889	1.81	7.80	-184.9	6.71	
10:10	8.20	200	2.6	12.11	1.890	1.80	7.80	-185.3	7.12	
10:15	8.20	200	2.9	12.09	1.892	1.59	7.79	-186.8	7.32	
10:20	8.20	200	3.2	12.06	1.894	1.54	7.77	-185.8	6.94	
10:25	8.20	200	3.4	12.11	1.896	1.49	7.78	-196.9	7.12	

Sample Collection Method: Peristaltic Pump | **Date:** 5-9-16 | **Time:** 10:30 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	6.25
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.2
Hydrogen Sulfide (mg/L)	1.0
DTW	8.20

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-16D

Well Diameter: 4" Steel

Samplers: E. Laity, M. Kuczka

Weather: 50°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-18-16 | **Time:** (hhmm) 9:40 | **Initial Depth to Water** 7.70 | **Depth to Bottom** 21.81

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:45	7.70	200	0.3	14.59	0.791	1.17	8.19	-266.9	2048	water gray at start
9:50	7.72	200	0.5	14.21	0.704	1.85	8.15	-263.3	error	emptied flow thru, cloudy w/ black flecks, water
9:55	7.73	200	0.8	14.47	0.929	0.10	8.08	-295.6	error	brown flow thru
10:00	7.73	200	1.1	14.97	1.470	0.10	7.96	-319.5	9.07	clear w/ small black flecks
10:05	7.73	200	1.3	14.68	1.716	0.27	7.91	-341.1	8.86	
10:10	7.74	200	1.6	15.01	1.797	0.36	7.83	-351.6	7.15	
10:15	7.74	200	1.8	14.95	1.925	0.36	7.77	-363.7	7.32	
10:20	7.74	200	2.1	14.99	1.992	0.32	7.73	-366.5	4.80	
10:25	7.74	200	2.4	15.10	2.040	0.20	7.74	-366.7	4.00	water clear now w/ few tiny flecks
10:30	7.74	200	2.6	14.94	2.061	0.39	7.75	-368.9	3.46	
10:35	7.74	200	2.9	15.06	2.092	0.28	7.24	-367.0	3.84	

Sample Collection Method: Peristaltic Pump | **Date:** 5-18-16 | **Time:** 10:40 | **Total Volume of Water Purged:** 5

Hach Test Kits

Alkalinity (mg/L)	625
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.08
Hydrogen Sulfide (mg/L)	5.0
DTW	7.74

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-17D

Well Diameter: 4"

Samplers: E. Thalhamer

Weather: 60°, breezy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-9-16 | **Time:** (hhmm) 13:27 | **Initial Depth to Water** 7.56 | **Depth to Bottom** 22.34

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:30	7.73	175	0.2	13.32	2.013	1.97	8.73	-321.4	6.31	clear w/ black flecks
13:35	7.99	175	0.5	13.43	2.013	1.89	8.92	-321.6	5.42	
13:40	8.03	175	0.7	13.32	2.015	1.44	9.17	-320.2	5.37	
13:45	8.03	175	0.9	13.53	2.008	1.32	9.04	-247.9	4.58	
13:50	8.03	175	1.2	13.54	2.009	1.28	9.03	-235.1	4.24	
13:55	8.03	175	1.4	13.57	2.009	1.25	8.97	-222.6	4.12	
14:00	8.03	175	1.6	13.71	2.009	2.01	9.04	-222.3	4.41	
14:05	8.03	175	1.8	13.80	2.010	2.19	9.10	-222.2	4.23	
14:10	8.03	175	2.1	13.85	2.011	2.24	9.10	-210.3	3.76	
14:15	8.03	175	2.3	13.91	2.012	2.32	9.11	-207.4	4.45	
14:20	8.03	175	2.5	14.04	2.015	2.35	9.08	-205.7	3.42	
14:25	8.03	175	2.8	13.86	2.019	1.98	9.15	-238.4	2.86	
14:30	8.03	175	3.0	13.89	2.016	2.16	9.16	-234.9	3.23	
14:35	8.03	175	3.2	13.89	2.024	2.18	9.16	-237.6	2.74	

Sample Collection Method: Peristaltic Pump | **Date:** 5-9-16 | **Time:** 14:40 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	770
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.03
Hydrogen Sulfide (mg/L)	2.0
DTW	8.03

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

Pilot Test Wells

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-1D	4" Steel

Samplers:
M. Kuczka, E. Laity

Weather:
60°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-10-16 | Time: 13:30 (hhmm) | Intial Depth to Water: 7.35 | Depth to Bottom: 23.00

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
13:35	7.72	200	0.3	14.53	4.382	1.12	7.73	-254.7	26.6	clear w/ black flecks
13:40	8.16	200	0.5	14.05	4.512	0.50	7.73	-218.7	18.4	
13:45	8.43	200	0.8	13.84	4.513	0.06	7.64	-162.9	18.4	
13:50	8.75	200	1.1	13.83	4.514	0.31	7.69	-183.0	17.9	
13:55	8.95	150	1.3	14.29	4.501	0.26	7.72	-197.1	17.4	
14:00	9.39	300	1.7	13.71	4.516	0.00	7.72	-191.0	15.8	
14:05	9.80	300	2.0	13.60	4.513	0.00	7.75	-206.6	14.9	
14:10	10.27	300	2.4	13.58	4.500	0.14	7.76	-198.4	14.7	
14:15	10.75	300	2.8	13.57	4.502	0.14	7.76	-184.5	16.7	
14:20	11.19	300	3.2	13.69	4.497	0.12	7.93	-266.1	16.9	
14:25	11.71	300	3.6	13.74	4.497	0.11	7.94	-247.7	17.6	
14:30	12.18	300	4.0	13.67	4.500	0.12	8.01	-289.8	16.5	
14:35	12.61	300	4.4	13.72	4.494	0.15	8.06	-298.1	15.5	
14:40	13.00	300	4.8	13.76	4.498	0.24	8.01	-270.0	16.3	
14:45	13.25	150	5.0	14.23	4.499	0.00	7.83	-215.2	13.9	
14:50	13.63	150	5.2	14.21	4.506	0.00	7.75	-188.3	12.5	
14:55	14.06	300	5.6	13.76	4.494	0.00	8.02	-297.3	16.1	
15:00	14.52	300	6.0	13.82	4.498	0.00	8.09	-314.8	16.2	
15:05	14.84	300	6.4	13.83	4.492	0.02	8.10	-316.5	16.5	dropped flow thru
15:10	-	300	6.8	-	-	-	-	-	-	skipped 15:10
15:15	15.80	300	7.2	13.96	4.485	0.49	7.96	-281.4	17.7	
15:20	16.23	300	7.6	14.15	4.480	0.38	7.93	-294.4	21.3	
15:25	16.61	300	8.0	14.20	4.481	0.33	7.86	-294.7	17.8	
15:30	17.04	300	8.4	14.22	4.484	0.27	7.77	-258.1	27.4	
15:35	17.80	300	8.8	14.24	4.477	0.21	7.80	-265.0	26.9	

GROUNDWATER SAMPLING LOG

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-10-16	15:40	9

Hach Test Kits

Alkalinity (mg/L)	660
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	3.03
Hyrdogen Sulfide (mg/L)	0.0
DTW	18.27

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-2D	2"

Samplers: E. Thalhamer

Weather: 50°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Intial Depth to Water	Depth to Bottom
Low Flow	5-10-16	10:00	7.66	NA

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
10:05	8.90	200	0.3	13.19	5.070	1.07	6.75	-344.4	4.17	clear w/ black specks
10:10	9.57	200	0.5	13.20	4.997	0.41	6.76	-338.3	3.85	
10:15	10.19	200	0.8	13.26	4.917	0.60	6.76	-334.3	3.00	
10:20	10.56	125	1.0	13.29	4.890	0.74	6.77	-332.8	2.74	
10:25	10.94	125	1.1	13.25	4.877	0.75	6.74	-331.8	3.51	
10:30	11.50	125	1.3	13.33	4.850	0.76	6.75	-334.4	2.83	
10:35	11.81	125	1.5	13.35	4.840	0.75	6.74	-342.9	3.14	
10:40	12.17	125	1.6	13.47	4.822	0.71	6.74	-338.0	2.71	
10:45	12.45	125	1.8	13.54	4.820	0.68	6.73	-340.5	2.63	
10:50	12.90	125	1.9	13.55	4.813	0.67	6.71	-339.4	3.12	
10:55	13.14	125	2.1	13.56	4.805	0.66	6.70	-336.9	2.74	
11:00	13.42	125	2.3	13.45	4.811	0.70	6.69	-343.2	3.04	
11:05	13.75	125	2.4	13.54	4.796	0.72	6.68	-333.6	3.42	clear w/ black specks

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-10-16	11:10	3

Hach Test Kits

Alkalinity (mg/L)	770
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	0.11
Hyrdogen Sulfide (mg/L)	1
DTW	16.2

Comments: All parameters stable except drawdown at sampling

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	PMW-6D	2"

Samplers: E. Thalhamer

Weather: 55°, Breezy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Intial Depth to Water	Depth to Bottom
Low Flow	5-9-16	11:47	7.10	25.14

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
11:50	7.95	150	0.2	12.96	6.100	5.67	7.01	-294.1	5.70	slight brown color
11:55	8.75	150	0.4	12.91	6.558	1.84	6.91	-328.8	4.73	cat-urine-like odor
12:00	10.08	150	0.6	12.91	6.604	1.47	6.90	-315.0	4.81	
12:05	10.96	150	0.8	13.05	6.615	1.43	6.90	-316.7	error	(-32)
12:10	11.72	150	1.0	13.02	6.628	1.45	6.91	-316.9	error	(-32)
12:15	12.66	150	1.2	12.95	6.621	1.38	6.91	-318.0	6.73	
12:20	13.71	150	1.4	13.06	6.620	1.30	6.90	-316.0	7.40	
12:25	14.62	150	1.6	13.17	6.619	1.30	6.90	314.8	6.84	
12:30	15.74	150	1.8	12.99	6.620	1.34	6.90	-318.3	7.36	
12:35	16.74	150	2.0	12.98	6.614	1.40	6.90	-319.7	6.47	
12:40	18.49	250	2.3	12.96	6.609	1.45	6.90	-325.1	6.03	
12:45	19.91	250	2.6	13.00	6.610	1.32	6.89	-318.8	5.73	
12:50	21.51	250	3.0	13.03	6.601	1.35	6.91	-321.7	6.05	
12:55	22.83	250	3.3	13.07	6.598	1.47	6.90	-317.5	5.12	
13:00	23.64	250	3.6	13.00	6.600	1.45	6.90	-322.4	5.24	Dry @ 13:04

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-10-16	9:05	4

Hach Test Kits

Alkalinity (mg/L)	1540
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	0.35
Hyrdogen Sulfide (mg/L)	1
DTW	22.49

Comments: 5/10/16 recharged to 19.53 @ 9:05. Grab sampled.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	RMW-4D	2"

Samplers: E. Thalhamer

Weather: 50°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Intial Depth to Water	Depth to Bottom
Low Flow	5-17-16	10:53	8.12	28.74

Time hhmm	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
11:00	9.13	200	0.3	12.58	3.177	0.35	7.29	-351.3	5.74	clear w/ black specks
11:05	9.72	200	0.5	12.60	3.160	0.28	7.30	-354.2	5.71	
11:10	-	200	0.8	-	-	-	-	-	-	flushed cup, dark staining
11:15	10.42	200	1.1	12.67	3.034	0.48	7.27	-363.1	9.72	
11:20	10.37	200	1.3	12.97	3.064	0.22	7.15	-364.5	8.34	
11:25	10.37	200	1.6	13.23	3.069	0.21	7.09	-364.3	7.62	
11:30	10.37	200	1.8	13.67	3.100	0.17	7.01	-360.1	6.70	
11:35	10.37	200	2.1	13.65	3.204	0.18	6.91	-362.7	6.00	
11:40	10.35	200	2.4	13.42	3.266	0.20	6.87	-361.7	5.71	
11:45	10.35	200	2.6	13.54	3.352	0.28	6.81	-363.8	7.66	
11:50	10.35	200	2.9	13.54	3.432	0.37	6.79	-361.9	8.11	
11:55	10.35	200	3.2	13.39	3.592	0.53	6.77	-352.4	7.04	
12:00	10.35	200	3.4	13.46	3.687	0.57	6.73	-346.1	6.17	
12:05	10.35	200	3.7	13.53	3.650	0.57	6.74	-349.6	5.53	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-17-16	12:10	4

Hach Test Kits

Alkalinity (mg/L)	990
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	0.13
Hyrdogen Sulfide (mg/L)	5.0
DTW	10.35

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: PMW-8D

Well Diameter: 2"

Samplers: E. Thalhamer

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-10-16 | **Time:** (hhmm) 12:55 | **Intial Depth to Water** 7.54 | **Depth to Bottom** 24.31

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
13:00	8.25	250	0.3	14.03	4.593	4.24	7.08	-357.3	28.3	
13:05	8.56	250	0.7	14.05	4.616	4.58	7.32	-358.7	24.1	
13:10	8.52	200	0.9	14.06	4.667	2.60	7.19	-358.7	12.0	
13:15	8.53	200	1.2	14.01	4.685	1.96	7.19	-363.2	5.66	
13:20	8.69	200	1.5	13.93	4.913	1.57	7.10	-353.2	6.55	
13:25	8.70	200	1.7	13.87	4.997	1.30	7.06	-356.4	4.20	
13:30	8.70	200	2.0	14.06	5.054	1.21	7.05	-353.9	2.10	
13:35	8.70	200	2.2	14.17	5.077	1.01	7.00	-350.7	2.05	
13:40	8.75	200	2.5	13.90	5.113	1.06	6.99	-337.2	2.05	
13:45	8.99	200	2.8	13.92	5.138	1.00	6.97	-336.9	3.32	
13:50	8.95	200	3.0	13.89	5.141	1.02	6.96	-335.3	2.72	
13:55	8.90	200	3.3	14.14	5.144	0.98	6.93	-334.1	3.04	

Sample Collection Method: Peristaltic Pump | **Date:** 5-10-16 | **Time:** 14:00 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	1010
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	0.04
Hyrdogen Sulfide (mg/L)	2
DTW	8.9

Comments: Effervescence with HCL. Duplicate collected at this well (PMW-58D @ 12:00)

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: MW-7D

Well Diameter: 4"

Samplers: E. Thalhamer

Weather: 65°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-17-16 | **Time:** (hhmm) 13:12 | **Intial Depth to Water** 8.01 | **Depth to Bottom** 26.57 (soft)

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
13:15	8.20	300	0.4	13.64	9.197	0.56	7.35	-377.8	error	(-62) clear w/ black particulates
13:20	8.20	300	0.8	13.71	8.956	0.40	7.14	-376.5	6.48	
13:25	8.20	300	1.2	13.57	8.329	0.32	7.11	-379.1	5.75	
13:30	8.20	300	1.6	13.55	8.255	0.31	7.11	-378.8	5.54	
13:35	8.20	300	2.0	13.65	7.793	0.14	7.06	-377.5	5.36	clear
13:40	8.20	300	2.4	13.62	7.749	0.14	7.06	-376.9	4.83	
13:45	8.20	300	2.8	13.63	7.713	0.14	7.06	-375.4	4.13	
13:50	8.20	300	3.2	13.64	7.488	0.22	7.03	-374.6	3.88	
13:55	8.20	300	3.6	13.63	7.400	0.23	7.02	-373.6	2.84	
14:00	8.20	300	4.0	13.59	7.394	0.24	7.00	-375.1	2.93	

Sample Collection Method: Peristaltic Pump | **Date:** 5-17-16 | **Time:** 14:05 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	910
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	0.0
Hyrdogen Sulfide (mg/L)	5.0
DTW	8.20

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

Site Investigation Wells

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-1S	2"

Samplers: E. Thalhamer

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-12-16 | Time: (hhmm) 8:47 | Initial Depth to Water: 4.75 | Depth to Bottom: 14.50

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
8:55	5.52	120	0.2	13.77	2.610	2.76	7.22	-192.7	15.41	
9:00	5.58	120	0.3	13.64	2.620	2.29	7.23	-191.9	12.76	
9:05	6.02	120	0.5	13.56	2.629	2.07	7.29	-192.2	11.54	
9:10	6.21	120	0.6	13.75	2.634	2.13	7.27	-189.3	5.13	
9:15	6.43	120	0.8	13.99	2.644	2.19	7.25	-188.6	3.29	
9:20	6.71	120	1.0	14.29	2.652	2.16	7.27	-189.6	2.73	
9:25	6.88	120	1.1	13.96	2.670	2.34	7.27	-191.3	3.26	
9:30	6.91	120	1.3	13.91	2.668	2.34	7.28	-191.8	6.12	
9:35	7.05	120	1.4	14.09	2.680	2.42	7.27	-186.4	5.76	
9:40	7.21	120	1.6	13.97	2.686	2.39	7.26	-187.1	4.83	
9:45	7.44	120	1.7	13.89	2.694	2.34	7.24	-184.0	5.21	
9:50	7.63	120	1.9	13.81	2.701	2.41	7.29	-183.9	5.12	
9:55	7.81	120	2.1	13.78	2.705	2.49	7.26	-183.7	4.64	

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 10:00 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	300
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.99
Hydrogen Sulfide (mg/L)	0.1
DTW	8.32

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-2S	2" PVC

Samplers: M. Kuczka, E. Laity

Weather: 55°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-9-16 | **Time:** (hhmm) 14:25 | **Initial Depth to Water** 3.07 | **Depth to Bottom** 11.95

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
14:30	3.85	200	0.3	15.39	5.675	3.54	7.09	-47.4	4.21	
14:35	5.36	200	0.5	14.54	5.650	0.63	6.87	-29.2	6.75	
14:40	-	200	0.8	-	-	-	-	-	-	skipped 14:40
14:45	7.18	200	1.1	14.69	5.632	0.31	6.81	-21.5	7.20	
14:50	7.76	200	1.3	14.57	4.172	0.41	6.89	-16.8	3.16	
14:55	7.79	200	1.6	14.56	3.303	0.54	6.86	-8.1	5.63	
15:00	7.79	200	1.8	14.46	4.375	0.49	6.75	0.4	2.95	
15:05	7.77	200	2.1	14.37	4.976	0.47	6.77	1.0	1.99	
15:10	7.78	200	2.4	14.53	5.259	0.25	6.75	1.5	1.21	
15:15	8.12	200	2.6	14.44	5.426	0.58	6.76	2.7	1.11	
15:20	8.50	200	2.9	14.33	5.500	0.41	6.78	3.8	1.02	
15:25	8.90	200	3.2	14.31	5.542	0.34	6.78	5.3	1.03	

Sample Collection Method: Peristaltic Pump | **Date:** 5-9-16 | **Time:** 15:30 | **Total Volume of Water Purged:** 4.5

Hach Test Kits

Alkalinity (mg/L)	770
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.79
Hydrogen Sulfide (mg/L)	NA
DTW	10.20

Comments: Well drawing down, took sample when all other parameters are stable.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-4S	2"

Samplers: E. Thalhamer

Weather: 45°, Breezy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-16-16	9:12	7.73	12.62

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:15	8.23	200	0.3	13.37	6.429	2.30	6.74	-113.7	30.9	clear
9:20	8.42	200	0.5	13.13	6.413	1.64	6.75	-121.4	11.4	
9:25	8.67	200	0.8	12.95	6.394	0.71	6.79	-133.7	3.29	
9:30	8.83	200	1.1	12.97	6.392	0.71	6.79	-128.4	3.14	
9:35	9.14	200	1.3	12.99	6.387	0.72	6.79	-121.3	2.65	
9:40	9.36	200	1.6	13.01	6.351	0.73	6.79	-117.6	2.14	
9:45	9.45	200	1.8	13.41	6.346	0.80	6.77	-117.2	2.43	
9:50	9.61	125	2.0	13.37	6.407	0.88	6.79	-116.3	1.63	
9:55	9.71	125	2.2	13.32	6.413	0.89	6.78	-119.3	1.46	
10:00	9.80	125	2.3	13.44	6.424	0.94	6.78	-117.6	1.57	
10:05	9.89	125	2.5	13.49	6.437	0.91	6.78	-118.4	1.23	
10:10	9.96	125	2.7	13.51	6.441	0.88	6.79	-121.3	1.24	
10:15	10.09	125	2.8	13.63	6.452	0.82	6.79	-124.7	1.17	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-16-16	10:20	3

Hach Test Kits

Alkalinity (mg/L)	605
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.52
Hydrogen Sulfide (mg/L)	1.0
DTW	10.35

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-6S	2"

Samplers: E. Thalhamer

Weather: 65°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-12-16 | **Time:** (hhmm) 12:27 | **Initial Depth to Water** 5.59 | **Depth to Bottom** 13.34

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
12:30	6.13	250	0.3	15.50	8.037	2.13	7.36	-142.9	53.4	
12:35	6.65	150	0.5	15.56	8.092	1.98	7.35	-142.8	41.5	
12:40	-	-	-	-	-	-	-	-	-	pump off, pump issue
12:48	-	-	-	-	-	-	-	-	-	pump back on
12:50	7.99	150	0.7	16.61	8.627	6.78	7.60	-160.6	57.3	
12:55	8.61	150	0.9	16.65	8.625	6.33	7.46	-152.9	42.3	
13:00	9.45	150	1.1	16.34	8.603	5.07	7.44	-151.3	15.42	
13:05	9.50	150	1.3	16.05	8.585	4.18	7.42	-149.8	13.73	
13:10	9.51	150	1.5	16.18	8.542	3.51	7.42	-129.1	14.12	
13:15	9.62	150	1.7	16.14	8.537	6.58	7.40	-140.8	8.70	
13:20	9.81	150	1.9	16.03	8.437	5.58	7.36	-141.4	7.31	
13:25	10.18	150	2.1	15.64	8.434	4.45	7.36	-122.7	8.14	
13:30	10.38	150	2.3	16.08	8.394	4.45	7.34	-112.9	6.32	
13:35	10.52	150	2.5	15.89	8.393	4.23	7.33	-119.9	7.12	

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 13:40 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	380
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.67
Hydrogen Sulfide (mg/L)	0.0
DTW	11.24

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name: IP-BP Ekonol

Well ID: MW-10S

Well Diameter: 2" Steel

Samplers: M. Kuczka

Weather: 55°, p. cloudy, windy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-13-16 | **Time:** (hhmm) 13:35 | **Initial Depth to Water:** 6.61 | **Depth to Bottom:** 11.48

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
13:40	6.75	150	0.2	13.37	4.526	1.28	6.72	31.5	5.2	clear
13:45	6.77	150	0.4	13.18	4.571	1.02	6.74	12.8	5.04	
13:50	6.77	150	0.6	12.89	4.573	0.70	6.74	0.5	5.86	
13:55	6.77	150	0.8	13.28	4.525	0.51	6.73	-4.3	4.35	
14:00	6.78	175	1.0	13.29	4.353	0.44	6.74	-6.2	5.28	
14:05	6.79	175	1.3	13.19	4.123	0.43	6.75	-5.6	5.16	
14:10	6.78	175	1.5	13.14	3.947	0.40	6.77	-5.8	6.16	
14:15	6.78	175	1.7	12.87	3.763	0.40	6.77	-4.3	5.64	
14:20	6.78	175	1.9	12.89	3.636	0.37	6.78	-3.8	5.74	
14:25	6.78	175	2.2	13.07	3.456	0.34	6.78	-3.4	5.64	
14:30	6.78	175	2.4	13.01	3.397	0.36	6.79	-2.1	6.04	
14:35	6.78	175	2.6	12.74	3.308	0.32	6.82	-1.6	6.20	
14:40	6.78	175	2.9	12.71	3.185	0.33	6.85	-2.8	4.19	
14:45	6.78	175	3.1	12.93	3.105	0.29	6.85	-2.4	5.75	
14:50	6.78	175	3.3	13.18	3.049	0.28	6.83	0.0	4.70	

Sample Collection Method: Peristaltic Pump | **Date:** 5-13-16 | **Time:** 14:55 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	360
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.05
Hydrogen Sulfide (mg/L)	0.0
DTW	6.71

Comments: MS-MSD

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name: IP-BP Ekonol

Well ID: MW-11S

Well Diameter: 2"

Samplers: E. Thalhamer

Weather: 60°, slight breeze

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-11-16 | **Time:** (hhmm) 12:52 | **Initial Depth to Water** 8.04 | **Depth to Bottom** 13.41

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
12:55	8.10	200	0.3	14.52	5.715	4.87	7.04	-39.6	19.3	
13:00	8.13	200	0.5	14.42	5.729	2.49	6.97	-53.8	17.9	
13:05	8.14	200	0.8	14.31	5.736	1.93	6.96	-61.2	16.32	
13:10	8.15	200	1.1	14.24	5.740	1.47	6.93	-87.9	15.56	
13:15	8.15	200	1.3	14.14	5.723	1.28	6.93	-95.6	7.24	
13:20	8.15	200	1.6	13.97	5.697	1.24	6.94	-99.8	6.32	
13:25	8.15	200	1.8	13.57	5.669	1.22	6.92	-95.1	6.46	
13:30	8.15	200	2.1	13.56	5.643	1.24	6.92	-97.4	5.01	
13:35	8.15	200	2.4	13.52	5.621	1.26	6.92	-97.0	4.32	
13:40	8.15	200	2.6	13.33	5.604	1.27	6.95	-104.8	5.09	
13:45	8.15	200	2.9	12.84	5.530	1.30	6.92	-100.7	6.09	
13:50	8.15	200	3.2	12.84	5.495	1.28	6.92	-99.5	5.63	
13:55	8.15	200	3.4	12.86	5.470	1.31	6.92	-94.8	4.60	

Sample Collection Method: Peristaltic Pump | **Date:** 5-11-16 | **Time:** 14:00 | **Total Volume of Water Purged:** 3

Hach Test Kits

Alkalinity (mg/L)	240
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.0
Hydrogen Sulfide (mg/L)	0.0
DTW	8.15

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name: IP-BP Ekonol

Well ID: MW-12S

Well Diameter: 2"

Samplers: M. Kuczka

Weather: 55°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-13-16 | **Time:** (hhmm) 8:30 | **Initial Depth to Water:** 7.84 | **Depth to Bottom:** 12.91

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
8:35	8.47	150	0.2	13.74	13.02	1.81	6.05	118.5	13.7	clear
8:40	8.66	150	0.4	13.71	13.11	0.90	6.23	114.7	11.8	
8:45	8.77	150	0.6	13.71	13.05	2.25	6.53	31.6	12.6	
8:50	8.77	150	0.8	13.77	12.74	3.93	6.79	-45.4	11	
8:55	8.71	150	1.0	13.88	12.46	3.87	6.93	-88.5	9.73	
9:00	8.72	150	1.2	14.02	12.27	3.84	6.95	-100.0	8.72	
9:05	8.73	150	1.4	14.17	12.07	3.82	6.98	-115.0	7.31	
9:10	8.75	150	1.6	14.05	11.90	3.80	7.02	-130.4	7.63	
9:15	8.75	150	1.8	14.02	11.79	3.65	7.04	-135.3	6.62	
9:20	8.80	150	2.0	14.07	11.68	3.50	7.05	-139.7	6.94	
9:25	8.90	150	2.2	14.13	11.52	3.29	7.07	-148.6	5.56	
9:30	8.94	150	2.4	14.07	11.43	3.05	7.08	-151.7	6.62	
9:35	8.97	150	2.6	14.00	11.31	2.81	7.13	-170.6	6.94	
9:40	9.00	150	2.8	14.20	11.17	2.49	7.10	-162.2	7.46	
9:45	9.01	150	3.0	14.35	11.01	2.19	7.15	-180.8	6.46	
9:50	9.03	150	3.2	14.31	10.88	1.91	7.02	-181.9	5.23	
9:55	9.03	150	3.4	14.33	10.74	1.61	7.07	-193.6	5.64	
10:00	9.04	150	3.6	14.34	10.64	1.28	7.08	-196.3	5.63	
10:05	9.04	150	3.8	14.28	10.56	1.04	7.10	-200.2	4.76	
10:10	9.07	150	4.0	14.13	10.44	0.84	7.12	-205.2	5.82	slight odor

Sample Collection Method: Peristaltic Pump | **Date:** 5-13-16 | **Time:** 10:15 | **Total Volume of Water Purged:** 5

Hach Test Kits

Alkalinity (mg/L)	440
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.89
Hydrogen Sulfide (mg/L)	1.0
DTW	9.07

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	RMW-2D	2" Steel

Samplers: M. Kuczka, E. Laity

Weather: 50°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-10-16 | **Time:** (hhmm) 8:55 | **Initial Depth to Water:** 7.25 | **Depth to Bottom:** NA

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:00	-	200	0.3	12.89	2.872	3.21	6.14	-138.0	6.69	odor with black flecks, water level meter stuck
9:05	-	200	0.5	12.97	2.876	4.82	6.23	-172.0	5.94	
9:10	-	200	0.8	13.06	2.878	3.09	6.27	-180.4	6.25	
9:15	10.40	200	1.1	13.15	2.878	1.41	6.34	-220.1	5.99	
9:20	10.22	150	1.3	13.21	2.877	0.77	6.39	-239.1	5.59	
9:25	10.00	150	1.5	13.24	3.015	0.51	6.64	-260.0	5.05	
9:30	9.92	150	1.7	13.42	3.395	0.43	7.15	-328.1	3.66	
9:35	9.89	150	1.8	13.47	3.447	0.44	7.24	-344.7	5.48	
9:40	9.86	150	2.0	13.58	3.584	0.49	7.36	-349.0	11.87	
9:45	9.86	150	2.2	13.64	3.690	0.51	7.37	-352.0	15.10	
9:50	9.89	150	2.4	13.67	3.756	0.44	7.37	-347.0	19.90	
9:55	9.91	150	2.6	13.72	3.814	0.41	7.32	-336.8	23.3	odor

Sample Collection Method: Peristaltic Pump | **Date:** 5-10-16 | **Time:** 10:00 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	1010
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.09
Hydrogen Sulfide (mg/L)	0.5
DTW	9.18

Comments: water tape sticks to side of casing. Filtered 2 Microbial Insights filters 1 for 350mL and 2nd for 250mL (total of 600mL filtered).

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☑	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: RMW-3D

Well Diameter: 2"

Samplers: E. Thalhamer

Weather: 70°, sunny, slight breeze

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-12-16 | **Time:** (hhmm) 14:21 | **Initial Depth to Water** 7.92 | **Depth to Bottom** 26.26

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
14:25	7.92	200	0.3	18.17	2.790	2.38	7.21	-349.2	5.46	
14:30	7.92	200	0.5	17.85	2.679	2.24	7.25	-344.7	4.73	
14:35	7.92	200	0.8	17.36	2.403	2.38	7.25	-352.2	3.06	
14:40	7.92	200	1.1	17.13	2.413	2.24	7.21	-351.3	2.83	
14:45	7.92	200	1.3	16.93	2.425	2.16	7.19	-340.7	2.69	
14:50	7.92	200	1.6	17.13	2.383	2.14	7.19	-325.3	1.68	
14:55	7.92	200	1.8	17.00	2.330	2.44	7.20	-341.9	2.90	
15:00	7.92	200	2.1	17.04	2.311	2.47	7.20	-336.3	2.96	
15:05	7.92	200	2.4	16.79	2.248	2.53	7.20	-341.3	1.84	
15:10	7.92	200	2.6	16.55	2.199	2.46	7.19	-345.5	2.04	
15:15	7.92	200	2.9	16.21	2.788	2.46	7.11	-338.5	2.82	
15:20	7.92	200	3.2	16.16	3.330	2.56	7.06	-349.2	3.14	
15:25	7.92	200	3.4	16.76	2.690	2.41	7.13	-340.2	2.73	
15:30	7.92	200	3.7	16.79	2.313	2.44	7.18	-343.0	3.07	
15:35	7.92	200	4.0	16.59	2.263	2.57	7.18	-343.5	2.68	
15:40	7.92	200	4.2	15.69	2.492	2.43	7.13	-345.0	4.01	
15:45	7.92	200	4.5	15.82	2.235	2.53	7.18	-340.8	3.64	
15:50	7.92	200	4.8	15.93	2.212	2.49	7.18	-340.6	2.28	
15:55	7.92	200	5.0	15.83	2.195	2.55	7.19	-330.8	1.82	

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 16:00 | **Total Volume of Water Purged:** 6

Hach Test Kits

Alkalinity (mg/L)	385
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.07
Hydrogen Sulfide (mg/L)	2.0
DTW	7.92

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-11D	2"

Samplers: E. Thalhamer

Weather: 55°, breezy, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-13-16	9:21	10.52	30.84

Time hhmm	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:25	10.55	250	0.3	12.86	2.992	3.18	6.93	-53.6	1.67	
9:30	10.57	250	0.7	12.59	3.083	1.59	6.70	-63.1	1.51	
9:35	10.57	250	1.0	12.67	3.084	0.78	6.72	-96.8	1.46	
9:40	10.57	250	1.3	12.68	3.068	1.03	6.81	-121.8	1.32	
9:45	10.57	250	1.7	12.65	3.060	0.62	6.83	-130.4	1.52	
9:50	10.57	250	2.0	12.59	3.044	0.45	6.86	-143.2	1.73	
9:55	10.57	250	2.3	12.64	3.037	0.41	6.87	-141.3	1.79	
10:00	10.57	250	2.6	12.68	3.032	0.39	6.91	-138.2	1.84	
10:05	10.57	250	3.0	12.73	3.015	0.38	6.91	-202.3	1.63	
10:10	10.57	250	3.3	12.72	3.012	0.36	6.91	-236.6	1.55	
10:15	10.57	250	3.6	12.79	3.003	0.42	6.92	-253.1	1.62	
10:20	10.57	250	4.0	12.87	2.999	0.41	6.92	-253.7	1.02	
10:25	10.57	250	4.3	12.73	3.002	0.48	6.94	-267.2	1.32	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-13-16	10:30	5

Hach Test Kits

Alkalinity (mg/L)	360
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.1
Hydrogen Sulfide (mg/L)	0.1
DTW	10.57

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: MW-17D

Well Diameter: 2" PVC

Samplers: M. Kuczka, E. Laity

Weather: 60°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-11-16 | **Time:** (hhmm) 12:50 | **Initial Depth to Water:** 9.81 | **Depth to Bottom:** 33.22

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
12:55	10.15	150	0.2	14.28	2.024	6.24	8.04	-38.0	1.19	clear, no odor
13:00	10.11	200	0.5	13.33	1.989	4.86	7.70	-15.1	0.82	
13:05	10.19	250	0.8	12.57	1.986	4.32	8.28	-27.6	0.72	
13:10	10.19	250	1.1	12.67	3.315	2.54	7.54	-117.1	0.94	
13:15	10.19	250	1.5	12.74	3.592	0.70	7.37	-140.5	0.91	
13:20	10.19	250	1.8	12.80	3.635	0.44	7.34	-144.2	0.75	
13:25	10.18	250	2.1	12.72	3.651	0.47	7.35	-151.0	0.98	
13:30	10.17	250	2.4	12.72	3.647	0.29	7.37	-157.4	1.23	
13:35	10.17	250	2.8	12.72	3.648	0.08	7.36	-157.4	0.93	

Sample Collection Method: Peristaltic Pump | **Date:** 5-11-16 | **Time:** 13:40 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	380
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.0
Hydrogen Sulfide (mg/L)	1.0
DTW	10.17

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-20D	2" Steel

Samplers: M. Kuczka

Weather: 70°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-12-16 | **Time:** 10:35 (hhmm) | **Initial Depth to Water:** 8.58 | **Depth to Bottom:** 29.38

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
10:40	8.92	250	0.3	16.11	2.411	0.67	7.70	-207.9	9.72	some black flecks
10:45	8.97	250	0.7	15.83	2.414	0.16	7.50	-236.1	4.91	
10:50	8.98	250	1.0	15.70	2.413	0.54	7.46	-239.0	2.94	
10:55	8.98	250	1.3	15.71	2.411	1.24	7.44	-240.1	3.02	
11:00	8.98	250	1.7	15.63	2.412	1.20	7.44	-242.0	1.96	
11:05	8.98	250	2.0	15.70	2.408	1.19	7.43	-238.6	2.36	
11:10	8.98	250	2.3	15.74	2.404	1.11	7.44	-240.8	2.51	

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 11:15 | **Total Volume of Water Purged:** 2.5

Hach Test Kits

Alkalinity (mg/L)	360
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.7
Hydrogen Sulfide (mg/L)	1.0
DTW	8.98

Comments: MS/MSD collected at this location for VOCs.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-21D	4"

Samplers: E. Thalhamer

Weather: 65°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-12-16 | Time: (hhmm) 10:42 | Intial Depth to Water: 8.45 | Depth to Bottom: 31.64

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Commets:
10:45	8.45	250	0.3	13.74	1.447	4.45	8.42	-256.8	31.6	
10:50	8.45	250	0.7	13.13	1.423	3.04	8.39	-127.3	24.7	
10:55	8.45	250	1.0	12.80	1.400	1.46	8.38	-95.4	21.3	
11:00	8.45	250	1.3	12.84	1.396	1.45	8.41	-93.1	18.7	
11:05	8.45	250	1.7	12.81	1.394	1.46	8.47	-83.1	22.7	
11:10	8.45	250	2.0	12.87	1.391	1.44	8.48	-84.6	24.6	
11:15	8.45	250	2.3	12.99	1.387	1.43	8.60	-107.9	19.3	
11:20	8.45	250	2.6	12.97	1.382	1.41	8.62	-131.6	21.3	
11:25	8.45	250	3.0	12.97	1.473	1.40	8.13	-142.3	19.6	
11:30	8.45	250	3.3	12.97	1.940	1.40	7.77	-154.7	18.3	
11:35	8.45	250	3.6	13.21	2.151	1.46	7.36	-150.4	13.1	
11:40	8.45	250	4.0	13.31	2.188	1.47	7.27	-148.7	12.0	
11:45	8.45	250	4.3	13.36	2.200	1.78	7.23	-151.5	14.73	
11:50	8.45	250	4.6	13.42	2.207	1.76	7.23	-149.8	13.47	
11:55	8.45	250	5.0	13.45	2.211	1.77	7.22	-149.6	13.31	

Sample Collection Method: Peristaltic Pump | **Date:** 5-12-16 | **Time:** 12:00 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	280
Carbon Dioxide (mg/L)	Lab
Ferrious Iron (mg/L)	1.12
Hyrdogen Sulfide (mg/L)	NA
DTW	8.45

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissloved Iron	☐	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☐	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☐	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☐	2-40 mL glass vial (field filtered)	unperserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

Investigative Monitoring Wells

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	RMW-1D	2" Steel

Samplers: M. Kuczka

Weather: 60°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-12-16	8:45	7.60	29.12

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
8:50	7.64	150	0.2	13.69	1.323	4.17	6.87	107.2	6.25	clear, odor
8:55	7.65	150	0.4	13.29	1.295	3.29	7.53	102.4	3.98	
9:00	7.66	200	0.7	12.77	1.284	3.29	7.81	95.4	3.74	
9:05	7.67	200	0.9	12.96	2.557	1.04	7.43	-60.4	4.13	
9:10	7.67	200	1.2	12.94	2.647	0.43	7.38	-84.3	4.24	
9:15	7.67	200	1.5	13.18	3.091	0.34	7.42	-228.7	4.35	
9:20	7.66	200	1.7	13.58	3.057	1.80	7.44	-244.5	3.19	
9:25	7.67	200	2.0	13.48	3.012	1.88	7.42	-251.1	2.28	
9:30	7.67	200	2.2	13.60	2.940	1.77	7.40	-248.3	1.98	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-12-16	9:35	3

Hach Test Kits

Alkalinity (mg/L)	320
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.18
Hydrogen Sulfide (mg/L)	2
DTW	7.67

Comments: Duplicate collected. Listed as RMW-51D @ 8:30.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: MW-15D

Well Diameter: 2" Steel

Samplers: M. Kuczka, E. Laity

Weather: 55°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-11-16 | **Time:** (hhmm) 9:00 | **Initial Depth to Water** 9.33 | **Depth to Bottom** 29.21

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:05	9.80	250	0.3	14.02	4.288	2.59	6.35	-92.9	3.35	
9:10	9.80	200	0.6	13.92	4.495	0.41	7.13	-157.7	1.83	
9:15	9.82	200	0.9	13.96	4.510	0.33	7.31	-159.8	1.32	
9:20	9.84	200	1.1	13.95	4.497	0.35	7.41	-153.0	1.55	
9:25	9.87	200	1.4	14.02	4.460	0.35	7.46	-164.8	1.61	
9:30	9.88	200	1.7	14.08	4.473	0.43	7.50	-161.8	1.68	
9:35	9.89	200	1.9	14.16	4.455	0.72	7.55	-174.8	1.59	
9:40	9.90	200	2.2	14.25	4.240	1.14	7.48	-163.8	1.97	
9:45	9.91	200	2.4	14.17	4.221	1.28	7.47	-165.8	1.30	
9:50	9.91	200	2.7	14.22	4.126	1.33	7.45	-160.6	1.30	
9:55	9.92	200	3.0	14.21	4.114	1.33	7.42	-140.0	1.70	
10:00	9.93	200	3.2	14.23	4.166	1.22	7.44	-148.7	1.50	
10:05	9.93	200	3.5	14.32	4.164	1.16	7.44	-153.0	1.29	
10:10	9.93	200	3.8	14.23	4.184	1.09	7.45	-161.2	1.43	
10:15	9.94	200	4.0	14.10	4.212	0.98	7.50	-171.1	0.91	
10:20	9.94	200	4.3	14.08	4.170	0.93	7.46	-150.8	1.32	
10:25	9.94	200	4.6	14.07	4.207	0.83	7.51	-175.8	1.29	
10:30	9.94	200	4.8	14.05	4.190	0.74	7.52	-179.0	1.27	
10:35	9.94	200	5.1	14.10	4.198	0.66	7.52	-179.6	1.84	

Sample Collection Method: Peristaltic Pump | **Date:** 5-11-16 | **Time:** 10:40 | **Total Volume of Water Purged:** 5.5

Hach Test Kits

Alkalinity (mg/L)	180
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.13
Hydrogen Sulfide (mg/L)	0.5
DTW	9.94

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-16D	2"

Samplers: E. Thalhamer

Weather: 60°, slight breeze

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-11-16	10:56	12.62	NA

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:05	13.40	150	0.2	12.23	1.065	6.44	8.63	70.2	5.63	
11:10	13.52	150	0.4	11.78	0.992	6.91	8.65	17.4	5.03	
11:15	13.54	150	0.6	11.74	1.013	5.83	8.12	-10.3	4.84	
11:20	13.56	150	0.8	11.70	1.103	4.64	7.75	-24.2	4.16	
11:25	13.59	150	1.0	11.61	1.247	3.04	7.46	-73.4	3.42	
11:30	13.61	150	1.2	11.53	1.660	1.65	7.22	-121.8	2.60	
11:35	13.63	150	1.4	11.63	1.704	1.71	7.20	-132.3	2.23	
11:40	13.65	150	1.6	11.78	1.836	1.73	7.18	-140.9	1.97	
11:45	13.65	150	1.8	11.96	1.924	1.66	7.15	-147.9	2.49	
11:50	13.65	150	2.0	11.96	1.944	1.63	7.15	-149.3	2.59	
11:55	13.65	150	2.2	11.99	1.978	1.77	7.15	-152.7	3.34	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-11-16	12:00	3

Hach Test Kits

Alkalinity (mg/L)	340
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.17
Hydrogen Sulfide (mg/L)	0.3
DTW	13.65

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-18D	2"

Samplers: E. Thalhamer

Weather: 50°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-17-16 | **Time:** 8:55 (hhmm) | **Initial Depth to Water:** 9.07 | **Depth to Bottom:** 28.6

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:00	9.10	300	0.4	9.40	2.933	1.57	6.79	-67.8	4.55	clear
9:05	9.12	300	0.8	9.51	2.995	0.61	6.86	-114.1	4.23	
9:10	9.12	300	1.2	9.53	2.998	0.52	6.88	-122.2	3.84	
9:15	9.12	300	1.6	9.54	2.996	0.38	6.90	-133.4	4.12	
9:20	9.13	300	2.0	9.59	2.992	0.35	6.92	-135.8	3.43	
9:25	9.12	300	2.4	9.59	2.989	0.33	6.92	-136.4	2.97	
9:30	9.12	300	2.8	9.59	2.987	0.31	6.92	-137.7	3.14	

Sample Collection Method: Peristaltic Pump | **Date:** 5-17-16 | **Time:** 9:35 | **Total Volume of Water Purged:** 5

Hach Test Kits

Alkalinity (mg/L)	380
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.06
Hydrogen Sulfide (mg/L)	2.0
DTW	9.12

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-19D	2"

Samplers: E. Thalhamer

Weather: 45°, windy

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-11-16	9:06	7.97	27.07

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:10	8.19	200	0.3	13.84	5.353	6.81	6.66	44.4	15.2	
9:15	8.21	200	0.5	13.86	5.453	1.89	6.66	25.5	11.3	
9:20	8.23	200	0.8	13.83	5.461	1.60	6.67	14.5	8.09	
9:25	8.24	200	1.1	13.85	5.457	1.50	6.67	7.6	8.42	
9:30	8.24	200	1.3	13.98	5.350	1.53	6.66	5.0	8.13	
9:35	8.24	200	1.6	13.97	5.337	1.53	6.66	3.3	7.84	
9:40	8.24	200	1.8	14.12	5.304	1.61	6.66	4.2	4.42	
9:45	8.24	200	2.1	14.20	5.213	1.74	6.65	8.6	3.72	
9:50	8.24	200	2.4	14.17	5.204	1.82	6.65	9.0	2.84	
9:55	8.24	200	2.6	14.28	5.127	1.88	6.65	13.2	3.17	

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-11-16	10:00	3

Hach Test Kits

Alkalinity (mg/L)	485
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.73
Hydrogen Sulfide (mg/L)	0.0
DTW	8.24

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-13D	2" Steel

Samplers: M. Kuczka, E. Laity

Weather: 55°, p. sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | Date: 5-11-16 | Time: (hhmm) 11:00 | Initial Depth to Water: 11.58 | Depth to Bottom: 31.39

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
11:05	12.00	300	0.4	12.46	5.179	0.47	7.13	-184.6	2.43	
11:10	12.02	300	0.8	12.58	5.281	0.81	7.29	-217.7	2.11	
11:15	12.04	300	1.2	12.59	5.085	1.19	7.32	-227.2	1.32	
11:20	12.02	300	1.6	12.70	5.018	0.82	7.33	-232.2	1.18	
11:25	12.02	300	2.0	12.70	4.874	0.69	7.33	-236.3	0.80	
11:30	12.02	300	2.4	12.47	4.676	0.60	7.36	-237.9	0.68	
11:35	12.02	300	2.8	12.69	3.585	0.28	7.44	-244.8	0.80	
11:40	12.02	300	3.2	12.67	3.056	0.10	7.51	-238.7	0.84	
11:45	12.01	300	3.6	12.73	2.946	0.47	7.51	-238.9	0.75	
11:50	12.00	300	4.0	12.78	2.878	0.23	7.52	-236.3	1.04	
11:55	12.00	300	4.4	12.72	2.850	0.20	7.49	-230.9	0.74	
12:00	12.00	300	4.8	12.81	2.816	0.15	7.48	-227.1	0.70	

Sample Collection Method: Peristaltic Pump | **Date:** 5-11-16 | **Time:** 12:05 | **Total Volume of Water Purged:** 5

Hach Test Kits

Alkalinity (mg/L)	380
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.16
Hydrogen Sulfide (mg/L)	2.0
DTW	12.00

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

Site Name: IP-BP Ekonol

Well ID: MW-9S

Well Diameter: 2"

Samplers: E. Thalhamer

Weather: 60°, overcast

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method: Low Flow | **Date:** 5-13-16 | **Time:** (hhmm) 13:57 | **Initial Depth to Water** 5.26 | **Depth to Bottom** 14.00

Time (hhmm)	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
14:00	6.55	150	0.2	14.52	3.851	0.67	10.07	-203.0	46.5	
14:05	7.11	150	0.4	14.59	3.698	0.55	10.28	-202.4	41.3	
14:10	8.24	150	0.6	14.77	3.315	0.73	10.32	-176.7	44.7	
14:15	8.78	150	0.8	14.88	2.594	1.23	10.84	-150.1	19.0	
14:20	8.95	150	1.0	17.21	1.970	0.89	10.75	-213.1	12.0	
14:25	9.31	150	1.2	16.03	2.143	1.36	11.01	-163.4	11.64	
14:30	9.75	150	1.4	15.60	2.191	1.49	11.05	-152.5	26.3	
14:35	9.75	150	1.6	15.51	3.123	0.99	10.41	-123.6	29.4	
14:40	9.75	150	1.8	15.43	3.404	0.86	10.33	-104.7	38.6	
14:45	9.75	150	2.0	15.90	3.694	0.70	10.01	-136.1	27.4	
14:50	9.75	150	2.2	16.11	3.950	0.54	9.69	-131.0	35.1	
14:55	9.75	150	2.4	15.73	3.991	0.51	9.53	-130.4	28.4	
15:00	9.75	150	2.6	15.51	4.025	0.47	9.41	-128.1	23.4	
15:05	9.75	150	2.8	14.68	3.872	0.42	9.33	-126.4	18.8	
15:10	9.75	150	3.0	14.50	3.668	0.48	9.30	-121.5	14.8	
15:15	9.75	150	3.2	14.73	3.636	0.49	9.29	-117.8	15.4	
15:20	9.75	150	3.4	15.03	3.525	0.49	9.26	-117.2	14.3	
15:25	9.75	150	3.6	15.03	3.483	0.50	9.26	-108.9	14.3	
15:30	9.75	150	3.8	15.03	3.490	0.53	9.24	-111.8	14.4	

Sample Collection Method: Peristaltic Pump | **Date:** 5-13-16 | **Time:** 15:35 | **Total Volume of Water Purged:** 4

Hach Test Kits

Alkalinity (mg/L)	NA
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	0.0
Hydrogen Sulfide (mg/L)	0.0
DTW	NA

Comments: Bubbles in line during purge.

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

AECOM

GROUNDWATER SAMPLING LOG

Low Flow Sampling Record

bp

Site Name:	Well ID:	Well Diameter:
IP-BP Ekonol	MW-7S	2" Steel

Samplers: E. Thalhamer

Weather: 55°, sunny

Water Volume Calculation

1 inch= 0.041	6 inch= 1.4
1.5 inch= 0.092	8 inch= 2.5
2 inch= 0.163	10 inch= 4
4 inch= 0.64	

= (Total Depth of Well - Depth to Water) × Casing volume per foot

Acceptance Criteria:

Temp	± 3%
pH	± 0.1 unit
Sp. Cond.	± 3%
ORP	± 10mV
DO	± 10%
Turbidity	<50 NTU
Drawdown	<0.3 ft

Purging Data:

Method:	Date:	Time: (hhmm)	Initial Depth to Water	Depth to Bottom
Low Flow	5-6-16	9:17	4.91	12.32

Time hhmm	DTW (ft)	Pump Rate (ml/min)	Volume (gal.)	Temp (C°)	Sp. Cond (ms/cm)	DO (mg/L)	pH	ORP (mV)	Turb (NTU)	Comments:
9:25	6.91	150	0.2	13.69	9.737	6.39	6.75	113.7	70.6	brown, no odor
9:30	7.61	150	0.4	13.56	9.718	4.82	6.68	105.2	63.6	
9:35	7.68	150	0.6	14.03	9.696	3.94	6.68	79.3	53.4	
9:40	7.86	150	0.8	14.31	9.741	2.25	6.69	43.8	42.5	
9:45	7.98	150	1.0	14.07	9.746	2.07	6.67	30.9	36.4	
9:50	8.14	150	1.2	14.02	9.731	1.94	6.66	29.9	31.5	
9:55	8.39	150	1.4	14.15	9.707	1.84	6.65	27.4	26.5	
10:00	8.51	150	1.6	14.23	9.702	1.82	6.64	25.2	19.2	
10:05	8.70	150	1.8	14.36	9.708	1.77	6.64	24.0	16.2	
										at sample, turbidity 8.52

Sample Collection Method:	Date:	Time:	Total Volume of Water Purged:
Peristaltic Pump	5-6-16	10:10	2

Hach Test Kits

Alkalinity (mg/L)	445
Carbon Dioxide (mg/L)	Lab
Ferrous Iron (mg/L)	1.27
Hydrogen Sulfide (mg/L)	0.0
DTW	9.30

Comments:

Sample Set

Parameter		Bottle	Pres.	Method
VOCs	☑	3-40 mL glass vial	HCL	8260C
Dissolved Iron	☑	1-250 mL poly(field filtered)	HNO3	6010C
TOC	☑	2-40mL amber glass vial	H3PO4	5310C
M.E.E	☑	2-40 mL glass vial	HCL	RSK-175 mod
Sulfide	☑	1- 250mL glass (field filtered)	NaOH/Zn Acetate	SM 4500 S2
Sulfate	☑	2-40 mL glass vial (field filtered)	unpreserved	300.0
Microbial Population	☐	In-line filter	N/A	CENSUS

Appendix C

Data Usability Summary Report

DATA USABILITY SUMMARY REPORT

EKONOL POLYESTER RESINS SITE
TOWN OF WHEATFIELD, NIAGARA COUNTY, NY
SITE No. V00653-9

Analyses Performed by:

EUROFINS LANCASTER LABORATORIES
LANCASTER, PENNSYLVANIA

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL REMEDIATION

Prepared by:

AECOM
257 WEST GENESEE STREET, SUITE 400
BUFFALO, NY 14202-2657

JULY 2016

TABLE OF CONTENTS

		Page No.
I.	INTRODUCTION	1
II.	ANALYTICAL METHODOLOGIES AND DATA VALIDATION PROCEDURES	1
III.	DATA DELIVERABLE COMPLETENESS	2
IV.	SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES	2
V.	NON-CONFORMANCES	2
VI.	SAMPLE RESULTS AND REPORTING	3
VII.	SUMMARY	3

TABLES
(Following Text)

Table 1	Validated Groundwater Sample Analytical Results
Table 2	Validated Field QC Sample Analytical Results

ATTACHMENTS

Attachment A	Validated Form 1's
Attachment B	Support Documentation

I. INTRODUCTION

This Data Usability Summary Report (DUSR) has been prepared following the guidelines provided in New York State Department of Environmental Conservation (NYSDEC) Division of Environmental Remediation *DER-10, Technical Guidance for Site Investigation and Remediation, Appendix 2B - Guidance for Data Deliverables and the Development of Data Usability Summary Reports*, May 2010. Discussed in this DUSR are the analytical data for fifty seven (57) groundwater samples, three (3) groundwater field duplicates, two (2) Matrix Spike/Matrix Spike Duplicate (MS/MSD) pairs and ten (10) trip blanks collected on May 5-22, 2016.

The samples were collected at the Ekonol Polyester Resins site (Site ID Number V00653-9), located in the Town of Wheatfield, Niagara County, NY and sent to Eurofins Lancaster Laboratories for analysis. Eurofins Lancaster Laboratories is a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) certified laboratory.

II. ANALYTICAL METHODOLOGIES AND DATA VALIDATION PROCEDURES

The groundwater samples were analyzed for the following parameters (not all samples were analyzed for all parameters):

Parameter	Method Number
Select Chlorinated Volatile Organic Compounds (CVOCs)	SW8260C
Dissolved Gases (CO_2, ethane, ethene, and methane)	RSK SOP-175 Modified
Dissolved Iron and Potassium	6010C
Sulfate (dissolved)	EPA300.0
Total Organic Carbon	SM 5310 C-2000
Sulfide (dissolved)	SM 4500-S2 D-2000

A limited data validation was performed on the samples in accordance with the guidelines in the following USEPA Region II documents:

- *Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B & 8260C*, SOP HW-24, Revision 4, October 2014;
- *ICP-AES Data Validation*, SOP HW-2a, Rev. 15, December 2012; and
- *Mercury and Cyanide Data Validation*, SOP HW-2c, Rev. 15, December 2012.

The limited data review included a review of: completeness of all required deliverables; holding times; QC results [blanks, instrument tunes, calibration standards, MS/MSD recoveries, duplicate precision, and

laboratory control sample (LCS) recoveries] to determine if the data are within the protocol-required QC limits and specifications; a determination that all samples were analyzed using established and agreed upon analytical protocols; an evaluation of the raw data to confirm the results provided in the data summary sheets; and a review of laboratory data qualifiers.

Qualifications applied to the data during the limited data validation include 'R' (rejected), 'J' (estimated value), and 'UJ' (estimated reporting limit). Definitions of USEPA data qualifiers are presented at the end of this text. The validated analytical results are presented on Table 1 and Table 2. Validated Form 1s have been presented in Attachment A. Documentation supporting the qualification of data is presented in Attachment B. Only analytical deviations affecting data usability are discussed in this report.

III. DATA DELIVERABLE COMPLETENESS

Full deliverable data packages (i.e., NYSDEC ASP Category B or equivalent) were provided by the laboratory, and included all reporting forms and raw data necessary to fully evaluate and verify the reported analytical results.

IV. SAMPLE RECEIPT/PRESERVATION/HOLDING TIMES

All samples were received by the laboratory intact, properly preserved, and under proper chain-of-custody (COC), and were analyzed within the required holding times (HT) with the following exceptions.

The VOC vials for samples OR-4SM, OR-6SM, OR-15SM, and OR-65SM (field duplicate of OR-15SM) were not properly preserved (pH >2) and were not analyzed within the HT for unpreserved samples (i.e., > 7 days). The detected VOC results have been qualified 'J' and the non-detect results were qualified 'R' in these samples.

The vials submitted for sample MW-20D for dissolved gases analysis (methane, ethane, and ethane) contained headspace upon arrival at the lab. The results for these analytes in sample MW-20D have been qualified 'J' or 'UJ'.

V. NON-CONFORMANCES

Matrix Spike/Matrix Spike Duplicate

The percent recovery (%R) for potassium (K) in sample PMW-6D MSD was greater than the upper quality control (QC) limit. The %R for K in the post digestion spike was acceptable. The percent difference (%D)

of the serial dilution performed on this sample also exceeded the QC limit of 10% for K. The result for K in this sample has been qualified 'J'.

The %R for sulfide in sample OR-65SM MSD was less than the lower QC limit. Sample OR-65SM is the field duplicate of sample OR-15SM. Since the matrix is the same the results for sulfide in both samples have been qualified 'J'.

Method Blank

Iron (Fe) was detected in the laboratory method blank at a concentration greater than the method detection limit (MDL) bur less than the reporting limit (RL). The results for Fe in associated samples MW-7D and MW-18D were qualified 'U' at the RL.

VI. SAMPLE RESULTS AND REPORTING

Field duplicates were collected at locations OR-15SM, PMW-8D, and RMW-1D and exhibited good field and analytical precision with the exceptions noted below.

The relative percent difference (RPD) between the sample and field duplicate concentrations in sample RMW-1D exceeded the QC limit for Fe. The results for Fe in these samples were qualified 'J'.

All sample results were reported in accordance with method requirements and were adjusted for sample volume (where applicable). Results reported below the reporting limit, but greater than the MDL, are qualified 'J' by the laboratory. Those results being reported from a secondary dilution have been qualified 'D'.

VII. SUMMARY

All sample analyses were found to be compliant with the method criteria, except where previously noted. Those results qualified 'R' (rejected) are not usable. Those results qualified 'J' (estimated value) or 'UJ' (estimated reporting limit) during the data review are considered conditionally usable. All other sample results are usable as reported. AECOM does not recommend the re-collection of any samples at this time.

Prepared By: Ann Marie Kropovitch, Chemist **Date:** 7/7/16

Reviewed By: George E. Kisluk, Senior Chemist **Date:** 7/7/16

DEFINITIONS OF USEPA REGION II DATA QUALIFIERS

U – The analyte was analyzed for, but was not detected above the reported sample reporting limit.

J – The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.

UJ – The analyte was not detected above the reported sample reporting limit. However, the reported reporting limit is approximate and may or may not represent the actual limit of reporting necessary to accurately and precisely measure the analyte in the sample.

R – The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

D – The sample results are reported from a secondary dilution.

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		INJ- 7D	INJ- 8D	INJ-11D	INJ-13D	MW- 1S
Sample ID		INJ-7D	INJ-8D	INJ-11D	INJ-13D	MW-1S
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/10/16	05/16/16	05/16/16	05/16/16	05/12/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	100 U	14	200 U	10 U	1.0 U
1,1-Dichloroethane	UG/L	100 U	320 D	200 U	10 U	1.0 U
1,1-Dichloroethene	UG/L	670	0.95 J	260	15	0.55 J
1,2-Dichloroethene (cis)	UG/L	540,000 D	170	120,000 D	4,300 D	58
1,2-Dichloroethene (trans)	UG/L	410	13	140 J	38	2.6
Chloroethane	UG/L	100 U	2.8	200 U	10 U	1.0 U
Tetrachloroethene	UG/L	220	1.0 U	200 U	10 U	1.0 U
Trichloroethene	UG/L	110,000 D	2.4	27,000	33	1.7
Vinyl chloride	UG/L	11,000	210	4,500	2,500	10
Dissolved Metals						
Iron, Dissolved	MG/L	25.2	26.1	0.167 J	9.13	1.01
Potassium, Dissolved	MG/L	6.99	79.9	11.2	8.78	3.55
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	187	465	83.2	101	2.2
Dissolved Gases						
Carbon dioxide	MG/L	260 D	54	89	75	30
Ethane	UG/L	19	20	82	380	5.0 U
Ethene	UG/L	1,200 D	1,400 D	980 D	2,300 D	5.0 U
Methane	UG/L	1,800 D	14,000 D	16,000 D	17,000 D	240
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	250	5.0 U	266	10.5	1,460
Sulfide	MG/L	1.1	0.095 J	56.7	3.3	0.39

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		MW- 2S	MW- 4S	MW- 6S	MW- 7D	MW- 7S
Sample ID		MW-2S	MW-4S	MW-6S	MW-7D	MW-7S
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/09/16	05/16/16	05/12/16	05/17/16	05/06/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	50 U	1.0 U	1.0 U	100 U	1.0 U
1,1-Dichloroethane	UG/L	29 J	0.79 J	1.4	150	1.0 U
1,1-Dichloroethene	UG/L	520	1.2	1.0 U	69 J	1.0 U
1,2-Dichloroethene (cis)	UG/L	240,000	320 D	25	67,000 D	1.0 U
1,2-Dichloroethene (trans)	UG/L	1,600	1.8	1.0 U	130	1.0 U
Chloroethane	UG/L	50 U	1.0 U	1.0 U	100 U	1.0 U
Tetrachloroethene	UG/L	50 U	1.0 U	1.0 U	94 J	1.0 U
Trichloroethene	UG/L	320	5.1	1.0 U	560	1.0 U
Vinyl chloride	UG/L	14,000	230	91	2,500	1.0 U
Dissolved Metals						
Iron, Dissolved	MG/L	2.23	0.639	NA	0.400 U	1.53
Potassium, Dissolved	MG/L	2.89	5.68	NA	13.4	5.88
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	2.3	5.6	NA	84.8	1.2
Dissolved Gases						
Carbon dioxide	MG/L	110	120	37	98	78
Ethane	UG/L	22	9.3	11	12	5.0 U
Ethene	UG/L	180	24	12	260	5.0 U
Methane	UG/L	310	480 D	88	9,600 D	15
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	1,220	4,110	NA	31.6	2,010
Sulfide	MG/L	0.10 U	2.4	NA	159	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		MW- 9S	MW-10S	MW-11D	MW-11S	MW-12S
Sample ID		MW-9S	MW-10S	MW-11D	MW-11S	MW-12S
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/13/16	05/13/16	05/13/16	05/11/16	05/13/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	65	1.0 U	8.5
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	12	12	20
1,1-Dichloroethene	UG/L	1.0 U	1.7	1.6	2.0	3.8 J
1,2-Dichloroethene (cis)	UG/L	1.0 U	530 D	15	260	1,600 D
1,2-Dichloroethene (trans)	UG/L	1.0 U	11	1.0 U	7.6	44
Chloroethane	UG/L	1.0 U	1.0 U	0.65 J	1.1	2.7 J
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U
Trichloroethene	UG/L	1.0 U	11	2.7	32	2,300 D
Vinyl chloride	UG/L	1.0 U	160	17	65	420
Dissolved Metals						
Iron, Dissolved	MG/L	0.400 U	NA	NA	NA	NA
Potassium, Dissolved	MG/L	6.42	NA	NA	NA	NA
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	7.6	NA	NA	NA	NA
Dissolved Gases						
Carbon dioxide	MG/L	12 U	59	53	64	94
Ethane	UG/L	5.0 U	4.4 J	36	1.9 J	29
Ethene	UG/L	5.0 U	12	1.3 J	36	820 D
Methane	UG/L	26	1,300 D	190	390	4,400 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	1,390	NA	NA	NA	NA
Sulfide	MG/L	0.10 U	NA	NA	NA	NA

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		MW-13D	MW-15D	MW-16D	MW-17D	MW-18D
Sample ID		MW-13D	MW-15D	MW-16D	MW-17D	MW-18D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/11/16	05/11/16	05/11/16	05/11/16	05/17/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	140	1.0 U	5.5	1.0 U
1,1-Dichloroethane	UG/L	9.6	37	1.8	7.5	1.0 U
1,1-Dichloroethene	UG/L	0.64 J	5.4	0.88 J	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	180	290 D	140	4.6	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.4	4.7	0.53 J	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	2.1	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.3	4.1	0.78 J	1.0 U	1.0 U
Vinyl chloride	UG/L	180	280	65	4.7	1.0 U
Dissolved Metals						
Iron, Dissolved	MG/L	0.0694 J	0.154 J	0.107 J	NA	0.400 U
Potassium, Dissolved	MG/L	3.77	6.31	3.63	NA	2.76
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	2.7	2.1	2.0	NA	5.1
Dissolved Gases						
Carbon dioxide	MG/L	64	18	52	57	66
Ethane	UG/L	4.2 J	5.0 U	1.8 J	2.2 J	5.0 U
Ethene	UG/L	65	3.4 J	5.9	1.5 J	5.0 U
Methane	UG/L	1,100 D	32	61	65	39
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	704	364	721	NA	1,570
Sulfide	MG/L	2.6	1.9	1.3	NA	2.5

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

Advanced Selection: emk-temp
J:\Projects\60481787_BP\POW\ISC\Exonol\900-CAD-GIS\950 Database\Program\EDMS.mde
Printed: 7/7/2016 2:05:55 PM
[LOGDATE] > #5/1/2016# AND [SACODE] <> 'TB' AND [LABCODE] <> 'FIELD' AND [UNITS] <> 'CELLS/ML'

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		MW-19D	MW-20D	MW-21D	OR- 3SM	OR- 4SM
Sample ID		MW-19D	MW-20D	MW-21D	OR-3SM	OR-4SM
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/11/16	05/12/16	05/12/16	05/06/16	05/06/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	2,000 D	45	1.0 U	R
1,1-Dichloroethane	UG/L	1.0 U	170	23	1.0 U	0.52 J
1,1-Dichloroethene	UG/L	1.0 U	37	4.1	1.0 U	R
1,2-Dichloroethene (cis)	UG/L	7.0	450	350 D	1.0 U	R
1,2-Dichloroethene (trans)	UG/L	0.66 J	4.1 J	3.1	1.0 U	1.2 J
Chloroethane	UG/L	1.0 U	5.0 U	1.0 U	1.0 U	R
Tetrachloroethene	UG/L	1.0 U	5.0 U	1.0 U	1.0 U	R
Trichloroethene	UG/L	1.0 U	14	1.9	1.0 U	R
Vinyl chloride	UG/L	0.51 J	740	460 D	1.0 U	R
Dissolved Metals						
Iron, Dissolved	MG/L	0.579	NA	NA	31.8	16.9
Potassium, Dissolved	MG/L	5.74	NA	NA	32.3	22.8
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	6.2	NA	NA	32.3	36.1
Dissolved Gases						
Carbon dioxide	MG/L	200	43	36	640 D	640 D
Ethane	UG/L	5.0 U	5.0 UJ	1.1 J	63	3.4 J
Ethene	UG/L	5.0 U	8.0 J	11	5.0 U	2.0 J
Methane	UG/L	17	57 J	57	13,000 D	13,000 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	2,870	NA	NA	2.2 J	36.4
Sulfide	MG/L	0.10 U	NA	NA	0.34	2.4 J

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		OR- 5SM	OR- 6SM	OR- 9SM	OR-10SM	OR-13SM
Sample ID		OR-5SM	OR-6SM	OR-9SM	OR-10SM	OR-13SM
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/05/16	05/05/16	05/06/16	05/06/16	05/05/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	R	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	4.4 J	0.53 J	5.3	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.5 J	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	4,600 DJ	2.8	77	1.0 U
1,2-Dichloroethene (trans)	UG/L	0.52 J	100 J	1.0 U	3.9	1.0 U
Chloroethane	UG/L	1.0 U	4.9 J	1.0 U	6.4	1.3
Tetrachloroethene	UG/L	1.0 U	R	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	2.8 J	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	1.0 U	1,100 DJ	3.2	65	1.0 U
Dissolved Metals						
Iron, Dissolved	MG/L	3.57	3.97	0.400 U	2.25	8.01
Potassium, Dissolved	MG/L	14.8	22.9	11.8	7.03	21.3
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	9.0	32.9	4.8	13.4	24.3
Dissolved Gases						
Carbon dioxide	MG/L	330 D	580 D	65	480 D	480 D
Ethane	UG/L	190	410 D	17	55	5.5
Ethene	UG/L	19	280 D	7.2	200	1.4 J
Methane	UG/L	19,000 D	12,000 D	8,500 D	18,000 D	18,000 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	25.0	125	185	153	8.1
Sulfide	MG/L	16.2	30.5	28.9	64.0	13.8

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		OR-14SM	OR-15SM	OR-15SM	OR-18SM	PMW- 1D
Sample ID		OR-14SM	OR-15SM	OR-65SM	OR-18SM	PMW-1D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/05/16	05/13/16	05/13/16	05/06/16	05/10/16
Parameter	Units			Field Duplicate (1-1)		
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	R	R	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	R	R	1.0 U	3.1
1,1-Dichloroethene	UG/L	1.0 U	R	R	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	2.1	R	R	5.1	67
1,2-Dichloroethene (trans)	UG/L	1.0 U	R	R	1.5	1.8
Chloroethane	UG/L	1.0 U	R	R	1.0 U	5.5
Tetrachloroethene	UG/L	1.0 U	R	R	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	R	R	1.0 U	3.1
Vinyl chloride	UG/L	4.1	R	R	1.0 U	36
Dissolved Metals						
Iron, Dissolved	MG/L	1.79	55.5	57.1	0.400 U	62.1
Potassium, Dissolved	MG/L	3.56	72.7	72.2	12.5	13.4
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	8.5	83.6	81.8	6.6	398
Dissolved Gases						
Carbon dioxide	MG/L	250 D	690	680 D	200 D	30
Ethane	UG/L	2.0 J	2.7 J	2.2 J	16	850 D
Ethene	UG/L	5.8	5.0 U	5.0 U	40	450
Methane	UG/L	16,000 D	12,000 D	12,000 D	14,000 D	19,000 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	189	3.0 J	3.2 J	189	2.3 J
Sulfide	MG/L	12.4	0.13 J	0.14 J	52.0	0.15

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		PMW- 1S	PMW- 2D	PMW- 2S	PMW- 3S	PMW- 4S
Sample ID		PMW-1S	PMW-2D	PMW-2S	PMW-3S	PMW-4S
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/05/16	05/10/16	05/09/16	05/09/16	05/12/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.8	21	0.58 J	5.6	0.77 J
1,1-Dichloroethene	UG/L	1.5	33	1.0 U	14	1.3
1,2-Dichloroethene (cis)	UG/L	560 D	28,000 D	38	5,800	500 D
1,2-Dichloroethene (trans)	UG/L	19	130	3.9	160	18
Chloroethane	UG/L	1.1	5.0 U	0.76 J	2.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	5.0 U	1.0 U	2.0 U	1.0 U
Trichloroethene	UG/L	1.2	50	0.55 J	13	12
Vinyl chloride	UG/L	280 D	20,000 D	35	2,100	25
Dissolved Metals						
Iron, Dissolved	MG/L	0.914	0.0807 J	0.222 J	0.638	0.583
Potassium, Dissolved	MG/L	12.6	12.6	14.7	10.3	2.15
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	5.1	222	6.5	5.6	5.4
Dissolved Gases						
Carbon dioxide	MG/L	12 U	140	230	220	12 J
Ethane	UG/L	130	28	130	200	2.8 J
Ethene	UG/L	250	3,900 D	73	600 D	5.1
Methane	UG/L	3,500 D	16,000 D	20,000 D	15,000 D	230
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	73.5	23.1	13.5	569	129
Sulfide	MG/L	7.1	146	17.1	18.5	0.10 U

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		PMW- 5S	PMW- 6D	PMW- 6S	PMW- 7S	PMW- 8D
Sample ID		PMW-5S	PMW-6D	PMW-6S	PMW-7S	PMW-58D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/18/16	05/10/16	05/13/16	05/12/16	05/10/16
Parameter	Units					Field Duplicate (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	20 U	1.0 U	10 U	1.0 U	3.8 J
1,1-Dichloroethane	UG/L	20 U	43	10 U	100	25
1,1-Dichloroethene	UG/L	36	1.4	9.4 J	1.0 U	62
1,2-Dichloroethene (cis)	UG/L	19,000 D	2,400 D	5,500 D	8.1	36,000 D
1,2-Dichloroethene (trans)	UG/L	420	68	150	1.0 U	91
Chloroethane	UG/L	20 U	3.7	10 U	1.0 U	5.0 U
Tetrachloroethene	UG/L	20 U	1.0 U	10 U	1.0 U	17
Trichloroethene	UG/L	1,200	8.5	13	0.58 J	7,200 D
Vinyl chloride	UG/L	2,500	410 D	1,600	3.8	3,300 DJ
Dissolved Metals						
Iron, Dissolved	MG/L	0.157 J	0.821	4.77	0.400 U	0.400 U
Potassium, Dissolved	MG/L	3.61	13.0 J	13.5	5.66	7.18
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	6.2	482	17.1	5.0	109
Dissolved Gases						
Carbon dioxide	MG/L	290 D	120	460	94	160 D
Ethane	UG/L	110	33	42	5.0 U	14
Ethene	UG/L	340	4,700 D	270	5.0 U	550 D
Methane	UG/L	9,600 D	14,000 D	12,000 D	5.0 U	3,500 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	1,390	92.7	366	3,300	1,790
Sulfide	MG/L	0.10 U	12.6	5.7	0.10 U	142

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		PMW- 8D	PMW- 9D	PMW- 9S	PMW-10D	PMW-11D
Sample ID		PMW-8D	PMW-9D	PMW-9S	PMW-10D	PMW-11D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/10/16	05/16/16	05/09/16	05/17/16	05/05/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	3.9 J	5.0 U	1.0 U	110	10,000
1,1-Dichloroethane	UG/L	25	7.0	1.0 U	350	730 D
1,1-Dichloroethene	UG/L	63	10	7.6	42	250 D
1,2-Dichloroethene (cis)	UG/L	27,000 D	4,200 D	3,400 D	19,000 D	3,100 D
1,2-Dichloroethene (trans)	UG/L	88	14	28	55	15 D
Chloroethane	UG/L	5.0 U	5.0 U	0.64 J	2.0 U	10 U
Tetrachloroethene	UG/L	17	5.0 U	1.0 U	15	36 D
Trichloroethene	UG/L	4,400 D	120	2,400 D	1,300 D	240 D
Vinyl chloride	UG/L	1,700 DJ	700	11	4,100 D	540 D
Dissolved Metals						
Iron, Dissolved	MG/L	0.400 U	70.9	0.400 U	19.4	0.0370 J
Potassium, Dissolved	MG/L	7.49	12.8	6.43	7.53	3.19
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	109	402	6.1	488	5.4
Dissolved Gases						
Carbon dioxide	MG/L	200 D	49	54	300	39
Ethane	UG/L	14	54	1.3 J	25	4.9 J
Ethene	UG/L	550 D	8,700 D	5.0 U	9,600 D	42
Methane	UG/L	3,600 D	13,000 D	17	9,600 D	1,100 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	1,690	5.0 U	1,710	12.4	440
Sulfide	MG/L	154	0.15	0.10 U	21.4	73.1

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

Advanced Selection: amk-temp
J:\Projects\60481767_BPIPC\MISC\Ekonol\900-CAD-GIS\950 Database\Program\EDMS.mde
Printed: 7/7/2016 2:05:58 PM
[LOGDATE] > #5/1/2016# AND [SACODE] <> 'TB' AND [LABCODE] <> 'FIELD' AND [UNITS] <> 'CELLS/ML'

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		PMW-11S	PMW-12D	PMW-15D	PMW-16D	PMW-17D
Sample ID		PMW-11S	PMW-12D	PMW-15D	PMW-16D	PMW-17D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/13/16	05/17/16	05/09/16	05/18/16	05/09/16
Parameter	Units					
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	20 U	12	1,700 D	3,500	1,400
1,1-Dichloroethane	UG/L	33	140	3,100 D	360	350
1,1-Dichloroethene	UG/L	22	390	140	150	68
1,2-Dichloroethene (cis)	UG/L	11,000 D	220,000 D	1,400 D	26,000 D	8,500
1,2-Dichloroethene (trans)	UG/L	190	560 D	11	82	25
Chloroethane	UG/L	20 U	2.0 U	35	20 U	2.0 U
Tetrachloroethene	UG/L	20 U	340	40	21	19
Trichloroethene	UG/L	150	52,000 D	50	83	1,700
Vinyl chloride	UG/L	1,800	38,000 D	830 D	2,200	1,200
Dissolved Metals						
Iron, Dissolved	MG/L	0.736	0.435	0.206 J	0.400 U	0.0478 J
Potassium, Dissolved	MG/L	3.30	9.53	5.36	2.17	4.13
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	2.6	365	115	42.8	56.6
Dissolved Gases						
Carbon dioxide	MG/L	220	340 D	24	80	23
Ethane	UG/L	24	24	160	4.2 J	7.6
Ethene	UG/L	150	12,000 D	110	350	97
Methane	UG/L	6,500 D	5,900 D	1,300 D	1,100 D	930 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	2,120	23.8	16.5	165	16.3
Sulfide	MG/L	0.10 U	118	57.2	98.5	52.4

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 1
VALIDATED GROUNDWATER SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		RMW- 1D	RMW- 1D	RMW- 2D	RMW- 3D	RMW- 4D
Sample ID		RMW-1D	RMW-51D	RMW-2D	RMW-3D	RMW-4D
Matrix		Groundwater	Groundwater	Groundwater	Groundwater	Groundwater
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/12/16	05/12/16	05/10/16	05/12/16	05/17/16
Parameter	Units		Field Duplicate (1-1)			
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	11	12	17 J	12,000 D	20 U
1,1-Dichloroethane	UG/L	2.6	2.7	120	230	32
1,1-Dichloroethene	UG/L	1.2	1.2	240	310	27
1,2-Dichloroethene (cis)	UG/L	160	170	160,000 D	2,700	17,000 D
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	100	10	57
Chloroethane	UG/L	1.0 U	1.0 U	20 U	10 U	20 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1,100	10 U	20 U
Trichloroethene	UG/L	0.83 J	0.87 J	140,000 D	32	2,100
Vinyl chloride	UG/L	7.5	7.4	630	180	4,900
Dissolved Metals						
Iron, Dissolved	MG/L	0.272 J	0.260 J	0.0719 J	0.400 U	0.400 U
Potassium, Dissolved	MG/L	3.53	3.43	5.54	2.83	5.75
Miscellaneous Parameters						
Total Organic Carbon (TOC)	MG/L	1.7	1.7	259	2.4	117
Dissolved Gases						
Carbon dioxide	MG/L	44	43	270	44	130
Ethane	UG/L	31	22	68	8.1	23
Ethene	UG/L	5.0 U	5.0 U	380	7.3	2,000 D
Methane	UG/L	130	93	510 D	260	9,800 D
Dissolved Miscellaneous Parameters						
Sulfate (as SO4)	MG/L	934	930	400	630	547
Sulfide	MG/L	7.8	7.5	172	27.9	60.2

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16
Checked By: GEK 7/7/16

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB-050516	TB-050616	TB-050916	TB-051016	TB-051116
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/05/16	05/06/16	05/09/16	05/10/16	05/11/16
Parameter	Units	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: [signature] 7/7/16
Checked By: _____

Detection Limits shown are PQL

TABLE 2
VALIDATED FIELD QC SAMPLE ANALYTICAL RESULTS
EKONOL POLYESTER RESINS SITE

Location ID		FIELDQC	FIELDQC	FIELDQC	FIELDQC	FIELDQC
Sample ID		TB-051216	TB-051316	TB-051616	TB-051716	TB-051816
Matrix		Water Quality	Water Quality	Water Quality	Water Quality	Water Quality
Depth Interval (ft)		-	-	-	-	-
Date Sampled		05/12/16	05/13/16	05/16/16	05/17/16	05/18/16
Parameter	Units	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)	Trip Blank (1-1)
Volatile Organic Compounds						
1,1,1-Trichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (cis)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethene (trans)	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	UG/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Flags assigned during chemistry validation are shown.

Made By: AMK 7/7/16

Checked By: _____

Detection Limits shown are PQL

ATTACHMENT A

VALIDATED FORM 1s

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-5SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369582
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 09:55 by EL

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

OR5SM SDG#: EKO01-01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	0.52 J	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	330,000 D	20,000	60,000	5
07105	Ethane	74-84-0	190	1.0	5.0	1
07105	Ethene	74-85-1	19	1.0	5.0	1
07105	Methane	74-82-8	19,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	3.57	0.0333	0.400	1
01762	Potassium	7440-09-7	14.8	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	25.0	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	9.0	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	16.2	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/21/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 00:50	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/18/2016 00:50	Matthew S Krause	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161310016A	05/10/2016 12:14	Johanna C Kennedy	5

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-6SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369583
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 12:50 by EL

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

OR6SM SDG#: EKO01-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	4.9	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	4.4	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.5	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	4,600	25	50	50
11997	trans-1,2-Dichloroethene	156-60-5	100	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	~~N.D.~~	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	~~N.D.~~	0.50	1.0	1
11997	Trichloroethene	79-01-6	2.8	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	1,100	5.0	10	10
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 6.					
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	580,000	20,000	60,000	5
07105	Ethane	74-84-0	410	5.0	25	5
07105	Ethene	74-85-1	280	5.0	25	5
07105	Methane	74-82-8	12,000	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	3.97	0.0333	0.400	1
01762	Potassium	7440-09-7	22.9	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	125	6.0	20.0	20
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	32.9	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	30.5	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-13SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369584
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 10:15 by EL

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

OR13S SDG#: EKO01-03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	1.3	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	480,000 D	20,000	60,000	5
07105	Ethane	74-84-0	5.5	1.0	5.0	1
07105	Ethene	74-85-1	1.4 J	1.0	5.0	1
07105	Methane	74-82-8	18,000 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	8.01	0.0333	0.400	1
01762	Potassium	7440-09-7	21.3	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	8.1	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	24.3	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	13.8	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/29/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 06:18	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/18/2016 06:18	Matthew S Krause	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161310016A	05/10/2016 12:32	Johanna C Kennedy	5

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-14SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369585
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 12:25 by EL

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

OR14S SDG#: EKO01-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	2.1	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	4.1	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	250,000 D	20,000	60,000	5
07105	Ethane	74-84-0	2.0 J	1.0	5.0	1
07105	Ethene	74-85-1	5.8	1.0	5.0	1
07105	Methane	74-82-8	16,000 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	1.79	0.0333	0.400	1
01762	Potassium	7440-09-7	3.56	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	189	15.0	50.0	50
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	8.5	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	12.4	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 01:12	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/18/2016 01:12	Matthew S Krause	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161310016A	05/10/2016 12:41	Johanna C Kennedy	5

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-11D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369586
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 14:35 by EL

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

OR11D SDG#: EKO01-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	5.0	10	10
11997	1,1-Dichloroethane	75-34-3	730	5.0	10	10
11997	1,1-Dichloroethene	75-35-4	250	5.0	10	10
11997	cis-1,2-Dichloroethene	156-59-2	3,100	25	50	50
11997	trans-1,2-Dichloroethene	156-60-5	15	5.0	10	10
11997	Tetrachloroethene	127-18-4	36	5.0	10	10
11997	1,1,1-Trichloroethane	71-55-6	10,000	25	50	50
11997	Trichloroethene	79-01-6	240	5.0	10	10
11997	Vinyl Chloride	75-01-4	540	5.0	10	10
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	39,000	4,000	12,000	1
07105	Ethane	74-84-0	4.9 J	1.0	5.0	1
07105	Ethene	74-85-1	42	1.0	5.0	1
07105	Methane	74-82-8	1,100 D	30	50	10
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0370 J	0.0333	0.400	1
01762	Potassium	7440-09-7	3.19	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	440	30.0	100	100
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.4	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	73.1	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/9/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 07:24	Matthew S Krause	10
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 14:10	Angela D Sneeringer	50
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/18/2016 07:24	Matthew S Krause	10

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-1S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369587
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 14:45 by EL

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

OR01S SDG#: EKO01-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	1.1	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	1.8	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.5	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	560 D	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	19	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	1.2	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	280 D	5.0	10	10
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	N.D.	4,000	12,000	1
07105	Ethane	74-84-0	130	1.0	5.0	1
07105	Ethene	74-85-1	250	1.0	5.0	1
07105	Methane	74-82-8	3,500 D	60	100	20
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.914	0.0333	0.400	1
01762	Potassium	7440-09-7	12.6	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	73.5	3.0	10.0	10
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.1	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	7.1	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 01:34	Matthew S Krause	1
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 14:31	Angela D Sneeringer	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/18/2016 01:34	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-3SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370280
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 11:40 by ET

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRW3S SDG#: EKO02-02

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	640,000		20,000	60,000	5
07105	Ethane	74-84-0	63		1.0	5.0	1
07105	Ethene	74-85-1	N.D.		1.0	5.0	1
07105	Methane	74-82-8	13,000		150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	31.8		0.0333	0.400	1
01762	Potassium	7440-09-7	32.3		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	2.2	J	1.5	5.0	5
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	32.3		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	0.34		0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide. Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/30/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 13:26	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

Sample Description: OR-4SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370281
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 14:05 by ET

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRW4S SDG#: EKO02-03

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	~~N.D.~~	R	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	0.52	J	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	~~N.D.~~	R	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	~~N.D.~~	R	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	1.2	R	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	~~N.D.~~	R	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	~~N.D.~~	R	0.50	1.0	1
11997	Trichloroethene	79-01-6	~~N.D.~~	R	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	~~N.D.~~	R	0.50	1.0	1
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 7.						
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	640,000	D	20,000	60,000	5
07105	Ethane	74-84-0	3.4	J	1.0	5.0	1
07105	Ethene	74-85-1	2.0	J	1.0	5.0	1
07105	Methane	74-82-8	13,000	D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	16.9		0.0333	0.400	1
01762	Potassium	7440-09-7	22.8		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	36.4		3.0	10.0	10
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	36.1		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	2.4	J	1.5	5.0	50
	Reporting limits were raised due to interference from the sample matrix.						

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide, TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/20/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-9SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370282
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 11:00 by ET

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRW9S SDG#: EKO02-04

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	0.53	J	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	2.8		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	3.2		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	65,000		4,000	12,000	1
07105	Ethane	74-84-0	17		1.0	5.0	1
07105	Ethene	74-85-1	7.2		1.0	5.0	1
07105	Methane	74-82-8	8,500	D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	N.D.		0.0333	0.400	1
01762	Potassium	7440-09-7	11.8		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	185		6.0	20.0	20
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	4.8		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	28.9		1.5	5.0	50

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/30/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 02:39	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-10SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370283
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 12:50 by ET

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRW10 SDG#: EKO02-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	6.4	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	5.3	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	77	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	3.9	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	65	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	480,000 D	20,000	60,000	5
07105	Ethane	74-84-0	55	1.0	5.0	1
07105	Ethene	74-85-1	200	1.0	5.0	1
07105	Methane	74-82-8	18,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	2.25	0.0333	0.400	1
01762	Potassium	7440-09-7	7.03	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	153	6.0	20.0	20
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	13.4	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	64.0	1.5	5.0	50

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide. Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/30/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-18SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370284
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 14:15 by ET

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRW18 SDG#: EKO02-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	5.1	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	1.5	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	200,000 D	20,000	60,000	5
07105	Ethane	74-84-0	16	1.0	5.0	1
07105	Ethene	74-85-1	40	1.0	5.0	1
07105	Methane	74-82-8	14,000 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	12.5	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	189	6.0	20.0	20
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	6.6	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	52.0	1.5	5.0	50

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

6/13/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/18/2016 03:23	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-7S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370285
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 10:10 by ET

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRW7S SDG#: EKO02-07

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	78,000	4,000	12,000	1
07105	Ethane	74-84-0	N.D.	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	15	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	1.53	0.0333	0.400	1
01762	Potassium	7440-09-7	5.88	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	2,010	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	1.2	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide. Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-3S Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371761
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 12:00 by EL

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

3SWRW SDG#: EKO03-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	1.0	2.0	2
11997	1,1-Dichloroethane	75-34-3	5.6	1.0	2.0	2
11997	1,1-Dichloroethene	75-35-4	14	1.0	2.0	2
11997	cis-1,2-Dichloroethene	156-59-2	5,800 D	10	20	20
11997	trans-1,2-Dichloroethene	156-60-5	160	1.0	2.0	2
11997	Tetrachloroethene	127-18-4	N.D.	1.0	2.0	2
11997	1,1,1-Trichloroethane	71-55-6	N.D.	1.0	2.0	2
11997	Trichloroethene	79-01-6	13	1.0	2.0	2
11997	Vinyl Chloride	75-01-4	2,100 D	10	20	20
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	220,000 D	20,000	60,000	5
07105	Ethane	74-84-0	200	1.0	5.0	1
07105	Ethene	74-85-1	600 D	100	500	100
07105	Methane	74-82-8	15,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.638	0.0333	0.400	1
01762	Potassium	7440-09-7	10.3	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	569	30.0	100	100
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.6	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	18.5	1.2	4.0	40

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/1/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 17:48	Angela D Sneeringer	2

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-2S Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371762
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 10:00 by EL

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

2SWRW SDG#: EKO03-03

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	0.76	J	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	0.58	J	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	38		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	3.9		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	0.55	J	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	35		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	230,000	D	20,000	60,000	5
07105	Ethane	74-84-0	130		1.0	5.0	1
07105	Ethene	74-85-1	73		1.0	5.0	1
07105	Methane	74-82-8	20,000	D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.222	J	0.0333	0.400	1
01762	Potassium	7440-09-7	14.7		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	13.5		1.5	5.0	5
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	6.5		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	17.1		0.75	2.5	25

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/1/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 17:27	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-15D Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371763
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 10:30 by EL

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

15WRW SDG#: EKO03-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	35	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	3,100 D	50	100	100
11997	1,1-Dichloroethene	75-35-4	140	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	1,400 D	50	100	100
11997	trans-1,2-Dichloroethene	156-60-5	11	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	40	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	1,700 D	50	100	100
11997	Trichloroethene	79-01-6	50	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	830 D	50	100	100
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	24,000	4,000	12,000	1
07105	Ethane	74-84-0	160	1.0	5.0	1
07105	Ethene	74-85-1	110	1.0	5.0	1
07105	Methane	74-82-8	1,300 D	30	50	10
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.206 J	0.0333	0.400	1
01762	Potassium	7440-09-7	5.36	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	16.5	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	115	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	57.2	1.5	5.0	50

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for some bottles for the following analyses: TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/1/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-17D Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371764
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 14:40 by EL

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

17WRW SDG#: EKO03-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	1.0	2.0	2
11997	1,1-Dichloroethane	75-34-3	350	1.0	2.0	2
11997	1,1-Dichloroethene	75-35-4	68	1.0	2.0	2
11997	cis-1,2-Dichloroethene	156-59-2	8,500 D	100	200	200
11997	trans-1,2-Dichloroethene	156-60-5	25	1.0	2.0	2
11997	Tetrachloroethene	127-18-4	19	1.0	2.0	2
11997	1,1,1-Trichloroethane	71-55-6	1,400 D	100	200	200
11997	Trichloroethene	79-01-6	1,700 D	100	200	200
11997	Vinyl Chloride	75-01-4	1,200 D	100	200	200
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	23,000	4,000	12,000	1
07105	Ethane	74-84-0	7.6	1.0	5.0	1
07105	Ethene	74-85-1	97	1.0	5.0	1
07105	Methane	74-82-8	930 D	30	50	10
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0478 J	0.0333	0.400	1
01762	Potassium	7440-09-7	4.13	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	16.3	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	56.6	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	52.4	1.5	5.0	50

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 19:16	Angela D Sneeringer	2

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-9S Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371765
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 13:50 by EL

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

9SWRW SDG#: EKO03-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Chloroethane	75-00-3	0.64 J	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	7.6	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	3,400 D	50	100	100
11997	trans-1,2-Dichloroethene	156-60-5	28	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	2,400 D	50	100	100
11997	Vinyl Chloride	75-01-4	11	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**	**ug/l**	**ug/l**	
08097	CO2 by Headspace	124-38-9	54,000	4,000	12,000	1
07105	Ethane	74-84-0	1.3 J	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	17	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	6.43	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
00228	Sulfate	14808-79-8	1,710	150	500	500
	SM 5310 C-2000		**mg/l**	**mg/l**	**mg/l**	
00273	Total Organic Carbon	n.a.	6.1	0.50	1.0	1
	SM 4500-S2 D-2000		**mg/l**	**mg/l**	**mg/l**	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/1/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/19/2016 22:34	Caitlin M Carmody	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-2S Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371766
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 15:30 by EL

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

M2WRW SDG#: EKO03-07

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	25	50	50
11997	1,1-Dichloroethane	75-34-3	29 J	25	50	50
11997	1,1-Dichloroethene	75-35-4	520	25	50	50
11997	cis-1,2-Dichloroethene	156-59-2	240,000 D	2,500	5,000	5000
11997	trans-1,2-Dichloroethene	156-60-5	1,600	25	50	50
11997	Tetrachloroethene	127-18-4	N.D.	25	50	50
11997	1,1,1-Trichloroethane	71-55-6	N.D.	25	50	50
11997	Trichloroethene	79-01-6	320	25	50	50
11997	Vinyl Chloride	75-01-4	14,000	25	50	50
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	110,000	4,000	12,000	1
07105	Ethane	74-84-0	22	1.0	5.0	1
07105	Ethene	74-85-1	180	1.0	5.0	1
07105	Methane	74-82-8	310	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	2.23	0.0333	0.400	1
01762	Potassium	7440-09-7	2.89	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,220	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.3	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client was contacted and the data reported.

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/1/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 00:24	Caitlin M Carmody	50

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-6D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374436
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 09:05 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK401 SDG#: EKO04-01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	3.7	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	43	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.4	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	2,400 D	50	100	100
11997	trans-1,2-Dichloroethene	156-60-5	68	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	8.5	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	410 D	50	100	100
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	120,000	4,000	12,000	1
07105	Ethane	74-84-0	33	1.0	5.0	1
07105	Ethene	74-85-1	4,700 D	50	250	50
07105	Methane	74-82-8	14,000 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.821 J	0.0333	0.400	1
01762	Potassium	7440-09-7	13.0 J	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	92.7	15.0	50.0	50
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	482	12.5	25.0	25
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	12.6	0.60	2.0	20

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

DWK 7/5/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 02:13	Caitlin M Carmody	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: RMW-2D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374437
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 10:00 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK402 SDG#: EKO04-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	10	20	20
11997	1,1-Dichloroethane	75-34-3	120	10	20	20
11997	1,1-Dichloroethene	75-35-4	240	10	20	20
11997	cis-1,2-Dichloroethene	156-59-2	160,000 D	1,000	2,000	2000
11997	trans-1,2-Dichloroethene	156-60-5	100	10	20	20
11997	Tetrachloroethene	127-18-4	1,100	10	20	20
11997	1,1,1-Trichloroethane	71-55-6	17 J	10	20	20
11997	Trichloroethene	79-01-6	140,000 D	1,000	2,000	2000
11997	Vinyl Chloride	75-01-4	630	10	20	20
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	270,000 D	20,000	60,000	5
07105	Ethane	74-84-0	68	1.0	5.0	1
07105	Ethene	74-85-1	380	1.0	5.0	1
07105	Methane	74-82-8	510 D	15	25	5
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0719 J	0.0333	0.400	1
01762	Potassium	7440-09-7	5.54	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	400	15.0	50.0	50
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	259	5.0	10.0	10
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	172	3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

CMK 7/5/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 02:56	Caitlin M Carmody	20

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-2D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374438
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 11:10 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK403 SDG#: EKO04-03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	2.5	5.0	5
11997	1,1-Dichloroethane	75-34-3	21	2.5	5.0	5
11997	1,1-Dichloroethene	75-35-4	33	2.5	5.0	5
11997	cis-1,2-Dichloroethene	156-59-2	28,000 D	250	500	500
11997	trans-1,2-Dichloroethene	156-60-5	130	2.5	5.0	5
11997	Tetrachloroethene	127-18-4	N.D.	2.5	5.0	5
11997	1,1,1-Trichloroethane	71-55-6	N.D.	2.5	5.0	5
11997	Trichloroethene	79-01-6	50	2.5	5.0	5
11997	Vinyl Chloride	75-01-4	20,000 D	250	500	500
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	140,000	4,000	12,000	1
07105	Ethane	74-84-0	28	1.0	5.0	1
07105	Ethene	74-85-1	3,900 D	100	500	100
07105	Methane	74-82-8	16,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.0807 J	0.0333	0.400	1
01762	Potassium	7440-09-7	12.6	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	23.1	3.0	10.0	10
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	222	5.0	10.0	10
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	146	3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 03:40	Caitlin M Carmody	5
11997	8260C Parsons Short List	SW-846 8260C	1	L161412AA	05/20/2016 22:38	Caitlin M Carmody	500
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161403AA	05/20/2016 03:40	Caitlin M Carmody	5

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: INJ-7D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374439
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 12:50 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK404 SDG#: EKO04-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	50	100	100
11997	1,1-Dichloroethane	75-34-3	N.D.	50	100	100
11997	1,1-Dichloroethene	75-35-4	670	50	100	100
11997	cis-1,2-Dichloroethene	156-59-2	540,000 D	5,000	10,000	10000
11997	trans-1,2-Dichloroethene	156-60-5	410	50	100	100
11997	Tetrachloroethene	127-18-4	220	50	100	100
11997	1,1,1-Trichloroethane	71-55-6	N.D.	50	100	100
11997	Trichloroethene	79-01-6	110,000 D	500	1,000	1000
11997	Vinyl Chloride	75-01-4	11,000	50	100	100
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	260,000 D	20,000	60,000	5
07105	Ethane	74-84-0	19	1.0	5.0	1
07105	Ethene	74-85-1	1,200 D	10	50	10
07105	Methane	74-82-8	1,800 D	30	50	10
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	25.2	0.0333	0.400	1
01762	Potassium	7440-09-7	6.99	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	250	30.0	100	100
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	187	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	1.1	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/5/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 04:24	Caitlin M Carmody	100
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 04:46	Caitlin M Carmody	1000

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

PMW-8D

Sample Description: PMW-58D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374441
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 12:00 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK406 SDG#: EKO04-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	2.5	5.0	5
11997	1,1-Dichloroethane	75-34-3	25	2.5	5.0	5
11997	1,1-Dichloroethene	75-35-4	62	2.5	5.0	5
11997	cis-1,2-Dichloroethene	156-59-2	36,000 D	250	500	500
11997	trans-1,2-Dichloroethene	156-60-5	91	2.5	5.0	5
11997	Tetrachloroethene	127-18-4	17	2.5	5.0	5
11997	1,1,1-Trichloroethane	71-55-6	3.8 J	2.5	5.0	5
11997	Trichloroethene	79-01-6	7,200 D	250	500	500
11997	Vinyl Chloride	75-01-4	3,300 DJ	250	500	500
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	160,000 D	20,000	60,000	5
07105	Ethane	74-84-0	14	1.0	5.0	1
07105	Ethene	74-85-1	550 D	20	100	20
07105	Methane	74-82-8	3,500 D	60	100	20
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	7.18	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,790	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	109	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	142	3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/9/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 05:51	Caitlin M Carmody	5

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-8D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374440
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 14:00 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK405 SDG#: EKO04-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	2.5	5.0	5
11997	1,1-Dichloroethane	75-34-3	25	2.5	5.0	5
11997	1,1-Dichloroethene	75-35-4	63	2.5	5.0	5
11997	cis-1,2-Dichloroethene	156-59-2	27,000 D	250	500	500
11997	trans-1,2-Dichloroethene	156-60-5	88	2.5	5.0	5
11997	Tetrachloroethene	127-18-4	17	2.5	5.0	5
11997	1,1,1-Trichloroethane	71-55-6	3.9 J	2.5	5.0	5
11997	Trichloroethene	79-01-6	4,400 D	250	500	500
11997	Vinyl Chloride	75-01-4	1,700 D5	250	500	500
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	200,000 D	20,000	60,000	5
07105	Ethane	74-84-0	14	1.0	5.0	1
07105	Ethene	74-85-1	550 D	20	100	20
07105	Methane	74-82-8	3,600 D	60	100	20
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	7.49	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,690	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	109	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	154	3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/20/2016 05:08	Caitlin M Carmody	5

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-1D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374442
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 15:40 by ET

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK407 SDG#: EKO04-07

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	5.5		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	3.1		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	67		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	1.8		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	3.1		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	36		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	30,000		4,000	12,000	1
07105	Ethane	74-84-0	850	D	100	500	100
07105	Ethene	74-85-1	450		1.0	5.0	1
07105	Methane	74-82-8	19,000	D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	62.1		0.0333	0.400	1
01762	Potassium	7440-09-7	13.4		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	2.3	J	1.5	5.0	5
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	398		5.0	10.0	10
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	0.15		0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161403AA	05/19/2016 23:18	Caitlin M Carmody	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161403AA	05/19/2016 23:18	Caitlin M Carmody	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161330015A	05/12/2016 10:04	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-15D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377946
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 10:40 by EL

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK502 SDG#: EKO05-02

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	37		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	5.4		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	290	D	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	4.7		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	140		0.50	1.0	1
11997	Trichloroethene	79-01-6	4.1		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	280		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	18,000		4,000	12,000	1
07105	Ethane	74-84-0	N.D.		1.0	5.0	1
07105	Ethene	74-85-1	3.4	J	1.0	5.0	1
07105	Methane	74-82-8	32		3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.154	J	0.0333	0.400	1
01762	Potassium	7440-09-7	6.31		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	364		15.0	50.0	50
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.1		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	1.9		0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/5/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161431AA	05/22/2016 12:07	Angela D Sneeringer	1
11997	8260C Parsons Short List	SW-846 8260C	1	L161441AA	05/23/2016 14:19	Angela D Sneeringer	10

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-19D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377947
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 10:00 by EL

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK503 SDG#: EKO05-03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**	**ug/l**	**ug/l**	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	7.0	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	0.66 J	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	0.51 J	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**	**ug/l**	**ug/l**	
08097	CO2 by Headspace	124-38-9	200,000 D	20,000	60,000	5
07105	Ethane	74-84-0	N.D.	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	17	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		**mg/l**	**mg/l**	**mg/l**	
01754	Iron	7439-89-6	0.579	0.0333	0.400	1
01762	Potassium	7440-09-7	5.74	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		**mg/l**	**mg/l**	**mg/l**	
00228	Sulfate	14808-79-8	2,870	60.0	200	200
	SM 5310 C-2000		**mg/l**	**mg/l**	**mg/l**	
00273	Total Organic Carbon	n.a.	6.2	0.50	1.0	1
	SM 4500-S2 D-2000		**mg/l**	**mg/l**	**mg/l**	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/5/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161441AA	05/23/2016 14:41	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161441AA	05/23/2016 14:41	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-16D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377948
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 12:00 by EL

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK504 SDG#: EKO05-04

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**		**ug/l**	**ug/l**	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	1.8		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	0.88	J	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	140		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	0.53	J	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	0.78	J	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	65		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**		**ug/l**	**ug/l**	
08097	CO2 by Headspace	124-38-9	52,000		4,000	12,000	1
07105	Ethane	74-84-0	1.8	J	1.0	5.0	1
07105	Ethene	74-85-1	5.9		1.0	5.0	1
07105	Methane	74-82-8	61		3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		**mg/l**		**mg/l**	**mg/l**	
01754	Iron	7439-89-6	0.107	J	0.0333	0.400	1
01762	Potassium	7440-09-7	3.63		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		**mg/l**		**mg/l**	**mg/l**	
00228	Sulfate	14808-79-8	721		30.0	100	100
	SM 5310 C-2000		**mg/l**		**mg/l**	**mg/l**	
00273	Total Organic Carbon	n.a.	2.0		0.50	1.0	1
	SM 4500-S2 D-2000		**mg/l**		**mg/l**	**mg/l**	
00230	Sulfide	18496-25-8	1.3		0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161431AA	05/22/2016 12:51	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161431AA	05/22/2016 12:51	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

eurofins
Lancaster Laboratories
Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-13D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377949
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 12:05 by EL

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK505 SDG#: EKO05-05

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	9.6		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	0.64	J	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	180		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	1.4		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	1.3		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	180		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	64,000		4,000	12,000	1
07105	Ethane	74-84-0	4.2	J	1.0	5.0	1
07105	Ethene	74-85-1	65		1.0	5.0	1
07105	Methane	74-82-8	1,100	D	30	50	10
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.0694	J	0.0333	0.400	1
01762	Potassium	7440-09-7	3.77		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	704		30.0	100	100
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.7		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	2.6		0.30	1.0	10

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved metals, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161431AA	05/22/2016 13:13	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161431AA	05/22/2016 13:13	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

eurofins
Lancaster Laboratories
Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-17D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377950
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 13:40 by EL

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK506 SDG#: EKO05-06BKG

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		**ug/l**		**ug/l**	**ug/l**	
11997	Chloroethane	75-00-3	2.1		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	7.5		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	4.6		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	5.5		0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	4.7		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		**ug/l**		**ug/l**	**ug/l**	
08097	CO2 by Headspace	124-38-9	57,000		4,000	12,000	1
07105	Ethane	74-84-0	2.2	J	1.0	5.0	1
07105	Ethene	74-85-1	1.5	J	1.0	5.0	1
07105	Methane	74-82-8	65		3.0	5.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161431AA	05/22/2016 13:36	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161431AA	05/22/2016 13:36	Angela D Sneeringer	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161340008A	05/13/2016 10:32	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161340012A	05/16/2016 23:57	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins
Lancaster Laboratories
Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: MW-11S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377953
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 14:00 by EL

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK507 SDG#: EKO05-07

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	1.1		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	12		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	2.0		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	260		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	7.6		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	32		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	65		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	64,000		4,000	12,000	1
07105	Ethane	74-84-0	1.9	J	1.0	5.0	1
07105	Ethene	74-85-1	36		1.0	5.0	1
07105	Methane	74-82-8	390		3.0	5.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161431AA	05/22/2016 14:42	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161431AA	05/22/2016 14:42	Angela D Sneeringer	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161340008A	05/13/2016 10:41	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161340012A	05/17/2016 00:15	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-1S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380301
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 10:00 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPM1S SDG#: EKO06-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	0.55 J	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	58	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	2.6	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	1.7	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	10	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	30,000	4,000	12,000	1
07105	Ethane	74-84-0	N.D.	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	240	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	1.01	0.0333	0.400	1
01762	Potassium	7440-09-7	3.55	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,460	60.0	200	200
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.2	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	0.39	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 22:50	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/24/2016 22:50	Kevin A Sposito	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 13:34	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: RMW-1S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380302
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 09:35 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPR1S SDG#: EKO06-03

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	2.6		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.2		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	160		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	11		0.50	1.0	1
11997	Trichloroethene	79-01-6	0.83	J	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	7.5		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	44,000		4,000	12,000	1
07105	Ethane	74-84-0	31		1.0	5.0	1
07105	Ethene	74-85-1	N.D.		1.0	5.0	1
07105	Methane	74-82-8	130		3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.272	J	0.0333	0.400	1
01762	Potassium	7440-09-7	3.53		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	934		60.0	200	200
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	1.7		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	7.8		0.75	2.5	25

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 23:12	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/24/2016 23:12	Kevin A Sposito	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 13:43	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-20D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380303
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 11:15 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EP20D SDG#: EKO06-04BKG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	2.5	5.0	5
11997	1,1-Dichloroethane	75-34-3	170	2.5	5.0	5
11997	1,1-Dichloroethene	75-35-4	37	2.5	5.0	5
11997	cis-1,2-Dichloroethene	156-59-2	450	2.5	5.0	5
11997	trans-1,2-Dichloroethene	156-60-5	4.1 J	2.5	5.0	5
11997	Tetrachloroethene	127-18-4	N.D.	2.5	5.0	5
11997	1,1,1-Trichloroethane	71-55-6	2,000 D	5.0	10	10
11997	Trichloroethene	79-01-6	14	2.5	5.0	5
11997	Vinyl Chloride	75-01-4	740	2.5	5.0	5
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	43,000	4,000	12,000	1
07105	Ethane	74-84-0	N.D.	1.0	5.0	1
07105	Ethene	74-85-1	8.0	1.0	5.0	1
07105	Methane	74-82-8	57	3.0	5.0	1

The container used for this analysis was submitted with headspace.

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 20:59	Kevin A Sposito	10
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 21:45	Kevin A Sposito	5
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/24/2016 20:59	Kevin A Sposito	10
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L161452AA	05/24/2016 21:45	Kevin A Sposito	5
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 13:51	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161380005A	05/17/2016 13:07	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-21D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380306
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 12:00 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EP21D SDG#: EKO06-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	23	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	4.1	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	350 D	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	3.1	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	45	0.50	1.0	1
11997	Trichloroethene	79-01-6	1.9	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	460 D	5.0	10	10
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	36,000	4,000	12,000	1
07105	Ethane	74-84-0	1.1 J	1.0	5.0	1
07105	Ethene	74-85-1	11	1.0	5.0	1
07105	Methane	74-82-8	57	3.0	5.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/25/2016 00:40	Kevin A Sposito	1
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/25/2016 01:02	Kevin A Sposito	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/25/2016 00:40	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L161452AA	05/25/2016 01:02	Kevin A Sposito	10
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 14:00	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161380005A	05/17/2016 14:42	Johanna C Kennedy	1

7/5/16

*=This limit was used in the evaluation of the final result

RMW-1D

eurofins | Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: RMW-51D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380307
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 08:30 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EP51D SDG#: EKO06-06

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	2.7		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.2		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	170		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	12		0.50	1.0	1
11997	Trichloroethene	79-01-6	0.87	J	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	7.4		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	43,000		4,000	12,000	1
07105	Ethane	74-84-0	22		1.0	5.0	1
07105	Ethene	74-85-1	N.D.		1.0	5.0	1
07105	Methane	74-82-8	93		3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.260	J	0.0333	0.400	1
01762	Potassium	7440-09-7	3.43		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	930		60.0	200	200
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	1.7		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	7.5		0.75	2.5	25

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 23:34	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/24/2016 23:34	Kevin A Sposito	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 14:09	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-7S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380308
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 12:20 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPR7S SDG#: EKO06-07

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	100		0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	8.1		0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	0.58	J	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	3.8		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	94,000		4,000	12,000	1
07105	Ethane	74-84-0	N.D.		1.0	5.0	1
07105	Ethene	74-85-1	N.D.		1.0	5.0	1
07105	Methane	74-82-8	N.D.		3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	N.D.		0.0333	0.400	1
01762	Potassium	7440-09-7	5.66		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	3,300		150	500	500
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.0		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.		0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 23:56	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/24/2016 23:56	Kevin A Sposito	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 14:18	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

Sample Description: MW-6S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380309
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 13:40 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPM6S SDG#: EKO06-08

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	1.4	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	25	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	91	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	37,000	4,000	12,000	1
07105	Ethane	74-84-0	11	1.0	5.0	1
07105	Ethene	74-85-1	12	1.0	5.0	1
07105	Methane	74-82-8	88	3.0	5.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/25/2016 00:18	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/25/2016 00:18	Kevin A Sposito	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 14:27	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161380005A	05/17/2016 18:31	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-4S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380310
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 14:35 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPP4S SDG#: EKO06-09

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	0.77	J	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.3		0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	500	D	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	18		0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.		0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.		0.50	1.0	1
11997	Trichloroethene	79-01-6	12		0.50	1.0	1
11997	Vinyl Chloride	75-01-4	25		0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	12,000	J	4,000	12,000	1
07105	Ethane	74-84-0	2.8	J	1.0	5.0	1
07105	Ethene	74-85-1	5.1		1.0	5.0	1
07105	Methane	74-82-8	230		3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.583		0.0333	0.400	1
01762	Potassium	7440-09-7	2.15		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	129		15.0	50.0	50
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.4		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.		0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/25/2016 01:23	Kevin A Sposito	1
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/25/2016 01:45	Kevin A Sposito	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/25/2016 01:23	Kevin A Sposito	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: RMW-3D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380311
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 16:00 by EL

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPR3D SDG#: EKO06-10

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	5.0	10	10
11997	1,1-Dichloroethane	75-34-3	230	5.0	10	10
11997	1,1-Dichloroethene	75-35-4	310	5.0	10	10
11997	cis-1,2-Dichloroethene	156-59-2	2,700	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	10	5.0	10	10
11997	Tetrachloroethene	127-18-4	N.D.	5.0	10	10
11997	1,1,1-Trichloroethane	71-55-6	12,000 D	25	50	50
11997	Trichloroethene	79-01-6	32	5.0	10	10
11997	Vinyl Chloride	75-01-4	180	5.0	10	10
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	44,000	4,000	12,000	1
07105	Ethane	74-84-0	8.1	1.0	5.0	1
07105	Ethene	74-85-1	7.3	1.0	5.0	1
07105	Methane	74-82-8	260	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	2.83	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	630	30.0	100	100
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.4	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	27.9	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/5/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/25/2016 02:07	Kevin A Sposito	50
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 03:11	Matthew S Krause	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/25/2016 02:07	Kevin A Sposito	50

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-12S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382615
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 10:15 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK701 SDG#: EKO07-01

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	2.7 J	2.5	5.0	5
11997	1,1-Dichloroethane	75-34-3	20	2.5	5.0	5
11997	1,1-Dichloroethene	75-35-4	3.8 J	2.5	5.0	5
11997	cis-1,2-Dichloroethene	156-59-2	1,600 D	25	50	50
11997	trans-1,2-Dichloroethene	156-60-5	44	2.5	5.0	5
11997	Tetrachloroethene	127-18-4	N.D.	2.5	5.0	5
11997	1,1,1-Trichloroethane	71-55-6	8.5	2.5	5.0	5
11997	Trichloroethene	79-01-6	2,300 D	25	50	50
11997	Vinyl Chloride	75-01-4	420	2.5	5.0	5
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	94,000	4,000	12,000	1
07105	Ethane	74-84-0	29	1.0	5.0	1
07105	Ethene	74-85-1	820 D	20	100	20
07105	Methane	74-82-8	4,400 D	60	100	20

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 05:01	Matthew S Krause	5
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 05:23	Matthew S Krause	50
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161462AA	05/26/2016 05:01	Matthew S Krause	5
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L161462AA	05/26/2016 05:23	Matthew S Krause	50
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 15:40	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161380006A	05/17/2016 16:49	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161380006A	05/18/2016 13:54	Johanna C Kennedy	20

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-11D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382616
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 10:30 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK702 SDG#: EKO07-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	0.65 J	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	12	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.6	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	15	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	65	0.50	1.0	1
11997	Trichloroethene	79-01-6	2.7	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	17	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	53,000	4,000	12,000	1
07105	Ethane	74-84-0	36	1.0	5.0	1
07105	Ethene	74-85-1	1.3 J	1.0	5.0	1
07105	Methane	74-82-8	190	3.0	5.0	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 03:55	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161462AA	05/26/2016 03:55	Matthew S Krause	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 15:49	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161380006A	05/17/2016 17:06	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: OR-15SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382618
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 11:30 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK704 SDG#: EKO07-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D. R	5.0	10	10
11997	1,1-Dichloroethane	75-34-3	N.D.	5.0	10	10
11997	1,1-Dichloroethene	75-35-4	N.D.	5.0	10	10
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	5.0	10	10
11997	Tetrachloroethene	127-18-4	N.D.	5.0	10	10
11997	1,1,1-Trichloroethane	71-55-6	N.D.	5.0	10	10
11997	Trichloroethene	79-01-6	N.D.	5.0	10	10
11997	Vinyl Chloride	75-01-4	N.D.	5.0	10	10
	A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.					
	Reporting limits were raised due to sample foaming.					
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	690,000 D	20,000	60,000	5
07105	Ethane	74-84-0	2.7 J	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	12,000 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	55.5	0.0333	0.400	1
01762	Potassium	7440-09-7	72.7	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	3.0 J	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	83.6	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	0.13 J	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide, TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

*=This limit was used in the evaluation of the final result

OR-153M

eurofins | Lancaster Laboratories Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: OR-65SM Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382617
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 09:00 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK703 SDG#: EKO07-03

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	R	5.0	10	10
11997	1,1-Dichloroethane	75-34-3	N.D.		5.0	10	10
11997	1,1-Dichloroethene	75-35-4	N.D.		5.0	10	10
11997	cis-1,2-Dichloroethene	156-59-2	N.D.		5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	N.D.		5.0	10	10
11997	Tetrachloroethene	127-18-4	N.D.		5.0	10	10
11997	1,1,1-Trichloroethane	71-55-6	N.D.		5.0	10	10
11997	Trichloroethene	79-01-6	N.D.		5.0	10	10
11997	Vinyl Chloride	75-01-4	N.D.		5.0	10	10

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.

Reporting limits were raised due to sample foaming.

GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	680,000	D	20,000	60,000	5
07105	Ethane	74-84-0	2.2	J	1.0	5.0	1
07105	Ethene	74-85-1	N.D.		1.0	5.0	1
07105	Methane	74-82-8	12,000	D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	57.1		0.0333	0.400	1
01762	Potassium	7440-09-7	72.2		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	3.2	J	1.5	5.0	5
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	81.8		0.50	1.0	1
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	0.14	J	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide, TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-11S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382619
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 12:55 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK705 SDG#: EKO07-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	10	20	20
11997	1,1-Dichloroethane	75-34-3	33	10	20	20
11997	1,1-Dichloroethene	75-35-4	22	10	20	20
11997	cis-1,2-Dichloroethene	156-59-2	11,000 D	100	200	200
11997	trans-1,2-Dichloroethene	156-60-5	190	10	20	20
11997	Tetrachloroethene	127-18-4	N.D.	10	20	20
11997	1,1,1-Trichloroethane	71-55-6	N.D.	10	20	20
11997	Trichloroethene	79-01-6	150	10	20	20
11997	Vinyl Chloride	75-01-4	1,800	10	20	20
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	220,000 D	20,000	60,000	5
07105	Ethane	74-84-0	24	1.0	5.0	1
07105	Ethene	74-85-1	150	1.0	5.0	1
07105	Methane	74-82-8	6,500 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.736	0.0333	0.400	1
01762	Potassium	7440-09-7	3.30	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	2,120	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	2.6	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide
Preservation requirements were not met. Regulatory requirements were not met for some bottles for the following analyses: TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-6S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382620
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 13:05 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK706 SDG#: EKO07-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	5.0	10	10
11997	1,1-Dichloroethane	75-34-3	N.D.	5.0	10	10
11997	1,1-Dichloroethene	75-35-4	9.4 J	5.0	10	10
11997	cis-1,2-Dichloroethene	156-59-2	5,500 D	50	100	100
11997	trans-1,2-Dichloroethene	156-60-5	150	5.0	10	10
11997	Tetrachloroethene	127-18-4	N.D.	5.0	10	10
11997	1,1,1-Trichloroethane	71-55-6	N.D.	5.0	10	10
11997	Trichloroethene	79-01-6	13	5.0	10	10
11997	Vinyl Chloride	75-01-4	1,600	5.0	10	10
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	460,000 D	20,000	60,000	5
07105	Ethane	74-84-0	42	1.0	5.0	1
07105	Ethene	74-85-1	270	1.0	5.0	1
07105	Methane	74-82-8	12,000 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	4.77	0.0333	0.400	1
01762	Potassium	7440-09-7	13.5	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	366	30.0	100	100
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	17.1	1.0	2.0	2
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	5.7	0.30	1.0	10

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide, TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 06:28	Matthew S Krause	10

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-10S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382621
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 14:55 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK707 SDG#: EKO07-07BKG

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.7	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	530 D	5.0	10	10
11997	trans-1,2-Dichloroethene	156-60-5	11	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	11	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	160	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	59,000	4,000	12,000	1
07105	Ethane	74-84-0	4.4 J	1.0	5.0	1
07105	Ethene	74-85-1	12	1.0	5.0	1
07105	Methane	74-82-8	1,300 D	30	50	10

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 11:42	Angela D Sneeringer	1
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 12:48	Angela D Sneeringer	10
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161471AA	05/26/2016 11:42	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	2	L161471AA	05/26/2016 12:48	Angela D Sneeringer	10
08097	CO2 by Headspace	RSKSOP-175 modified	1	161390022A	05/18/2016 16:41	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161390006A	05/18/2016 13:43	Johanna C Kennedy	1
07105	Volatile Headspace Hydrocarbon	RSKSOP-175 modified	1	161390006A	05/20/2016 10:50	Johanna C Kennedy	10

7/6/16

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-9S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382624
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 15:35 by ET

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK708 SDG#: EKO07-08

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	N.D.	4,000	12,000	1
07105	Ethane	74-84-0	N.D.	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	26	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	6.42	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,390	60.0	200	200
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	7.6	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 07:34	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161462AA	05/26/2016 07:34	Matthew S Krause	1
08097	CO2 by Headspace	RSKSOP-175 modified	1	161400006A	05/19/2016 12:48	Johanna C Kennedy	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-4S Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8385420
LL Group # 1662502
Account # 37314

Project Name: Ekonol

Collected: 05/16/2016 10:20 by EL

Submitted: 05/17/2016 09:35
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

E0802 SDG#: EKO08-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	0.79 J	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	1.2	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	320 D	10	20	20
11997	trans-1,2-Dichloroethene	156-60-5	1.8	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	5.1	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	230	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	120,000	4,000	12,000	1
07105	Ethane	74-84-0	9.3	1.0	5.0	1
07105	Ethene	74-85-1	24	1.0	5.0	1
07105	Methane	74-82-8	480 D	15	25	5
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.639	0.0333	0.400	1
01762	Potassium	7440-09-7	5.68	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	4,110	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.6	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	2.4	0.060	0.20	2

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 13:32	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: INJ-13D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8385421
LL Group # 1662502
Account # 37314

Project Name: Ekonol

Collected: 05/16/2016 11:40 by EL

Submitted: 05/17/2016 09:35
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

E0803 SDG#: EKO08-03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	5.0	10	10
11997	1,1-Dichloroethane	75-34-3	N.D.	5.0	10	10
11997	1,1-Dichloroethene	75-35-4	15	5.0	10	10
11997	cis-1,2-Dichloroethene	156-59-2	4,300 D	50	100	100
11997	trans-1,2-Dichloroethene	156-60-5	38	5.0	10	10
11997	Tetrachloroethene	127-18-4	N.D.	5.0	10	10
11997	1,1,1-Trichloroethane	71-55-6	N.D.	5.0	10	10
11997	Trichloroethene	79-01-6	33	5.0	10	10
11997	Vinyl Chloride	75-01-4	2,500	5.0	10	10
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	75,000	4,000	12,000	1
07105	Ethane	74-84-0	380	1.0	5.0	1
07105	Ethene	74-85-1	2,300 D	100	500	100
07105	Methane	74-82-8	17,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	9.13	0.0333	0.400	1
01762	Potassium	7440-09-7	8.78	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	10.5	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	101	5.0	10.0	10
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	3.3	0.12	0.40	4

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 14:15	Angela D Sneeringer	10
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 14:37	Angela D Sneeringer	100

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-9D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8385422
LL Group # 1662502
Account # 37314

Project Name: Ekonol

Collected: 05/16/2016 13:15 by EL

Submitted: 05/17/2016 09:35
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

E0804 SDG#: EKO08-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	2.5	5.0	5
11997	1,1-Dichloroethane	75-34-3	7.0	2.5	5.0	5
11997	1,1-Dichloroethene	75-35-4	10	2.5	5.0	5
11997	cis-1,2-Dichloroethene	156-59-2	4,200 D	25	50	50
11997	trans-1,2-Dichloroethene	156-60-5	14	2.5	5.0	5
11997	Tetrachloroethene	127-18-4	N.D.	2.5	5.0	5
11997	1,1,1-Trichloroethane	71-55-6	N.D.	2.5	5.0	5
11997	Trichloroethene	79-01-6	120	2.5	5.0	5
11997	Vinyl Chloride	75-01-4	700	2.5	5.0	5
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	49,000	4,000	12,000	1
07105	Ethane	74-84-0	54	1.0	5.0	1
07105	Ethene	74-85-1	8,700 D	100	500	100
07105	Methane	74-82-8	13,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	70.9	0.0333	0.400	1
01762	Potassium	7440-09-7	12.8	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	N.D.	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	402	5.0	10.0	10
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	0.15	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 14:59	Angela D Sneeringer	5
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 15:21	Angela D Sneeringer	50

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: INJ-8D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8385423
LL Group # 1662502
Account # 37314

Project Name: Ekonol

Collected: 05/16/2016 14:55 by EL

Submitted: 05/17/2016 09:35
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

E0805 SDG#: EKO08-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	2.8	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	320 D	5.0	10	10
11997	1,1-Dichloroethene	75-35-4	0.95 J	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	170	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	13	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	14	0.50	1.0	1
11997	Trichloroethene	79-01-6	2.4	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	210	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	54,000	4,000	12,000	1
07105	Ethane	74-84-0	20	1.0	5.0	1
07105	Ethene	74-85-1	1,400 D	100	500	100
07105	Methane	74-82-8	14,000 D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	26.1	0.0333	0.400	1
01762	Potassium	7440-09-7	79.9	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	N.D.	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	465	12.5	25.0	25
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	0.095 J	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 15:43	Angela D Sneeringer	1
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 16:05	Angela D Sneeringer	10

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: INJ-11D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8385424
LL Group # 1662502
Account # 37314

Project Name: Ekonol

Collected: 05/16/2016 15:00 by EL

Submitted: 05/17/2016 09:35
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

E0806 SDG#: EKO08-06

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		100	200	200
11997	1,1-Dichloroethane	75-34-3	N.D.		100	200	200
11997	1,1-Dichloroethene	75-35-4	260		100	200	200
11997	cis-1,2-Dichloroethene	156-59-2	120,000	D	1,000	2,000	2000
11997	trans-1,2-Dichloroethene	156-60-5	140	J	100	200	200
11997	Tetrachloroethene	127-18-4	N.D.		100	200	200
11997	1,1,1-Trichloroethane	71-55-6	N.D.		100	200	200
11997	Trichloroethene	79-01-6	27,000		100	200	200
11997	Vinyl Chloride	75-01-4	4,500		100	200	200
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	89,000		4,000	12,000	1
07105	Ethane	74-84-0	82		1.0	5.0	1
07105	Ethene	74-85-1	980	D	100	500	100
07105	Methane	74-82-8	16,000	D	300	500	100
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	0.167	J	0.0333	0.400	1
01762	Potassium	7440-09-7	11.2		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	266		30.0	100	100
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	83.2		1.3	2.5	2.5
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	56.7		1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 16:27	Angela D Sneeringer	200
11997	8260C Parsons Short List	SW-846 8260C	1	L161471AA	05/26/2016 16:49	Angela D Sneeringer	2000

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-18D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8387551
LL Group # 1663036
Account # 37314

Project Name: Ekonol

Collected: 05/17/2016 09:35 by EL

Submitted: 05/18/2016 09:30
Reported: 06/20/2016 16:08

AECOM
P.O. Box 203970
Austin TX 78720

MW18D SDG#: EKO09-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	66,000	4,000	12,000	1
07105	Ethane	74-84-0	N.D.	1.0	5.0	1
07105	Ethene	74-85-1	N.D.	1.0	5.0	1
07105	Methane	74-82-8	39	3.0	5.0	1
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	~~0.0444 J~~ ND	~~0.0333~~ 0.4	0.400	1
01762	Potassium	7440-09-7	2.76	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,570	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	5.1	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	2.5	0.060	0.20	2

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate,and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 12:41	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161501AA	05/29/2016 12:41	Christopher G Torres	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: RMW-4D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8387552
LL Group # 1663036
Account # 37314

Project Name: Ekonol

Collected: 05/17/2016 12:10 by EL

Submitted: 05/18/2016 09:30
Reported: 06/20/2016 16:08

AECOM
P.O. Box 203970
Austin TX 78720

RMW4D SDG#: EKO09-03

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	10	20	20
11997	1,1-Dichloroethane	75-34-3	32	10	20	20
11997	1,1-Dichloroethene	75-35-4	27	10	20	20
11997	cis-1,2-Dichloroethene	156-59-2	17,000 D	100	200	200
11997	trans-1,2-Dichloroethene	156-60-5	57	10	20	20
11997	Tetrachloroethene	127-18-4	N.D.	10	20	20
11997	1,1,1-Trichloroethane	71-55-6	N.D.	10	20	20
11997	Trichloroethene	79-01-6	2,100	10	20	20
11997	Vinyl Chloride	75-01-4	4,900	10	20	20
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	130,000	4,000	12,000	1
07105	Ethane	74-84-0	23	1.0	5.0	1
07105	Ethene	74-85-1	2,000 D	50	250	50
07105	Methane	74-82-8	9,800 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	N.D.	0.0333	0.400	1
01762	Potassium	7440-09-7	5.75	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	547	30.0	100	100
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	117	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	60.2	1.5	5.0	50

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate,and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/16/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 18:31	Christopher G Torres	20
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 18:53	Christopher G Torres	200

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-10D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8387553
LL Group # 1663036
Account # 37314

Project Name: Ekonol

Collected: 05/17/2016 12:30 by EL

Submitted: 05/18/2016 09:30
Reported: 06/20/2016 16:08

AECOM
P.O. Box 203970
Austin TX 78720

PM10D SDG#: EKO09-04

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	1.0	2.0	2
11997	1,1-Dichloroethane	75-34-3	350	1.0	2.0	2
11997	1,1-Dichloroethene	75-35-4	42	1.0	2.0	2
11997	cis-1,2-Dichloroethene	156-59-2	19,000 D	100	200	200
11997	trans-1,2-Dichloroethene	156-60-5	55	1.0	2.0	2
11997	Tetrachloroethene	127-18-4	15	1.0	2.0	2
11997	1,1,1-Trichloroethane	71-55-6	110	1.0	2.0	2
11997	Trichloroethene	79-01-6	1,300 D	100	200	200
11997	Vinyl Chloride	75-01-4	4,100 D	100	200	200
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	300,000 D	20,000	60,000	5
07105	Ethane	74-84-0	25	1.0	5.0	1
07105	Ethene	74-85-1	9,600 D	50	250	50
07105	Methane	74-82-8	9,600 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	19.4	0.0333	0.400	1
01762	Potassium	7440-09-7	7.53	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	12.4	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	488	12.5	25.0	25
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	21.4	0.75	2.5	25

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate,and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 14:08	Christopher G Torres	2
11997	8260C Parsons Short List	SW-846 8260C	1	L161512AA	05/30/2016 17:55	Brett W Kenyon	200

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: MW-7D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8387554
LL Group # 1663036
Account # 37314

Project Name: Ekonol

Collected: 05/17/2016 14:05 by EL

Submitted: 05/18/2016 09:30
Reported: 06/20/2016 16:08

AECOM
P.O. Box 203970
Austin TX 78720

MW-7D SDG#: EKO09-05

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	50	100	100
11997	1,1-Dichloroethane	75-34-3	150	50	100	100
11997	1,1-Dichloroethene	75-35-4	69 J	50	100	100
11997	cis-1,2-Dichloroethene	156-59-2	67,000 D	500	1,000	1000
11997	trans-1,2-Dichloroethene	156-60-5	130	50	100	100
11997	Tetrachloroethene	127-18-4	94 J	50	100	100
11997	1,1,1-Trichloroethane	71-55-6	N.D.	50	100	100
11997	Trichloroethene	79-01-6	560	50	100	100
11997	Vinyl Chloride	75-01-4	2,500	50	100	100
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	98,000	4,000	12,000	1
07105	Ethane	74-84-0	12	1.0	5.0	1
07105	Ethene	74-85-1	260	1.0	5.0	1
07105	Methane	74-82-8	9,600 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	~~0.0336 J~~ ND	~~0.0333~~ 0.4	0.400	1
01762	Potassium	7440-09-7	13.4	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	31.6	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	84.8	2.5	5.0	5
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	159	3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate, and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 19:58	Christopher G Torres	100
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 20:20	Christopher G Torres	1000

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-12D Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8387555
LL Group # 1663036
Account # 37314

Project Name: Ekonol

Collected: 05/17/2016 15:30 by EL

Submitted: 05/18/2016 09:30
Reported: 06/20/2016 16:08

AECOM
P.O. Box 203970
Austin TX 78720

PM12D SDG#: EKO09-06

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	1.0	2.0	2
11997	1,1-Dichloroethane	75-34-3	140	1.0	2.0	2
11997	1,1-Dichloroethene	75-35-4	390	1.0	2.0	2
11997	cis-1,2-Dichloroethene	156-59-2	220,000 D	500	1,000	1000
11997	trans-1,2-Dichloroethene	156-60-5	560 D	10	20	20
11997	Tetrachloroethene	127-18-4	340	1.0	2.0	2
11997	1,1,1-Trichloroethane	71-55-6	12	1.0	2.0	2
11997	Trichloroethene	79-01-6	52,000 D	500	1,000	1000
11997	Vinyl Chloride	75-01-4	38,000 D	500	1,000	1000
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	340,000 D	20,000	60,000	5
07105	Ethane	74-84-0	24	1.0	5.0	1
07105	Ethene	74-85-1	12,000 D	50	250	50
07105	Methane	74-82-8	5,900 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.435	0.0333	0.400	1
01762	Potassium	7440-09-7	9.53	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	23.8	1.5	5.0	5
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	365	12.5	25.0	25
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	118	3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate,and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for some bottles for the following analyses: TOC

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 14:52	Christopher G Torres	2

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-5S Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8389710
LL Group # 1663554
Account # 37314

Project Name: Ekonol

Collected: 05/18/2016 09:00 by EL

Submitted: 05/19/2016 09:05
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EPM5S SDG#: EKO10-02

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	10	20	20
11997	1,1-Dichloroethane	75-34-3	N.D.	10	20	20
11997	1,1-Dichloroethene	75-35-4	36	10	20	20
11997	cis-1,2-Dichloroethene	156-59-2	19,000 D	100	200	200
11997	trans-1,2-Dichloroethene	156-60-5	420	10	20	20
11997	Tetrachloroethene	127-18-4	N.D.	10	20	20
11997	1,1,1-Trichloroethane	71-55-6	N.D.	10	20	20
11997	Trichloroethene	79-01-6	1,200	10	20	20
11997	Vinyl Chloride	75-01-4	2,500	10	20	20
GC Miscellaneous	**RSKSOP-175 modified**		ug/l	ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	290,000 D	20,000	60,000	5
07105	Ethane	74-84-0	110	1.0	5.0	1
07105	Ethene	74-85-1	340	1.0	5.0	1
07105	Methane	74-82-8	9,600 D	150	250	50
Metals Dissolved	**SW-846 6010C**		mg/l	mg/l	mg/l	
01754	Iron	7439-89-6	0.157 J	0.0333	0.400	1
01762	Potassium	7440-09-7	3.61	0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l	mg/l	mg/l	
00228	Sulfate	14808-79-8	1,390	150	500	500
	SM 5310 C-2000		mg/l	mg/l	mg/l	
00273	Total Organic Carbon	n.a.	6.2	0.50	1.0	1
	SM 4500-S2 D-2000		mg/l	mg/l	mg/l	
00230	Sulfide	18496-25-8	N.D.	0.030	0.10	1

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.
Preservation requirements were not met. Regulatory requirements were not met for all bottles for the following analyses: Sulfide

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161512AA	05/30/2016 18:40	Brett W Kenyon	20

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: PMW-16D Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8389711
LL Group # 1663554
Account # 37314

Project Name: Ekonol

Collected: 05/18/2016 10:40 by EL

Submitted: 05/19/2016 09:05
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EP16D SDG#: EKO10-03

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l		ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.		10	20	20
11997	1,1-Dichloroethane	75-34-3	360		10	20	20
11997	1,1-Dichloroethene	75-35-4	150		10	20	20
11997	cis-1,2-Dichloroethene	156-59-2	26,000	D	100	200	200
11997	trans-1,2-Dichloroethene	156-60-5	82		10	20	20
11997	Tetrachloroethene	127-18-4	21		10	20	20
11997	1,1,1-Trichloroethane	71-55-6	3,500		10	20	20
11997	Trichloroethene	79-01-6	83		10	20	20
11997	Vinyl Chloride	75-01-4	2,200		10	20	20
GC Miscellaneous	**RSKSOP-175 modified**		ug/l		ug/l	ug/l	
08097	CO2 by Headspace	124-38-9	80,000		4,000	12,000	1
07105	Ethane	74-84-0	4.2	J	1.0	5.0	1
07105	Ethene	74-85-1	350		1.0	5.0	1
07105	Methane	74-82-8	1,100	D	30	50	10
Metals Dissolved	**SW-846 6010C**		mg/l		mg/l	mg/l	
01754	Iron	7439-89-6	N.D.		0.0333	0.400	1
01762	Potassium	7440-09-7	2.17		0.192	1.00	1
Wet Chemistry	**EPA 300.0**		mg/l		mg/l	mg/l	
00228	Sulfate	14808-79-8	165		30.0	100	100
	SM 5310 C-2000		mg/l		mg/l	mg/l	
00273	Total Organic Carbon	n.a.	42.8		1.3	2.5	2.5
	SM 4500-S2 D-2000		mg/l		mg/l	mg/l	
00230	Sulfide	18496-25-8	98.5		3.0	10.0	100

Sample Comments

State of New York Certification No. 10670
This sample was field filtered for dissolved iron, sulfate and sulfide.

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

7/6/16

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161512AA	05/30/2016 19:25	Brett W Kenyon	20
11997	8260C Parsons Short List	SW-846 8260C	1	L161512AA	05/30/2016 19:47	Brett W Kenyon	200
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161512AA	05/30/2016 19:25	Brett W Kenyon	20

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-050516 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8369588
LL Group # 1658235
Account # 37314

Project Name: Ekonol

Collected: 05/05/2016 09:00

Submitted: 05/06/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

ORTRB SDG#: EKO01-07TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/17/2016 22:39	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/17/2016 22:39	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-050616 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8370279
LL Group # 1658375
Account # 37314

Project Name: Ekonol

Collected: 05/06/2016 09:00

Submitted: 05/07/2016 10:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

WRWTB SDG#: EKO02-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161382AA	05/17/2016 23:01	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161382AA	05/17/2016 23:01	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-050916 Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8371760
LL Group # 1658821
Account # 37314

Project Name: Ekonol

Collected: 05/09/2016 09:00

Submitted: 05/10/2016 09:20
Reported: 06/14/2016 10:48

AECOM
P.O. Box 203970
Austin TX 78720

WRW-T SDG#: EKO03-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161391AA	05/18/2016 17:05	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161391AA	05/18/2016 17:05	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-051016 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8374443
LL Group # 1659345
Account # 37314

Project Name: Ekonol

Collected: 05/10/2016 09:00

Submitted: 05/11/2016 09:30
Reported: 06/14/2016 10:49

AECOM
P.O. Box 203970
Austin TX 78720

EK408 SDG#: EKO04-08TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161411AA	05/20/2016 11:14	Brett W Kenyon	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161411AA	05/20/2016 11:14	Brett W Kenyon	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-051216 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8380300
LL Group # 1660576
Account # 37314

Project Name: Ekonol

Collected: 05/12/2016 08:00

Submitted: 05/13/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EPRTB SDG#: EKO06-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161452AA	05/24/2016 20:38	Kevin A Sposito	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161452AA	05/24/2016 20:38	Kevin A Sposito	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-051316 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8382625
LL Group # 1661864
Account # 37314

Project Name: Ekonol

Collected: 05/13/2016 08:30

Submitted: 05/14/2016 10:30
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

EK709 SDG#: EKO07-09TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 03:33	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161462AA	05/26/2016 03:33	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-051616 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8385419
LL Group # 1662502
Account # 37314

Project Name: Ekonol

Collected: 05/16/2016 08:50

Submitted: 05/17/2016 09:35
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

E0801 SDG#: EKO08-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161462AA	05/26/2016 07:12	Matthew S Krause	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161462AA	05/26/2016 07:12	Matthew S Krause	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-051716 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8387550
LL Group # 1663036
Account # 37314

Project Name: Ekonol

Collected: 05/17/2016 09:10

Submitted: 05/18/2016 09:30
Reported: 06/20/2016 16:08

AECOM
P.O. Box 203970
Austin TX 78720

TB175 SDG#: EKO09-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 11:57	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161501AA	05/29/2016 11:57	Christopher G Torres	1

*=This limit was used in the evaluation of the final result

eurofins | Lancaster Laboratories Environmental

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Analysis Report

Sample Description: TB-051816 Water
BP Ekonol COC:
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8389709
LL Group # 1663554
Account # 37314

Project Name: Ekonol

Collected: 05/18/2016 08:45

Submitted: 05/19/2016 09:05
Reported: 06/20/2016 16:09

AECOM
P.O. Box 203970
Austin TX 78720

T-WHF SDG#: EKO10-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161501AA	05/29/2016 12:19	Christopher G Torres	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161501AA	05/29/2016 12:19	Christopher G Torres	1

*=This limit was used in the evaluation of the final result

ATTACHMENT B

SUPPORT DOCUMENTATION

37314 / 1658235 / 8369582-88

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
BP/ARC Facility No: Ekonol Polyester Resins Site
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Water / Liquid	Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaoH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1) *	Total Organic Carbon (5310C)	Dissolved Iron 6010B *	Sulfide (SM204500) *	Carbon Dioxide	DISS Fe, Fe2 G. Fe3	Report Type & QC Level
	OR-5SM	5-5-16	9:55		X		13	4	1	5	1	2	X	X	X	X	X	X	X	X	* (Field Filtered)
	OR-6SM	5-5-16	12:50		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	OR-13SM	5-5-16	10:15		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	OR-14SM	5-5-16	12:25		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	PMW-11D	5-5-16	14:35		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	PMW-1S	5-5-16	14:45		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	TB-050516	5-5-16	9.00		X		3			3			X								

Report Type & QC Level: Standard ___ Full Data Package X

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: E. Gaity, E. Mathemer, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: AECOM	[signature] AECOM	5-5-16	1715			
Shipment Method: Fedex Ship Date:						
Shipment Tracking No: 8091 6047 6654 / 8091 6047 6540				[signature] ABL	5/6/16	0920

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 3.6 °F/(C) | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1658235

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Sample #s: 8369583

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 6.

RSKSOP-175 modified, GC Miscellaneous

Batch #: 161300001A (Sample number(s): 8369582-8369585 UNSPK: P367838)

The recovery(ies) for the following analyte(s) in the MS was outside the acceptance window: Methane

SW-846 6010C, Metals Dissolved

Batch #: 161300635005 (Sample number(s): 8369582-8369587 UNSPK: P368188 BKG: P368188)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Iron, Potassium

The relative percent difference(s) for the following analyte(s) in the MS/MSD were outside outside acceptance windows: Iron, Potassium

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Potassium

SM 5310 C-2000, Wet Chemistry

Batch #: 16132049501A (Sample number(s): 8369582-8369587 UNSPK: 8369587 BKG: 8369587)

The recovery(ies) for the following analyte(s) in the MS was outside the acceptance window: Total Organic Carbon

SM 4500-S2 D-2000, Wet Chemistry

Batch #: 16130023001A (Sample number(s): 8369582-8369587 UNSPK: P370280 BKG: P370280)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

37314/16583375/8370279-85

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
BP/ARC Facility No: Ekonol Polyester Resins Site
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Soil / Solid	Water / Liquid	Air / Vapor	Total Number of Containers	Unpreserved	HNO3	HCl	NaoH/Zn-acetate	H3PO4	VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B+K	Sulfide(SM204500)	Carbon Dioxide
	TB-050616	5-6-16	9:00		X		3			X			X						
	OR-3SM	5-6-16	11:40		X		13	4	1	5	1	2	X	X	X	X	X	X	X
	OR-4SM	5-6-16	14:05		X		13	4	1	5	1	2	X	X	X	X	X	X	X
	OR-9SM	5-6-16	11:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X
	OR-10SM	5-6-16	12:50		X		13	4	1	5	1	2	X	X	X	X	X	X	X
	OR-18SM	5-6-16	14:15		X		13	4	1	5	1	2	X	X	X	X	X	X	X
	MW-7S	5-6-16	10:10		X		13	4	1	5	1	2	X	X	X	X	X	X	X

Requested Analyses: Methane, Ethane, Ethene; Sulfate (300.1); Total Organic Carbon (5310C); Dissolved Iron 6010B+K (Field Filtered); Sulfide(SM204500); Carbon Dioxide

Report Type & QC Level: Standard ___ Full Data Package X

Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

(Field Filtered, Sulfate, Sulfide, Diss. Iron)

Sampler's Name:	E. Thalhamer, M. Kuczka, E. Lilly	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation / Date / Time
Sampler's Company:	AECOM	[signature] / Aecom	5/6/16	1545	
Shipment Method:	Fedex Ship Date:				
Shipment Tracking No:	8091 6047 6648 / 8091 6047 6632				[signature] 5/7/16 1030

Special Instructions: 8

THIS LINE - LAB USE ONLY: Custody Seals in Place: Yes / No | Temp Blank: Yes / No | Cooler Temp on Receipt: 2.6 °F/C | Trip Blank: Yes / No | MS/MSD Sample Submitted: Yes / No

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1658375

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Sample #s: 8370281
A preserved vial was submitted for analysis. However, the pH at the time of analysis was 7.

SM 4500-S2 D-2000, Wet Chemistry

Sample #s: 8370281
Reporting limits were raised due to interference from the sample matrix.

Sample #s: 8370282, 8370283, 8370284, 8370285
The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client
was contacted and the data reported.

Batch #: 16130023001A (Sample number(s): 8370280-8370281 UNSPK: 8370280 BKG: 8370280)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

Batch #: 16133023001A (Sample number(s): 8370282-8370285 UNSPK: P373755, P373757 BKG: P373755, P373757)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

37314 | 1658821 | 8371760-66

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
BP/ARC Facility No: Ekonol Polyester Resins Site
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Acct:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4		Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + K, Fe Co, V, Cu, Mn, Zn, Al, Mg, Ca, Na	Sulfide (SM204500)	Carbon Dioxide				Report Type & QC Level
	TB-050916	5-9-16	9:00		X			3			3				X										(Field Filtered, Sulfate,
	PMW-35	5-9-16	12:00		X			13	4	1	5	1	2		X	X	X	X	X	X	X				Sulfide, Diss. Iron)
	PMW-25	5-9-16	10:00		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	PMW-15D	5-9-16	10:30		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	PMW-17D	5-9-16	14:40		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	PMW-95	5-9-16	13:50		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	MW-25	5-9-16	15:30		X			13	4	1	5	1	2		X	X	X	X	X	X	X				

Standard ___
Full Data Package X

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name:	E. Laity, E. Thalhamer, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation / Date / Time
Sampler's Company:	AECOM		5/9/16	16:40	
Shipment Method:	Fedex	Ship Date:			
Shipment Tracking No:	8091 6047 6610 / 8091 6047 662				ELLE 5/10/16 920

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 1.3-1.9 °F/(C) | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1658821

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Batch #: L161403AA (Sample number(s): 8371763-8371766 UNSPK: P374442)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,1-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene, cis-1,2-Dichloroethene

Batch #: L161411AA (Sample number(s): 8371765-8371766 UNSPK: P375084)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Trichloroethene

SM 4500-S2 D-2000, Wet Chemistry

Sample #s: 8371761, 8371762, 8371763, 8371764, 8371765, 8371766

The ending continuing calibration verification (CCV) standard that bracketed this batch's matrix QC samples is outside the QC acceptance limits. The client
was contacted and the data reported.

Batch #: 16133023001A (Sample number(s): 8371761-8371766 UNSPK: P373755, P373757 BKG: P373755, P373757)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

37314 / 1659345 / 8374436-43

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

Page 1 of 1

BP/ARC Project Name: BP IPO | Req Due Date (mm/dd/yy): | Rush TAT: Yes ___ No X

BP/ARC Facility No: Ekonol Polyester Resins Site | Lab Work Order Number:

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + 7470A Prep E-245.1/7470A Prep	Sulfide (SM204500)	Carbon Dioxide	Report Type & QC Level
	PMW-6D	5-10-16	9:05		X		13	4	1	5	1	2	X	X	X	X	X	X	X	(Field Filtered & Diss. Iron, Sulfate, Sulfide)
	RMW-2D	5-10-16	10:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	PMW-2D	5-10-16	11:10		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	INJ-7D	5-10-16	12:50		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	PMW-8D	5-10-16	1400		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	PMW-58D	5-10-16	12:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X	PMW-8D
	PMW-1D	5-10-16	15:40		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	TB-051016	5-10-16	9:00		X		3			3			X							

Sampler's Name:	E. Mahaney, E. Leity, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company:	AECOM		5-10-16	16:25			
Shipment Method:	Fedex Ship Date: 5-10-16						
Shipment Tracking No:	8090 6047 6551 / 8091 6047 6562					5/11/16	893

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.3-3.6 °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

BP/ARC LaMP COC Rev. 8 01/01/2009

Project Name: Ekonol
LL Group #: 1659345

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Batch #: L161403AA (Sample number(s): 8374436-8374442 UNSPK: 8374442)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,1-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene, cis-1,2-Dichloroethene

Batch #: L161411AA (Sample number(s): 8374443 UNSPK: P375084)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,1-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene

SW-846 6010C, Metals Dissolved

Batch #: 161340635004 (Sample number(s): 8374436-8374442 UNSPK: 8374436 BKG: 8374436)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Potassium

SM 4500-S2 D-2000, Wet Chemistry

Batch #: 16134023001A (Sample number(s): 8374436-8374442 UNSPK: P375266 BKG: P375266)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Sulfide

eurofins | Lancaster Laboratories Environmental

QUALITY ASSURANCE SUMMARY
FORM 5A(MS/MSD)
MATRIX SPIKE/MATRIX SPIKE DUPLICATE
SDG No.: EKO04
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 8374436BKG Matrix Spike Lab Sample ID: 8374436MS Matrix Spike Duplicate Lab Sample ID: 8374436MSD
Batch Number(s): 161340635004

Analyte	Mass	BKG Sample Result	C	MS Sample Result	C	MSD Sample Result	C	MS Spike Added	MSD Spike Added	Units	MS %R	Q	MSD %R	Q	RPD	Q	Control Limit %R	Control Limit RPD	M
Iron		821.2400		1759.1500		1814.2900		1000.0000	1000.0000	UG/L	94		99		3		75 - 125	20	P
Potassium		12968.5300		24810.2300		25774.0500		10000.0000	10000.0000	UG/L	118		128	N	4		75 - 125	20	P

Note: Results shown are reported on an as-received basis.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry
CV = Cold Vapor
AF = Cold Vapor Atomic Fluorescence

CONCENTRATION QUALIFIERS:
U= Below MDL, B= Below LOQ
FLAGS:
N = Matrix Spike OOS, * = Duplicate OOS

eurofins

Lancaster Laboratories Environmental

QUALITY ASSURANCE SUMMARY
FORM 9
SERIAL DILUTIONS
SDG No.: EKO04
Matrix: WATER Level (low/med): LOW

Background Lab Sample ID: 8374436BKG Serial Dilution Lab Sample ID: 8374436L
Batch Number(s): 161340635004
Concentration Units: UG/L

Analyte	Mass	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Diff.	Q	M
Iron		821.2400		794.2000	B	3		P
Potassium		12968.5300		11592.1000		11	E	P

NOTE: An E in column Q indicates the presence of a chemical or physical interference in the matrix when the % difference is greater than 10%. This applies only when (I) is greater than or equal to 50x MDL for ICP, 100x MDL for ICP-MS (6020), 50x MDL for ICP-MS (200.8), or 25x MDL for GFAA.

METHODS:
P = ICP Atomic Emission Spectrometer
MS = ICP Mass Spectrometry

CONCENTRATION QUALIFIERS:
U= Below MDL
B= Below LOQ
FLAGS:
E = Matrix Effects exist as proven by Serial Dilution or Spiked Dilution

37314 / 16601114 / 8377945-53

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
BP/ARC Facility No: Ekonol Polyester Resins Site
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + K Fe2+ SM3500-Fe-B	Sulfide (SM4500)	Carbon Dioxide	Report Type & QC Level: Standard ___ / Full Data Package X	Comments
	TB-051116	5-11-16	8:30		X		3			3			X								
	MW-15D	5-11-16	10:40		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	MW-19D	5-11-16	10:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	MW-16D	5-11-16	12:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	MW-13D	5-11-16	12:05		X		13	4	1	5	1	2	X	X	X	X	X	X	X		
	MW-17D	5-11-16	13:40		X		13	2		11			X	X					X		VOCs MS/MSD for MW-17D
	MW-11S	5-11-16	1400		X		7	2		5			X	X					X		

Sampler's Name: E. Laity, E. Thalhamer, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: AECOM	AECOM	5-11-16	15:50			
Shipment Method: Fedex Ship Date: 5-11-16						
Shipment Tracking No: 8071 6047 6584 / 8071 6047 6571				/ELLE	5.12.16	930

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 2.5 - 2.4 °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: (Yes) / No

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1660114

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Batch #: L161431AA (Sample number(s): 8377945-8377946, 8377948-8377953 UNSPK: 8377950)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: 1,1-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene

SW-846 6010C, Metals Dissolved

Batch #: 161340635004 (Sample number(s): 8377946-8377949 UNSPK: P374436 BKG: P374436)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Potassium

SM 5310 C-2000, Wet Chemistry

Batch #: 16137049502A (Sample number(s): 8377946-8377949 UNSPK: 8377946 BKG: 8377946)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Total Organic Carbon

eurofins
Lancaster Laboratories
Environmental

Analysis Report

2425 New Holland Pike, Lancaster, PA 17601 • 717-656-2300 • Fax: 717-656-2681 • www.LancasterLabs.com

Sample Description: TB-051116 Water
BP Ekonol
6600 Walmore Rd - Wheatfield, NY

LL Sample # WW 8377945
LL Group # 1660114
Account # 37314

Project Name: Ekonol

Collected: 05/11/2016 08:30

Submitted: 05/12/2016 09:30
Reported: 06/14/2016 10:50

AECOM
P.O. Box 203970
Austin TX 78720

EK501 SDG#: EKO05-01TB

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C**		ug/l	ug/l	ug/l	
11997	Chloroethane	75-00-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethane	75-34-3	N.D.	0.50	1.0	1
11997	1,1-Dichloroethene	75-35-4	N.D.	0.50	1.0	1
11997	cis-1,2-Dichloroethene	156-59-2	N.D.	0.50	1.0	1
11997	trans-1,2-Dichloroethene	156-60-5	N.D.	0.50	1.0	1
11997	Tetrachloroethene	127-18-4	N.D.	0.50	1.0	1
11997	1,1,1-Trichloroethane	71-55-6	N.D.	0.50	1.0	1
11997	Trichloroethene	79-01-6	N.D.	0.50	1.0	1
11997	Vinyl Chloride	75-01-4	N.D.	0.50	1.0	1

Sample Comments

State of New York Certification No. 10670

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11997	8260C Parsons Short List	SW-846 8260C	1	L161431AA	05/22/2016 11:45	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	L161431AA	05/22/2016 11:45	Angela D Sneeringer	1

*=This limit was used in the evaluation of the final result

37314 1660576 8380300-11

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ____ No X
BP/ARC Facility No: Ekonol Polyester Resins Site
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.18.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	Matrix:	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4		Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B+ (Filtered in Field)	Sulfide (SM4500)	Carbon Dioxide				Report Type & QC Level
	TB - 051216	5-12-16	8:00		X			3			3				X										"Field Filtered" Diss. Iron, Sulfate, Sulfide.
	MW - 1S	5-12-16	10:00		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	RMW - 1S	5-12-16	9:35		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	MW - 20D	5-12-16	11:15		X			13	2		11				X	X					X				+ MS/MSD on VOCs for MW-20D
	MW - 21D	5-12-16	12:00		X			7	2		5				X	X					X				
	RMW - 51D	5-12-16	8:30		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	PMW - 7S	5-12-16	12:20		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	MW - 6S	5-12-16	13:40		X			7	2		5				X	X					X				MW-10
	PMW - 4S	5-12-16	14:35		X			13	4	1	5	1	2		X	X	X	X	X	X	X				
	RMW - 3D		16:00																						

Sampler's Name: E. Leahy, E. Thalhamer, M. Kuczka
Sampler's Company: AECOM
Shipment Method: Fedex Ship Date: 5-12-16
Shipment Tracking No: 8091 6047 6600 / 8091 6047 6595

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
	5-12-16	1615			
			ECLE	5-13-16	930

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: Yes / (No) | Cooler Temp on Receipt: _____ °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: (Yes) / No

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1660576

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Batch #: L161452AA (Sample number(s): 8380300-8380311 UNSPK: 8380303)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Vinyl Chloride, trans-1,2-Dichloroethene, 1,1-Dichloroethane, cis-1,2-Dichloroethene, 1,1,1-Trichloroethane, Trichloroethene

RSKSOP-175 modified, GC Miscellaneous

Sample #s: 8380303

The container used for this analysis was submitted with headspace.

SM 5310 C-2000, Wet Chemistry

Batch #: 16138049504A (Sample number(s): 8380301-8380302, 8380307-8380308, 8380310-8380311 UNSPK: 8380301 BKG: 8380301)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Total Organic Carbon

37314 / 16618 64 / 8382615-25

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
BP/ARC Facility No: Ekonol Polyester Resins Site
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + X (Prep: EPA 200.7) 5/14/16	Sulfide (SM20 4500)	Carbon Dioxide			Report Type & QC Level / Comments
1	MW-12S	5-13-16	10:15		X		7	2		5			X	X					X			Field Filtered,
1	MW-11D	5-13-16	10:30		X		7	2		5			X	X					X			Diss Iron, Sulfate, Sulfide
1	OR-65SM	5-13-16	9:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X			
1	OR-15SM	5-13-16	11:30		X		13	4	1	5	1	2	X	X	X	X	X	X	X			
1	PMW-11S	5-13-16	12:55		X		13	4	1	5	1	2	X	X	X	X	X	X	X			
1	PMW-6S	5-13-16	13:05		X		13	4	1	5	1	2	X	X	X	X	X	X	X			
1	MW-10S	5-13-16	14:55		X		13	2		11			X	X					X			MS/MSD for VOCs on MW-10S.
1	MW-9S	5-13-16	15:35		X		13	4	1	5	1	2	X	X	X	X	X	X	X			
1	TB-051316	5-13-16	8:30				3			3			X									

Sampler's Name: E. Malhame, E. Laity, M. Kuczka.
Sampler's Company: AECOM
Shipment Method: Fedex Ship Date:
Shipment Tracking No: 7763 3224 5888 / 7763 3222 2409

Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
[signature] / AECOM	5-13-16	1600			
			[signature]	5/14/16	1030

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: Yes / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 5.5 °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: (Yes) / No

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1661864

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles

Sample #s: 8382617, 8382618

A preserved vial was submitted for analysis. However, the pH at the time of analysis was 5.
Reporting limits were raised due to sample foaming.

Batch #: L161471AA (Sample number(s): 8382621-8382623 UNSPK: 8382621)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene

RSKSOP-175 modified, GC Miscellaneous

Batch #: 161400006A (Sample number(s): 8382624 UNSPK: P388507)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: CO2 by Headspace

SM 4500-S2 D-2000, Wet Chemistry

Batch #: 16140023001A (Sample number(s): 8382617-8382620, 8382624 UNSPK: 8382617 BKG: 8382617)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Sulfide

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

eurofins | Lancaster Laboratories Environmental

Quality Control Summary
Matrix Spike/Matrix Spike Duplicate

SDG: EKO07
Matrix: LIQUID

Water Quality
Fraction: Wet Chemistry

UNSPK: 8382617 MS: 8382617 MSD: 8382617 **Parameter**	Batch: **16140023001A** (Sample number(s): 8382617-8382620, 8382624)									
	ME	**Spike Added mg/l**	**Unspiked Conc mg/l**	**MS Conc mg/l**	**MSD Conc mg/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Sulfide	CO	0.510	0.141	0.645	0.557	99	82 *	90-110	15	16

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

371314 / 1602502 / 8385419-24

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
BP/ARC Facility No: Ekonol Polyester Resins Site
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Acct:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + V (Per ES VSL Lab)	Sulfide (SM20450D) Sulfide	Carbon Dioxide	Report Type & QC Level
	TB-051616	5-16-16	8:50		X		3			3			X							Standard ___
	MW-45	5-16-16	10:20		X		13	4	1	5	1	3	X	X	X	X	X	X	X	Full Data Package X
	INJ-13D	5-16-16	11:40		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	PMW-9D	5-16-16	13:15		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	INJ-8D	5-16-16	14:55		X		13	4	1	5	1	2	X	X	X	X	X	X	X	
	INJ-11D	5-16-16	15:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X	

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Field Filtered & Diss Iron, Sulfate, Sulfide

Sampler's Name:	E. Laity, E. Thallmann, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation / Date / Time
Sampler's Company:	AECOM				
Shipment Method:	Fedex	Ship Date: 5-16-16	5-16-16	16:05	
Shipment Tracking No:	7763 3226 4774				Mustafa Abel 5/17/16 0935

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals in Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 1.6 °F/C | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1662502

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SW-846 8260C, GC/MS Volatiles
Batch #: L161471AA (Sample number(s): 8385420-8385424 UNSPK: P382621)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: cis-1,2-Dichloroethene, trans-1,2-Dichloroethene, Trichloroethene

RSKSOP-175 modified, GC Miscellaneous
Batch #: 161400006A (Sample number(s): 8385420-8385424 UNSPK: P388507)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: CO2 by Headspace

SM 4500-S2 D-2000, Wet Chemistry
Batch #: 16140023001A (Sample number(s): 8385420-8385424 UNSPK: P382617 BKG: P382617)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Sulfide

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

37314 1663036 8387550-55

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
Req Due Date (mm/dd/yy): _____ Rush TAT: Yes ___ No X
BP/ARC Facility No: Ekonol Polyester Resins Site
Lab Work Order Number: _____

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + 7470 (Filtered in Lab)	Sulfide (SM4500)	Carbon Dioxide				Report Type & QC Level / Comments
	TB-051716	5-17-16	9:10		X		3			3			X										Field Filtered: Diss iron, sulfate, sulfide
	MW-18D	5-17-16	9:35		X		13	4	1	5	1	2	X	X	X	X	X	X	X				
	RMW-4D	5-17-16	12:10		X		13	4	1	5	1	2	X	X	X	X	X	X	X				
	PMW-10D	5-17-16	12:30		X		13	4	1	5	1	2	X	X	X	X	X	X	X				
	MW-7D	5-17-16	14:05		X		13	4	1	5	1	2	X	X	X	X	X	X	X				
	PMW-12D	5-17-16	15:30		X		13	4	1	5	1	2	X	X	X	X	X	X	X				

Standard ___
Full Data Package X

Comments
Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.

Sampler's Name: E. Laity, E. Thalhamer, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: AECOM		5-17-16	1600			
Shipment Method: Fedex Ship Date: 5-17-16						
Shipment Tracking No: 7763 3229 7430				ELLE	5-18-16	920

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 1.1 °F/(C) | Trip Blank: (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

BP/ARC LaMP COC Rev. 6 01/01/2009

Project Name: Ekonol
LL Group #: 1663036

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

RSKSOP-175 modified, GC Miscellaneous

Batch #: 161400006A (Sample number(s): 8387551-8387555 UNSPK: P388507)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: CO2 by Headspace

SM 5310 C-2000, Wet Chemistry

Batch #: 16144049502B (Sample number(s): 8387551-8387555 UNSPK: P386867 BKG: P386867)

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Total Organic Carbon

eurofins

Lancaster Laboratories Environmental

QUALITY ASSURANCE SUMMARY
FORM 3
BLANKS
SDG No.: EKO09

Method: P
Run Name: 1614401T74
Calibration Date(s): 05/23/2016
Preparation Blank Matrix: WATER

		Initial Calibration Blank (ug/L)		Continuing Calibration Blank (ug/L)							Preparation Blank (UG/L)			
Analyte	Mass		C	1	C	2	C	3	C	Mass		C	Batch Number
Iron		41.2	U	59.2	B	41.2	U	41.2	U		50.520	B	161400635002
Potassium		144	U	144	U	144	U	144	U		192.000	U	161400635002

METHODS:	CONCENTRATION QUALIFIERS:
P = ICP Atomic Emission Spectrometer	U= Below IDL/MDL
MS = ICP Mass Spectrometry	B= Below LOQ
CV = Cold Vapor	
AF = Cold Vapor Atomic Fluorescence	

eurofins | Lancaster Laboratories Environmental

QUALITY ASSURANCE SUMMARY
FORM 13
PREPARATION LOG
SDG No.: EKO09

Method: P
Batch Number: 161400635002

Lab Sample ID	Date	Initial Volume(ml)	Final Volume(ml)
8387551	05/22/2016	50.00	50
8387552	05/22/2016	50.00	50
8387553	05/22/2016	50.00	50
8387554	05/22/2016	50.00	50
8387555	05/22/2016	50.00	50
*87644BKG	05/22/2016	50.00	50
P14035BB	05/22/2016	50.00	50
P14035BQ	05/22/2016	1.00	1

METHODS:	LEGEND:
P = ICP Atomic Emission Spectrometer	BKG = Background
MS = ICP Mass Spectrometry	DUP = Duplicate
CV = Cold Vapor	MS = Matrix Spike
AF = Cold Vapor Atomic Fluorescence	MSD = Matrix Spike Duplicate
	B = Blank
	Q = Laboratory Control Sample
	Y = Laboratory Control Sample Duplicate

37314 | 1663554 | 8389709-11

Atlantic Richfield Company
A BP affiliated company

Laboratory Management Program LaMP Chain of Custody Record

BP/ARC Project Name: BP IPO
BP/ARC Facility No: Ekonol Polyester Resins Site
Req Due Date (mm/dd/yy): Standard. Rush TAT: Yes ___ No X
Lab Work Order Number:

Lab Name:	Lancaster Laboratories	BP/ARC Facility Address:	6600 Walmore Rd.	Consultant/Contractor:	AECOM
Lab Address:	2425 New Holland Pike	City, State, ZIP Code:	Wheatfield, NY 14304	Consultant/Contractor Project No:	60481767.16.03
Lab PM:	Kaitlin Plasterer	Lead Regulatory Agency:	NYSDEC	Address:	257 West Genesee St., Suite 400 Buffalo, NY 14202
Lab Phone:	717-656-2300	California Global ID No.:		Consultant/Contractor PM:	James Kaczor
Lab Shipping Accnt:		Enfos Proposal No:		Phone:	716-923-1300
Lab Bottle Order No:		Accounting Mode:	Provision ___ OOC-BU ___ OOC-RM ___	Email EDD To:	James.Kaczor@aecom.com
Other Info:		Stage:	Activity:	Invoice To:	BP/ARC ___ Contractor X
BP/ARC EBM:					
EBM Phone:					
EBM Email:					

Lab No.	Sample Description	Date	Time	Matrix: Soil / Solid	Matrix: Water / Liquid	Matrix: Air / Vapor	No. Containers / Preservative: Total Number of Containers	Unpreserved	HNO3	HCl	NaOH/Zn-acetate	H3PO4	Requested Analyses: VOCs (SW8260B)	Methane, Ethane, Ethene	Sulfate (300.1)	Total Organic Carbon (5310C)	Dissolved Iron 6010B + HL 2326.0: ECS only	Sulfide (SM20 4500)	Carbon Dioxide				Report Type & QC Level
	TB-051816	5-18-16	8:45		X		3			3			X										Standard ___
	PMW-5S	5-18-16	9:00		X		13	4	1	5	1	2	X	X	X	X	X	X	X				Full Data Package X
	PMW-16D	5-18-16	10:40		X		13	4	1	5	1	2	X	X	X	X	X	X	X				Comments: Note: If sample not collected, indicate "No Sample" in comments and single-strike out and initial any preprinted sample description.
																							(Field Filtered & Diss Iron, Sulfate, Sulfide)

Sampler's Name: E. Laity, M. Kuczka	Relinquished By / Affiliation	Date	Time	Accepted By / Affiliation	Date	Time
Sampler's Company: AECOM	[signature] AECOM	5-18-16	1315			
Shipment Method: Fedex Ship Date: 5-18-16						
Shipment Tracking No: 7763 3232 5238				[signature] ELE	5-19-16	905

Special Instructions:

THIS LINE - LAB USE ONLY: Custody Seals In Place: (Yes) / No | Temp Blank: (Yes) / No | Cooler Temp on Receipt: 4.9 °F (C) | Trip Blank (Yes) / No | MS/MSD Sample Submitted: Yes / (No)

BP/ARC LaMP COC Rev. 8 01/01/2009

Project Name: Ekonol
LL Group #: 1663554

General Comments:

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client. The compliance signature is located on the cover page of the Analysis Reports.

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below. Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are not included in this data set

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Preservation requirements were not met.

Analysis Specific Comments:

SM 5310 C-2000, Wet Chemistry

Batch #: 16144049503B (Sample number(s): 8389710-8389711 UNSPK: P388994 BKG: P388994)

The recovery(ies) for the following analyte(s) in the MS was outside the acceptance window: Total Organic Carbon

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Total Organic Carbon

SM 4500-S2 D-2000, Wet Chemistry

Batch #: 16144023001A (Sample number(s): 8389710-8389711 UNSPK: P390404 BKG: P390404)

The recovery(ies) for the following analyte(s) in the MS and/or MSD was outside the acceptance window: Sulfide

The duplicate RPD for the following analyte(s) exceeded the acceptance window: Sulfide

Appendix D

Historical Analytical Data

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

Well ID: INJ- 1

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	5.0 U	5.0 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		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		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		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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
6/3/2009	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
6/3/2009	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
6/4/2009	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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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	2.4E+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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	11	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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	2.6E+03	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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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														7.9								
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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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											

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		440000 BD								32	33											
12/6/2001		950000								50000 U	50000 U											
12/12/2001		4.4E+08								24000000 U	24000000 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											

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	11600000 J	4000000	611000	2500 U	2500 U	2500 U				2500 U	2500 U	5000 U										

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- 2S

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		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 J	60000	44	650	290	400 U	500 U			7.6	1130 J							
6/2/2009	5000 U	31000	230000	1700 J	660 J	28000	40	390	210	5000 U	5000 U	5000 U	4.39	7.5	1120	0.98 U						
7/13/2010	2500 U	2500	250000	1700 J	680 J	32000	30	320	120	2500 U	2500 U	2500 U	4.23	7.9	1270 J	0.16 U						
6/29/2011	1300 U	6400	230000	1400	610 J	26000	12	76	56	1300 U	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 U	220000	1400	490 J	24000	12	120	55	500 U	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	500 U	1.32	5.4	868	0.16 U	6.95	2.1E+05	1.2E+02	3.4E+05	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	1000 U	1.28	5	1100 J	0.16 U	6.5	2.5E+05	1.0E+02	2.3E+05	1.5E+02	1.4E+03
6/20/2012	250 U	600	250000	1700	560	27000	62	390	1800	250 UJ	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	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	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	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	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	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	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	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	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	500 U	3.4	4.4			6.85					
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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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										

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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							

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-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	8.9	130	46	5.0 U	4.4 J	5.0 U				590 D	5.9	10 U										

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		4.3 BJ								5.0 U	5.0 U											
12/6/2001		2.3 J								5 U	5 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				5.0 U	5.0 U											
10/28/2003		5.0 U				5.0 U				5.0 U	5.0 U											
5/19/2004		5 U				5 U				5 U	5 U											
6/22/2004		2.4 J				5.0 U				5.0 U	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		5.3	13.1							
5/29/2008	5 U	5 U	1.8 J	5 U	5 U	5 U	5 U	5 U	11	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	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	1.93		2610	0.16 U						
6/22/2011	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	16	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	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	5 U	32	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	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	5 U	15 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	2.6 J	5 U	240	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	5 U	140	5 U	5 U	5 UJ	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	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	2.8 J	1.5 J	150	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	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	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	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	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	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	17	1 U	1 U	1 U	0.236 J	76.3	215	0.16 U						

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		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											

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		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 UJ	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			6.68					
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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		29								5.0 U	5.0 U											
11/4/2002		0.68 J								1.0 U	1.6											
9/18/2003		3.4 J				210 D				5.0 U	5.4											
10/29/2003		3.9 J				140				5.0 U	4.4 J											
5/17/2004		5 U				190 D				5 U	5.6											
6/22/2004		11				120				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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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											
10/29/2003		2.9 J				5.0 U				5.0 U	5.0 U											
5/17/2004		5 U				5 U				5 U	5 U											
6/22/2004		12				5.0 U				1.2 J	5.0 U											
8/29/2005		1.0 U	1	1.0 U	1.0 U	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	1 U	2 U										
5/28/2008	5 U	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 UJ	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	5 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	1.0 U	1.0 U	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	5.0 U	5.0 U	5.0 U	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 UJ	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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				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	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	1.0 U	1.0 U	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					

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-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
7/2/2002		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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		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										
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					

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-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
7/3/2002		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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	5.0 U	5.0 U	5.0 U	5.0 U	2.0 U	37	1.0 U	210	5.0 U	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	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	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	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	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	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	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	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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														16.7	1650							
9/21/2006	20 U	3050	2210	20 U	21	136	12 U	17 U	52.2	1420	140	40 U										
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					

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-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
9/25/2002		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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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											
9/22/2003		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											
5/17/2004		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		1.0 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	5.0 U	5.0 U	5.0 U	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
9/15/2003		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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
5/18/2004		5 U				5 U				5 U	5 U											
6/22/2004		3.1 J				5.0 U				5.0 U	5.0 U											
8/30/2005		1.0 U	1.0 U	1.0 U	1.0 U	1.0 U				1.0 U	1.0 U	1.0 U										
9/22/2006	1 U	1 U	1 U	1 U	1 U	1 U				1 U	1 U	2 U										
5/28/2008	5 U	5 U	5 U	5 U	5 U	5 U				5 U	5 U											
5/28/2009	5.0 U	5.0 U	5.0 U	5.0 U	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	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	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	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	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			6.63					
5/17/2016	1.0 U	1.0 U	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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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 UJ	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	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	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	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	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					

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-20D

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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		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										
6/26/2012							5 U	3.7 J	42								7.41					
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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	5 UJ	5 UJ	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	50 U	50 U	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	50 U	50 U	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	1.0 U	1.0 U	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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	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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	11 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	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	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

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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 UJ	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	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					

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-10SM

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	50 UJ	50 UJ	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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	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	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	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	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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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
8/23/2011																	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	25 U	25 U	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	50 U	50 U	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 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	4.1 J	2.3 J	13000	50 UJ	50 UJ	50 UJ	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	50 U	50 U	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	25 U	25 U	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	25 U	25 U	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 UJ	50 UJ	50 UJ	50 UJ	50 UJ	50 UJ	14 J	14 J	12000 J	50 UJ	50 UJ	50 UJ	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 U	25 U	25 U	25 U	25 U	25 U	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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	0 R	55.5	83.6	3 J	0.13 J	6.8					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	4.8E+03	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	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	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			6.23					
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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	5000 U		237	1520							
9/30/2008	1300 U	5900	91000	990 J	140 J	1400	9.1	10	77	1300 U	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	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	1000 U	0.0322 J	105	2000	173						
6/4/2009			270000 J	1600 J	580 J	2400 J				3000	260 J	2500 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	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	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	1000 U	0.4 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	250 U	0.4 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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 UJ	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
7/1/2011	100 U	28 J	10000	170	16 J	1400	13	59	1200	100 U	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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- 7S

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
7/1/2011	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						
6/22/2012	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	2500	360000	57000	500 U	160 J	440 J	5.7	8.7	50	400 J	500 U	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	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	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	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	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	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	500 UJ	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	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	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	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					

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- 9S

Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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	0.5 U
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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	12	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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		3.0E+00	1.3E+01	6.9E+01	0.1 J	6.0E-01

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	1.8E+03	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

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	3.8E+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			6.55					
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

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
3/22/2012																		8.7E+05	7.8E+03	3.3E+06	7.2E+02	1.4E+04

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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	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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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	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	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

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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							

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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					

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-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
12/3/2001		6 U								6 U	6 U											
12/5/2014	1 U	1 U	1 U	1 U	1 U	1 U				1 U	1 U	1 U										

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)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	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 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)
12/4/2001		6 U								6 U	24											

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

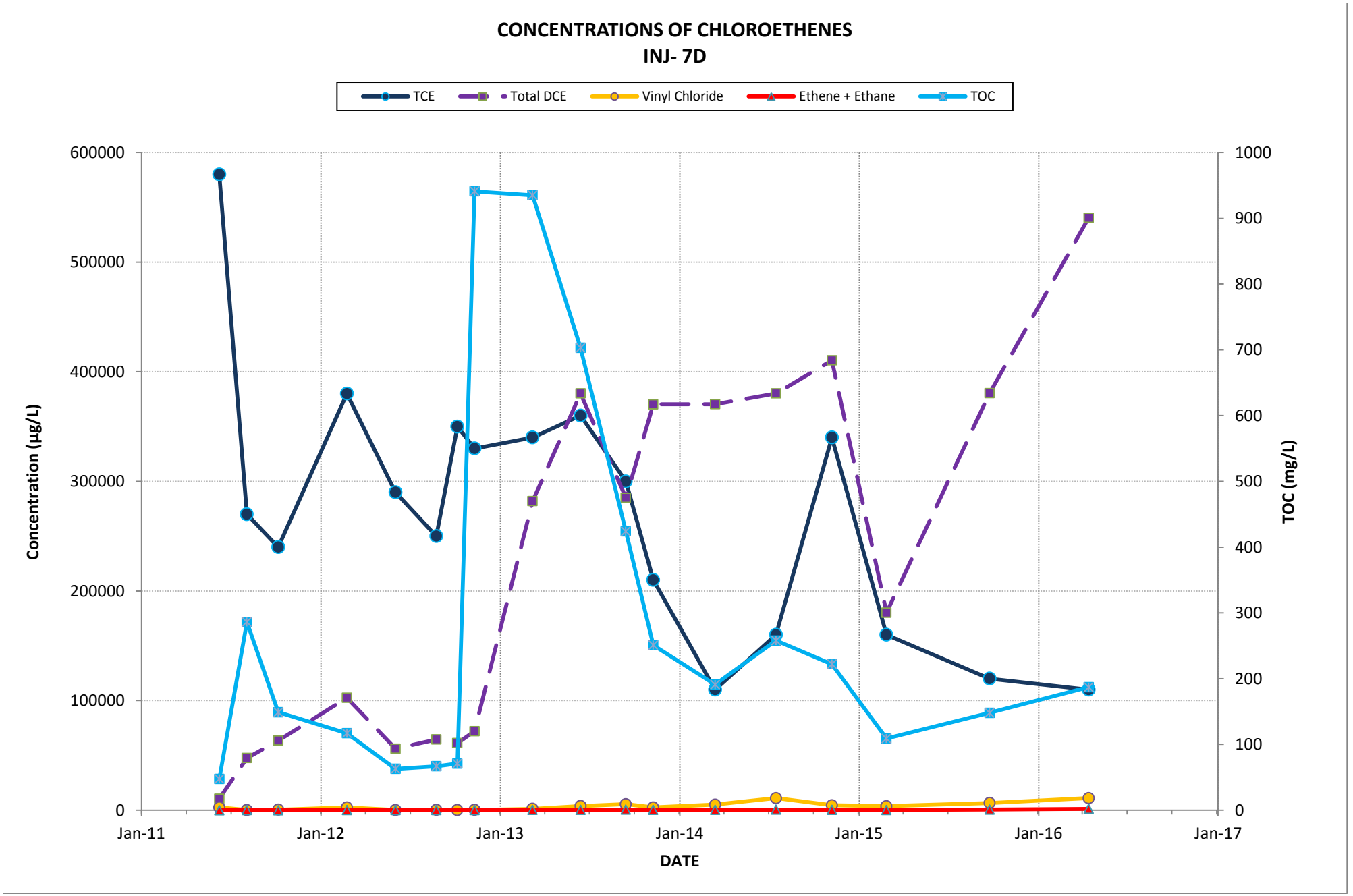
Date	PCE (µg/L)	TCE (µg/L)	Cis-1,2-DCE (µg/L)	Trans-1,2-DCE (µg/L)	1,1-DCE (µg/L)	Vinyl Chloride (µg/L)	Ethane (µg/L)	Ethene (µg/L)	Methane (µg/L)	1,1,1-Trichloroethane (µg/L)	1,1-Dichloroethane (µg/L)	Chloroethane (µg/L)	Dissolved Iron (mg/L)	TOC (mg/L)	Sulfate (mg/L)	Sulfide (mg/L)	pH (s.u.)	BVC (cells/ml)	DHBt (cells/ml)	DHC (cells/ml)	TCEr (cells/ml)	VCR (cells/ml)
12/4/2001		7 U								7 U	7 U											

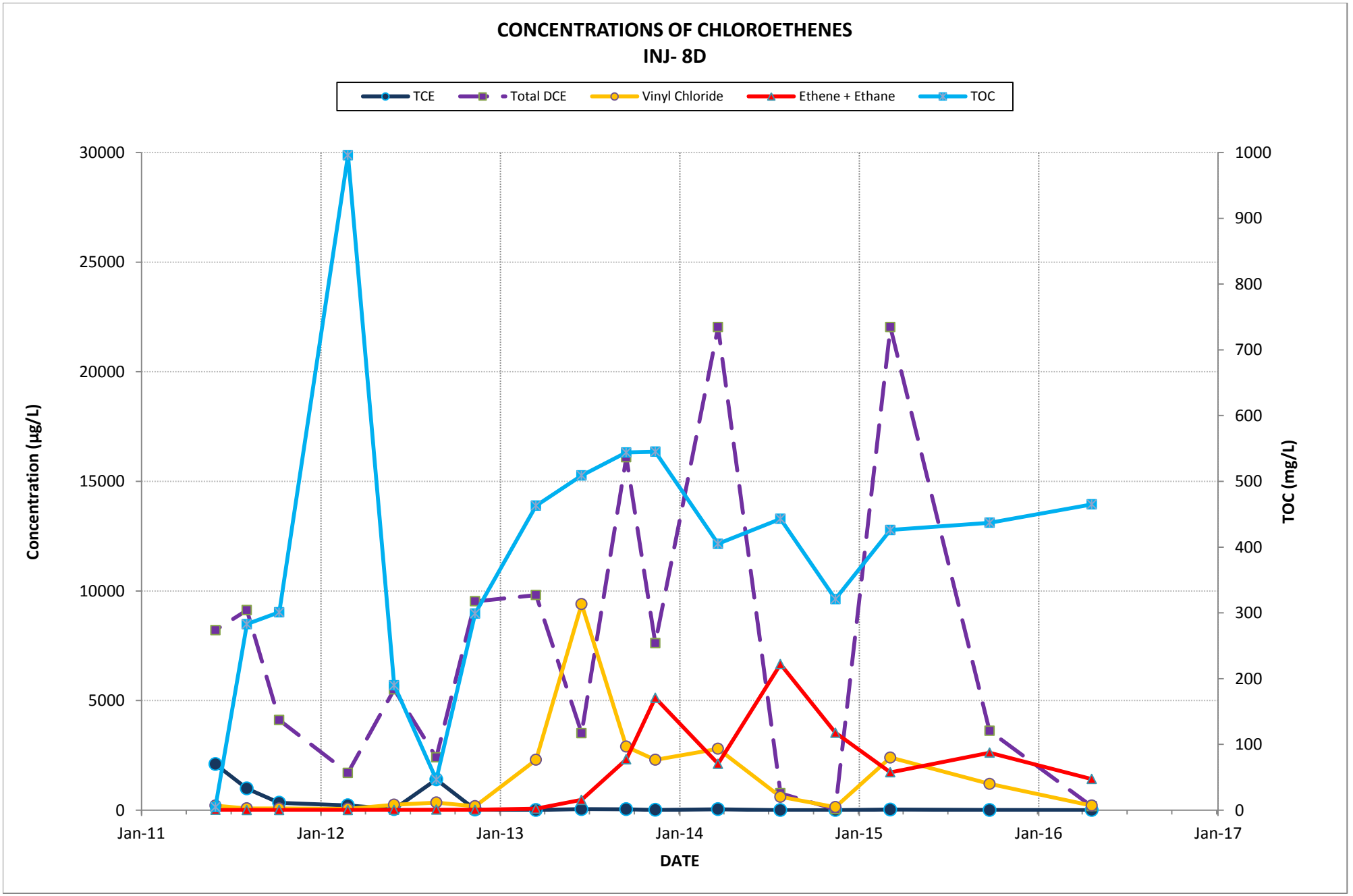
J Indicates an estimated value
U Analyte was not detected above the reporting limit
UJ The analyte was not detected. The reporting limit is an approximate value
J- Indicates estimated value, biased low
J+ Indicates estimated value, biased high
D Result reported from a secondary dilution analysis
R The sample results are rejected

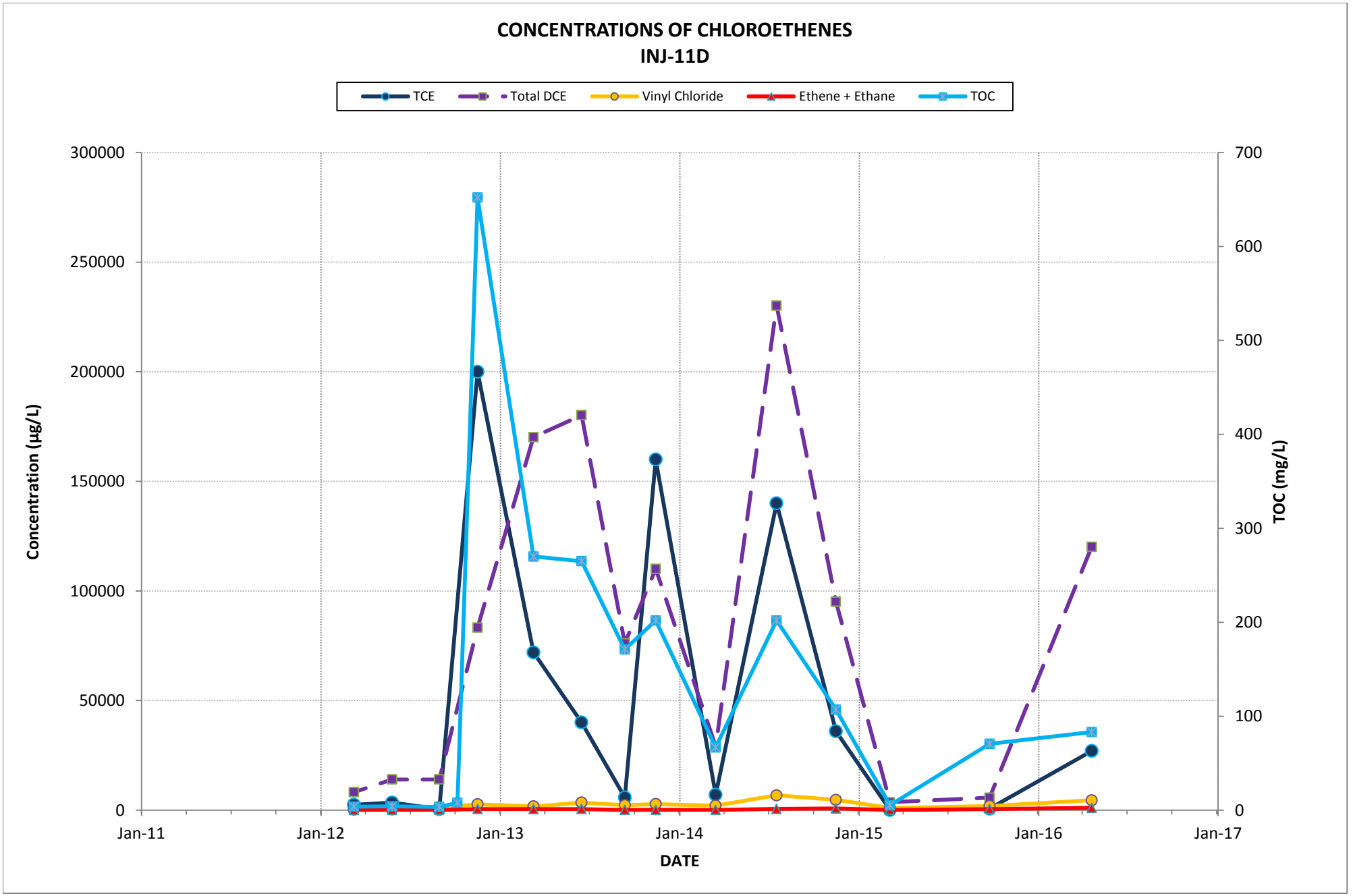
µg/L micrograms per liter
mg/L milligrams per liter
cells/ml cells per milliliter
s.u. standard units

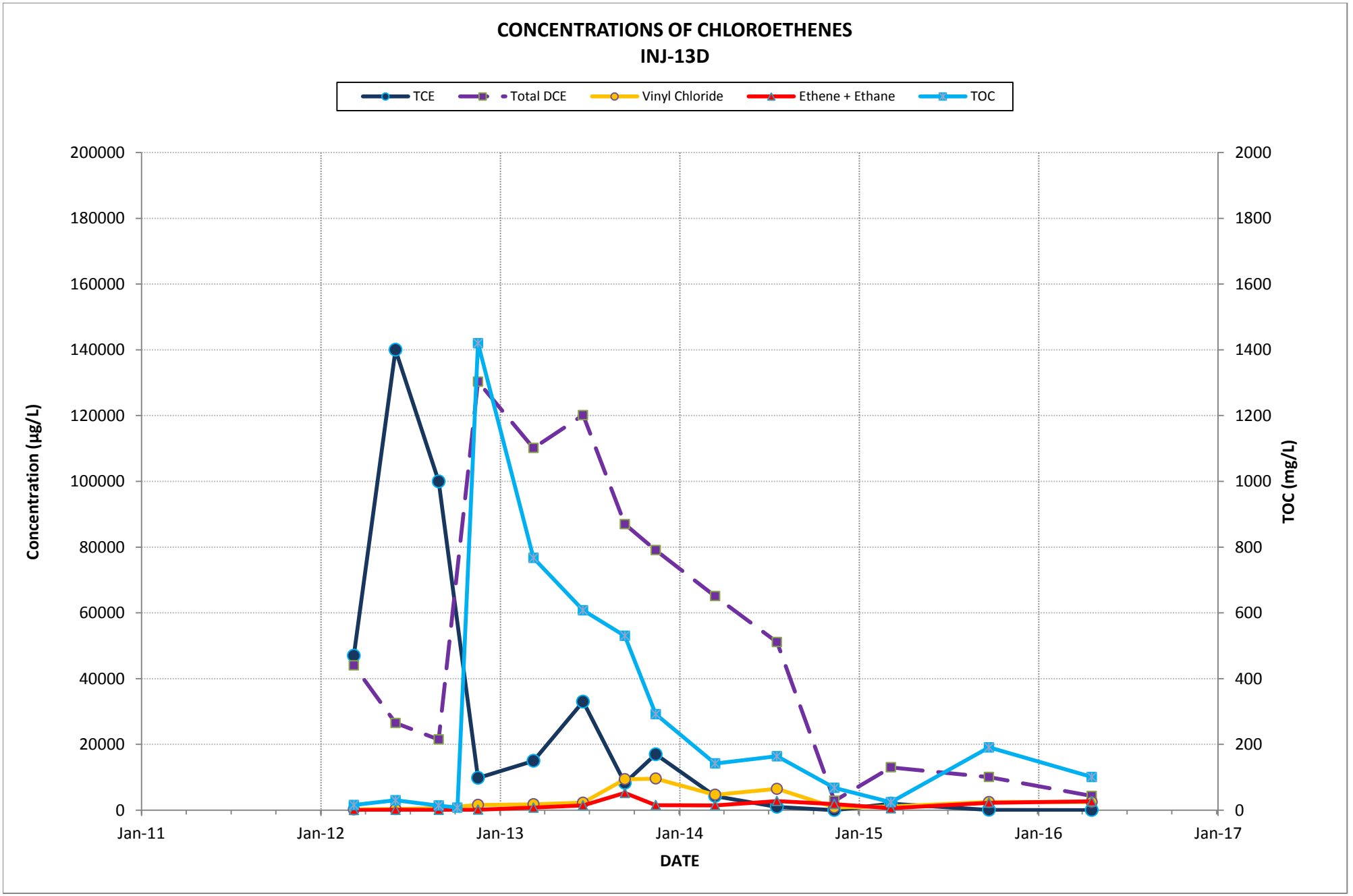
Appendix E

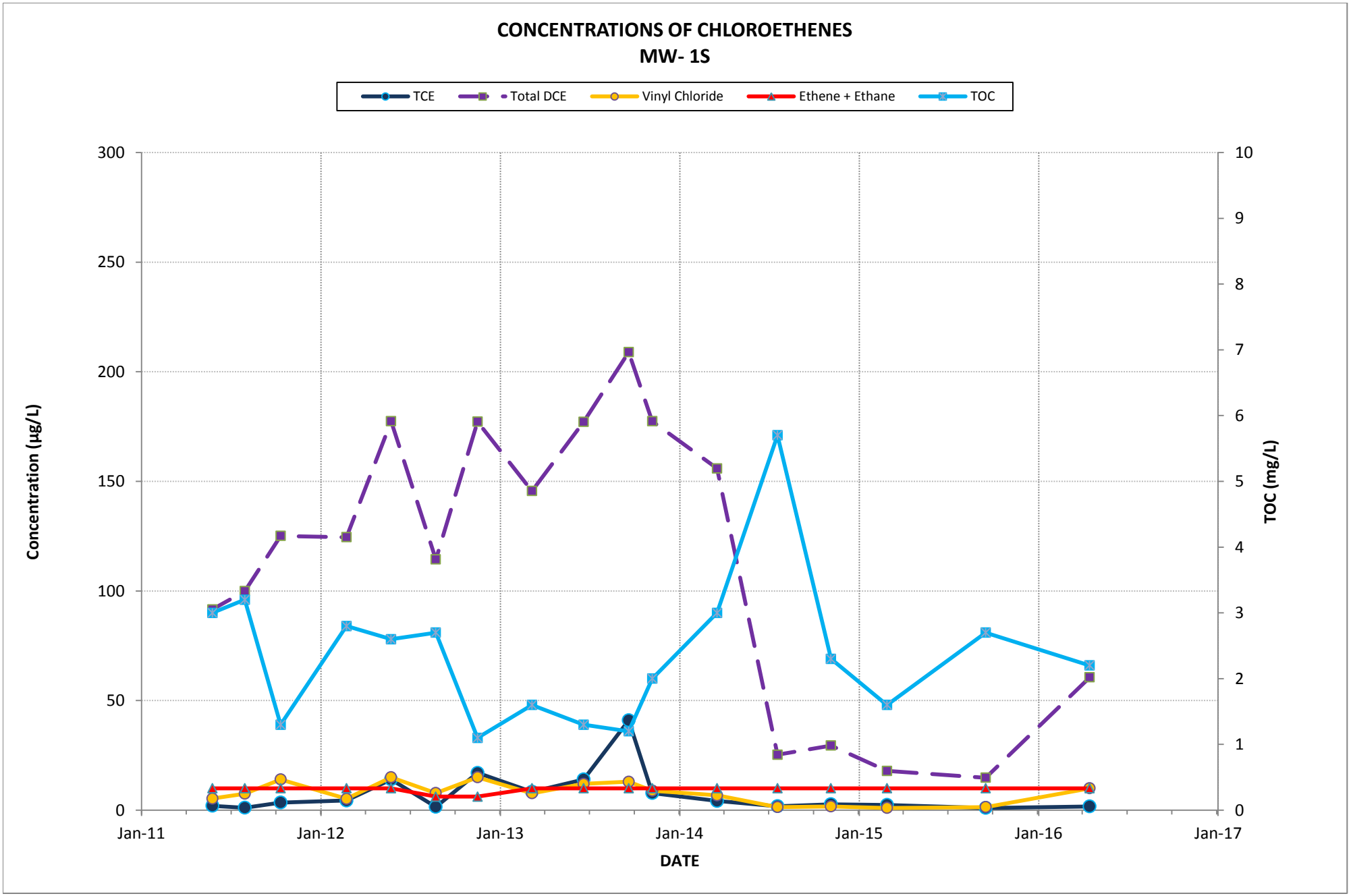
Time Series Plots for Wells Sampled

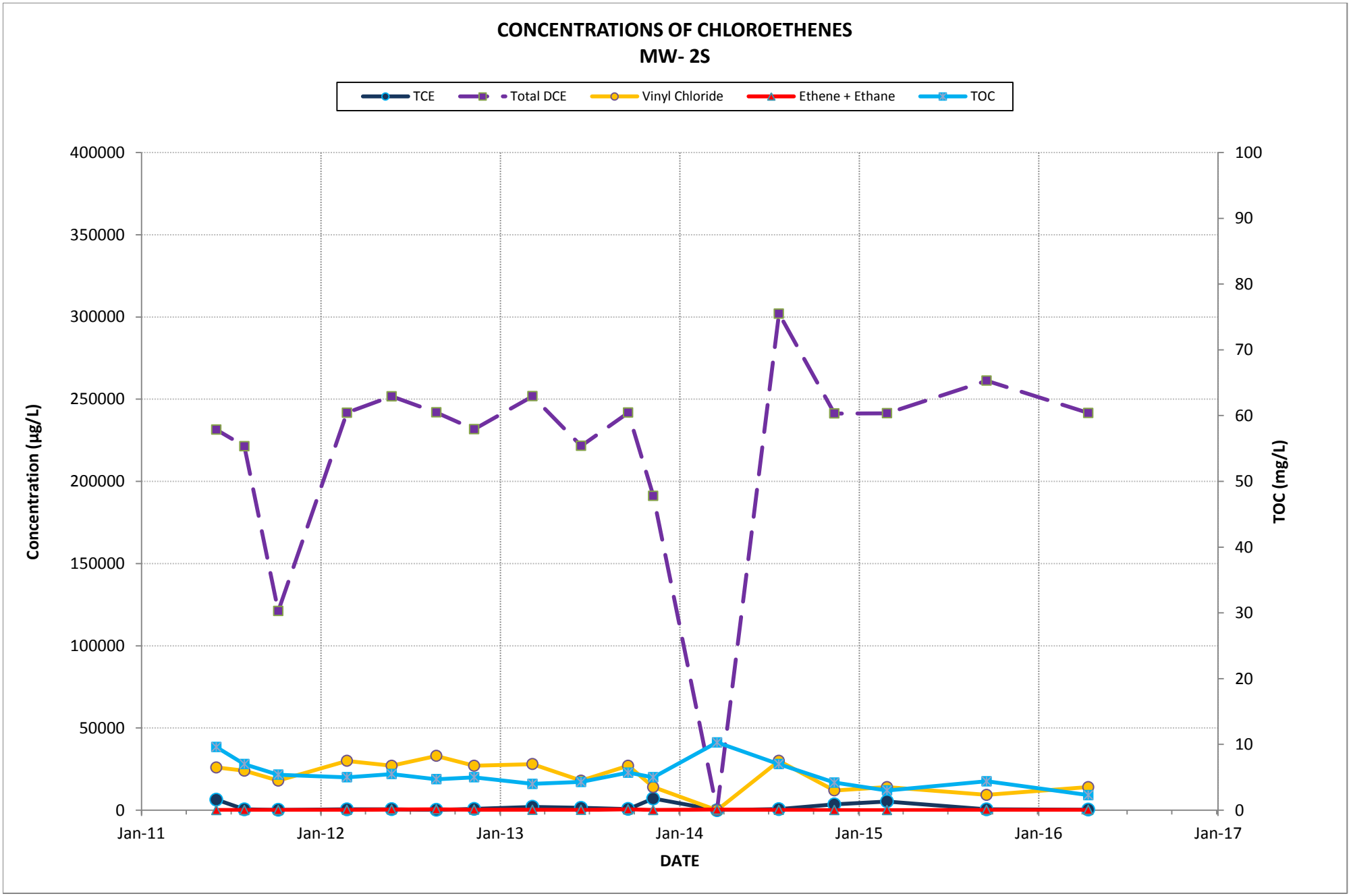

CONCENTRATIONS OF CHLOROETHENES
INJ- 7D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
600000
500000
400000
300000
200000
100000
0
1000
900
800
700
600
500
400
300
200
100
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

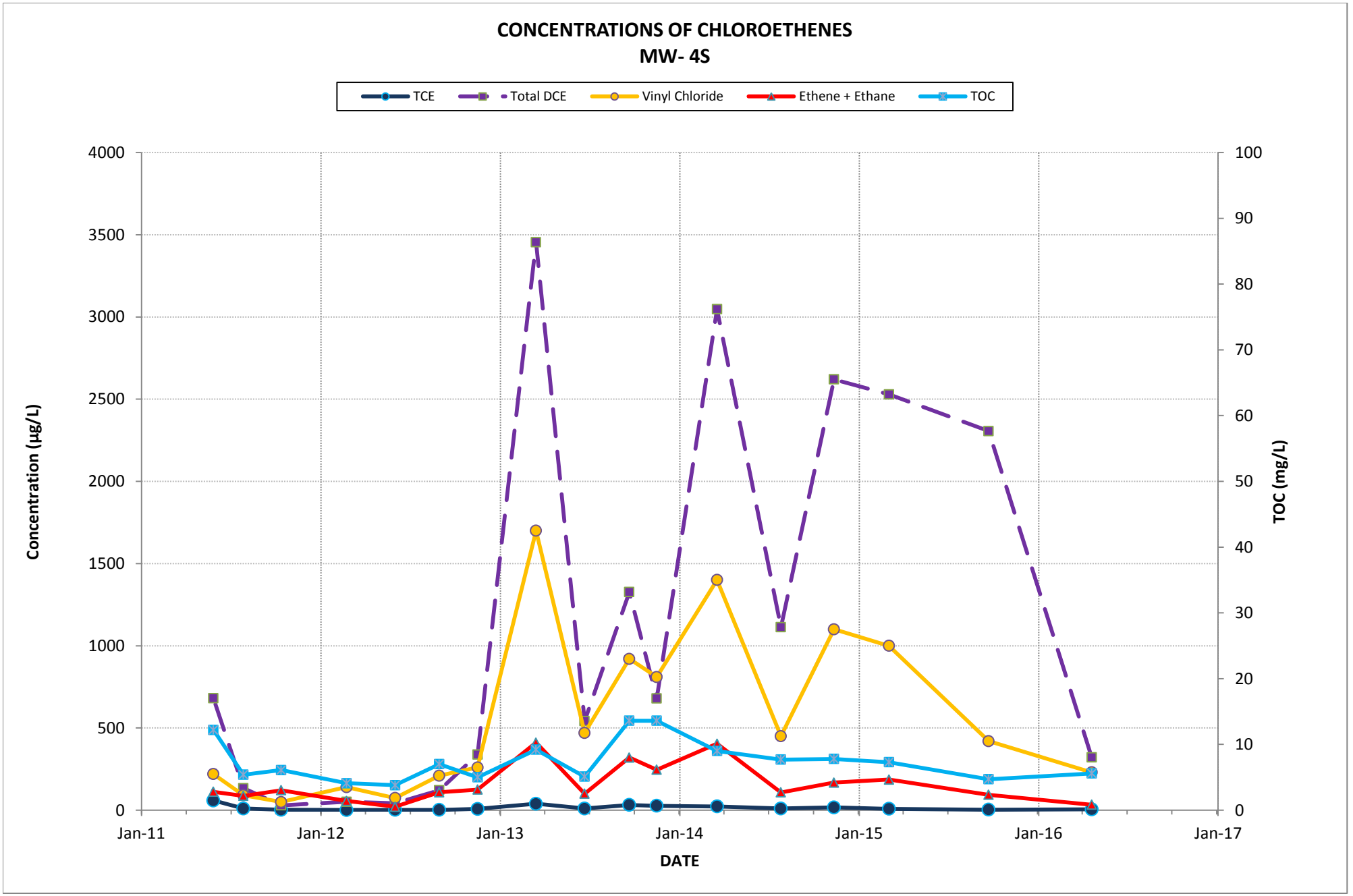

CONCENTRATIONS OF CHLOROETHENES
INJ- 8D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
0
5000
10000
15000
20000
25000
30000
100
200
300
400
500
600
700
800
900
1000
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

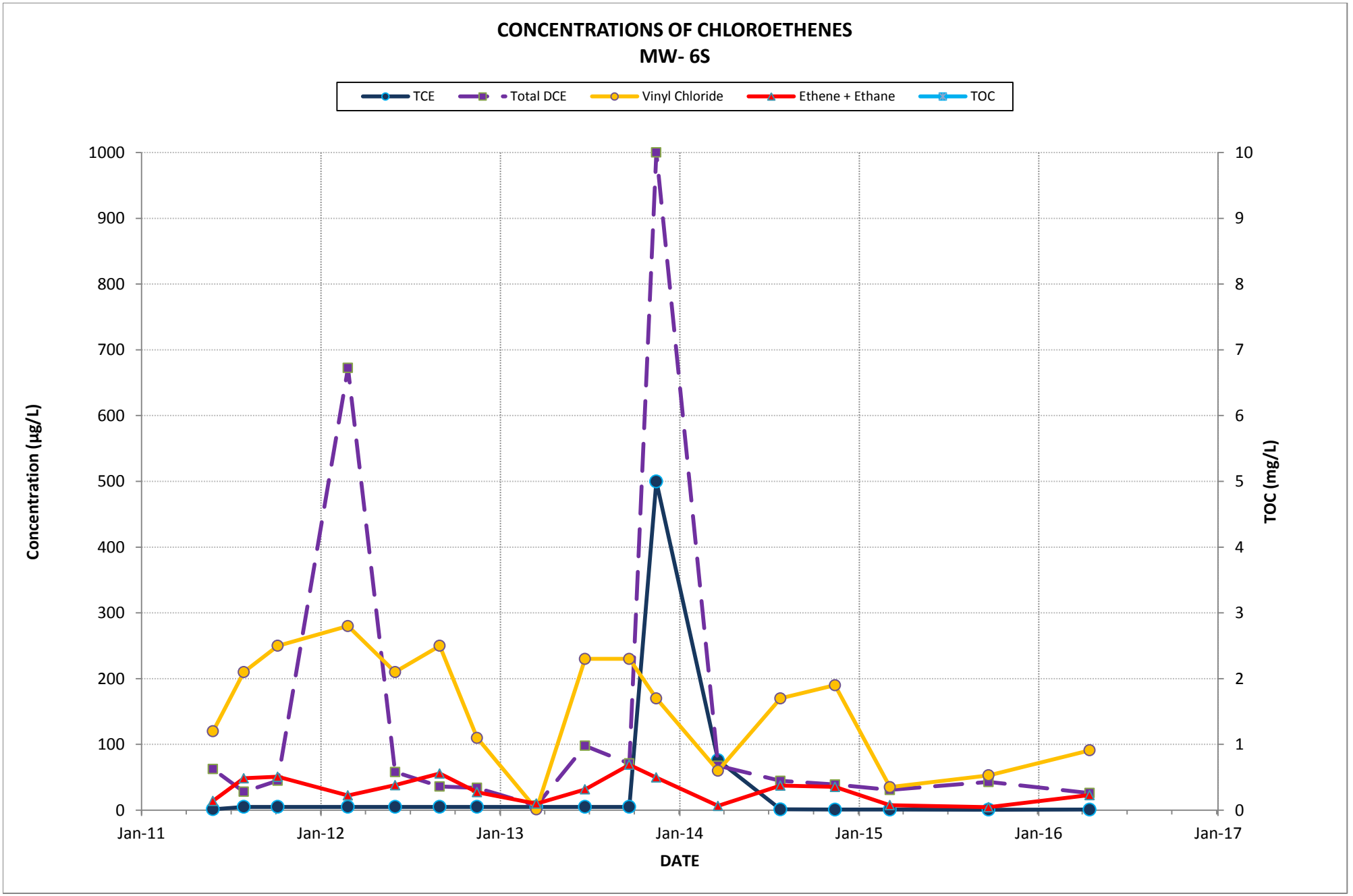

CONCENTRATIONS OF CHLOROETHENES
INJ-11D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
300000
250000
200000
150000
100000
50000
0
Concentration (µg/L)
700
600
500
400
300
200
100
0
TOC (mg/L)
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

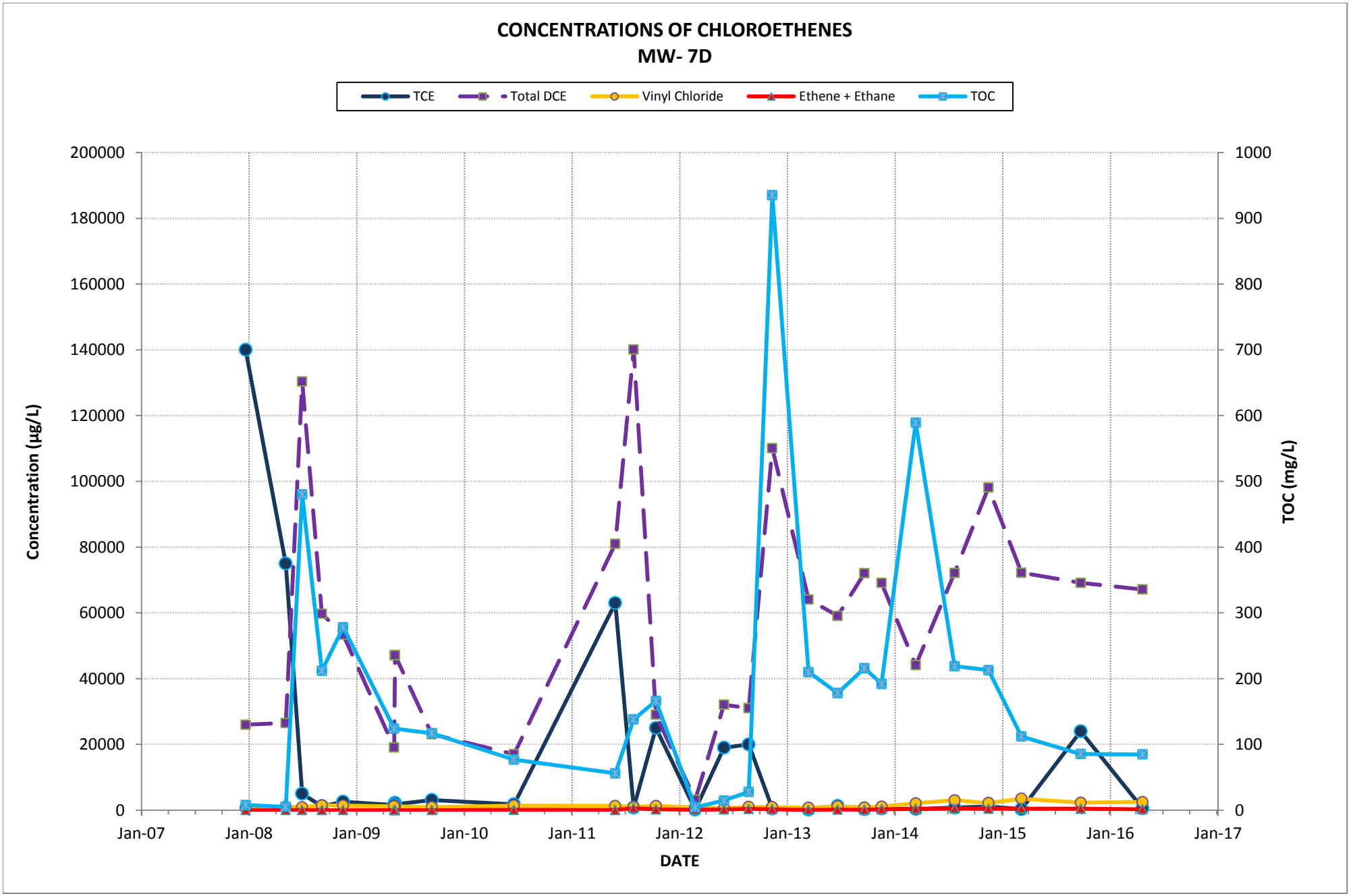

CONCENTRATIONS OF CHLOROETHENES
INJ-13D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

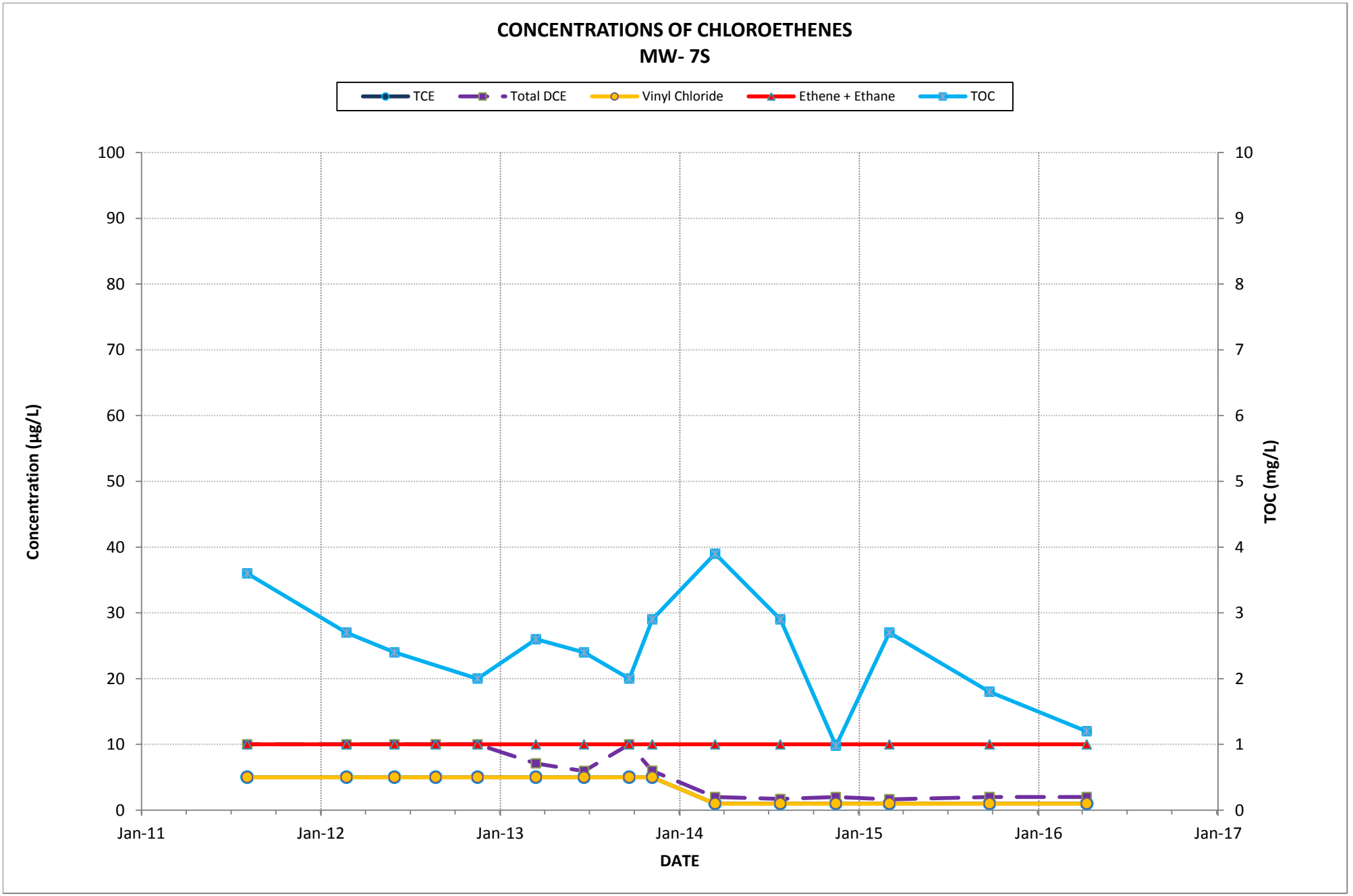

CONCENTRATIONS OF CHLOROETHENES
MW- 1S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
300
250
200
150
100
50
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

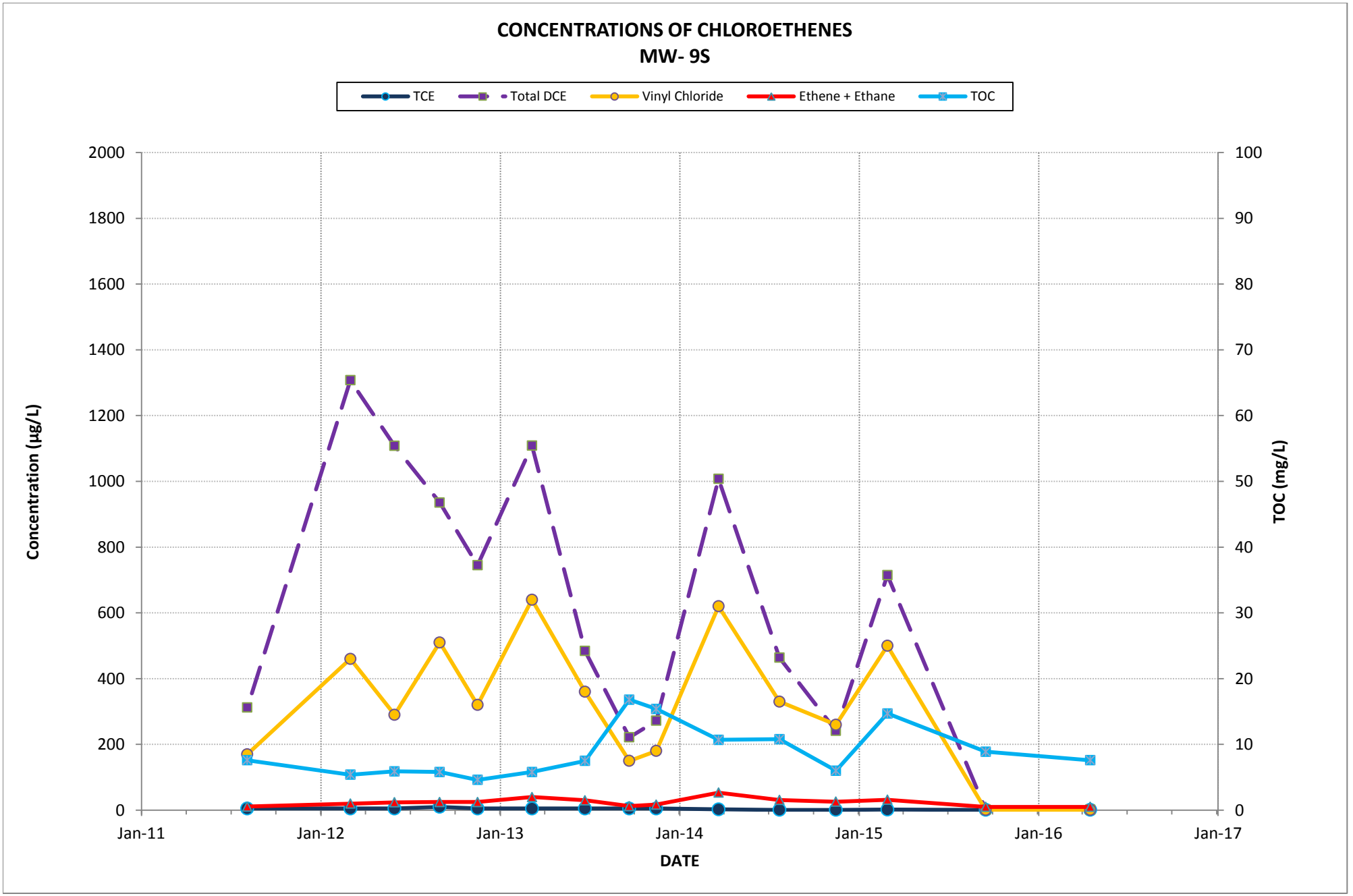

CONCENTRATIONS OF CHLOROETHENES
MW- 2S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
400000
350000
300000
250000
200000
150000
100000
50000
0
100
90
80
70
60
50
40
30
20
10
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

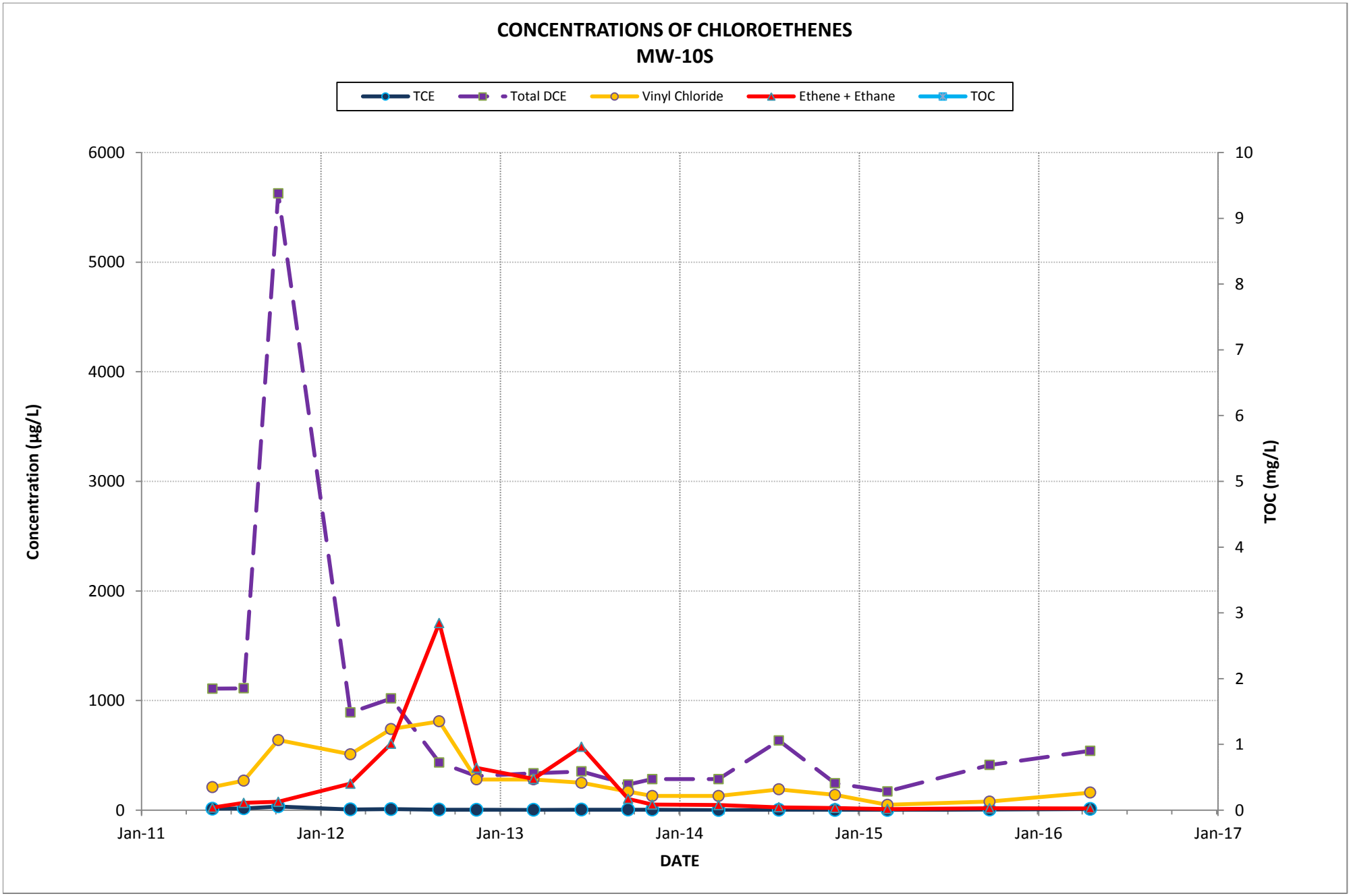

CONCENTRATIONS OF CHLOROETHENES
MW- 4S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
4000
3500
3000
2500
2000
1500
1000
500
0
100
90
80
70
60
50
40
30
20
10
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

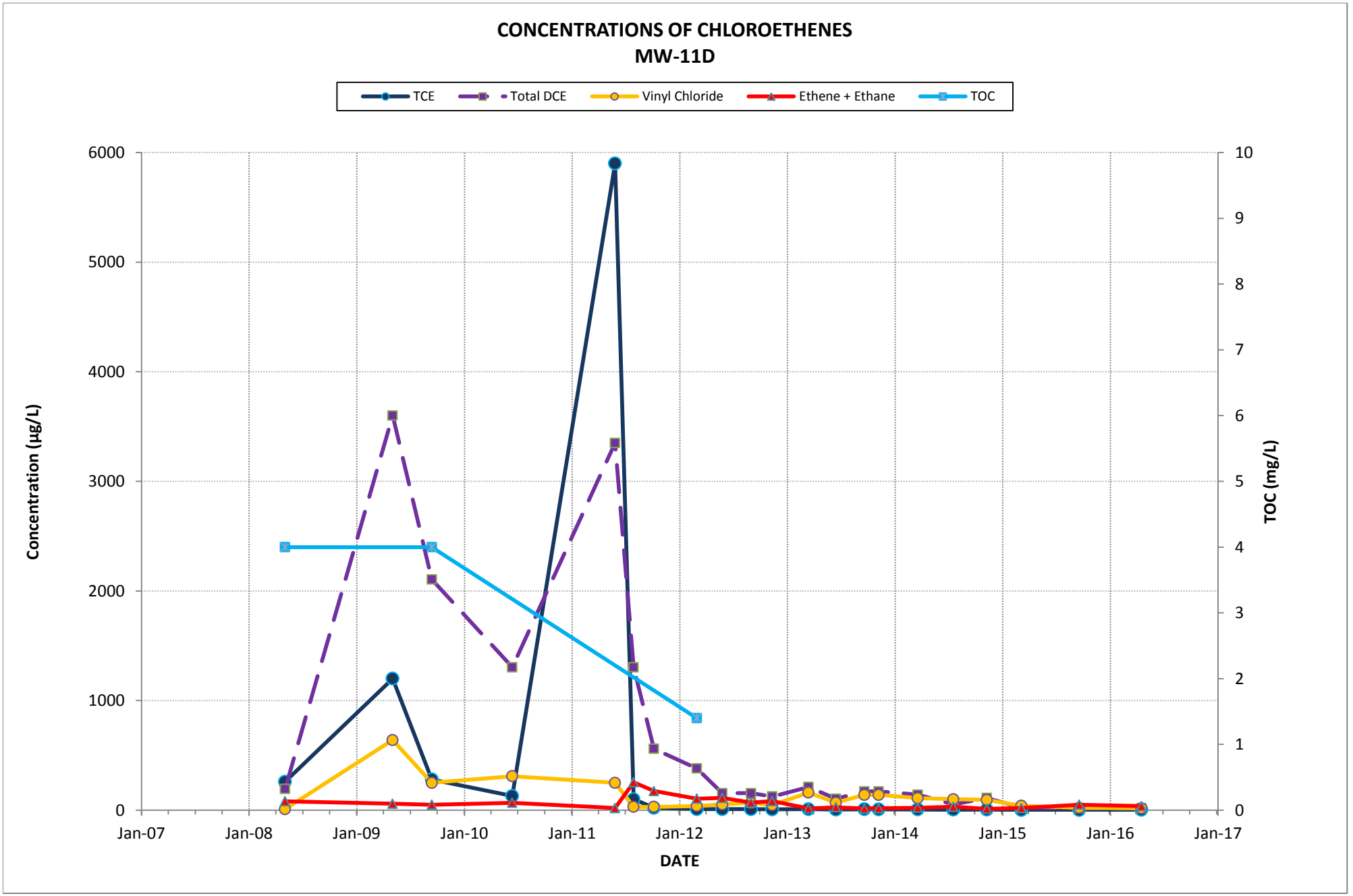

CONCENTRATIONS OF CHLOROETHENES
MW- 6S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
1000
900
800
700
600
500
400
300
200
100
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

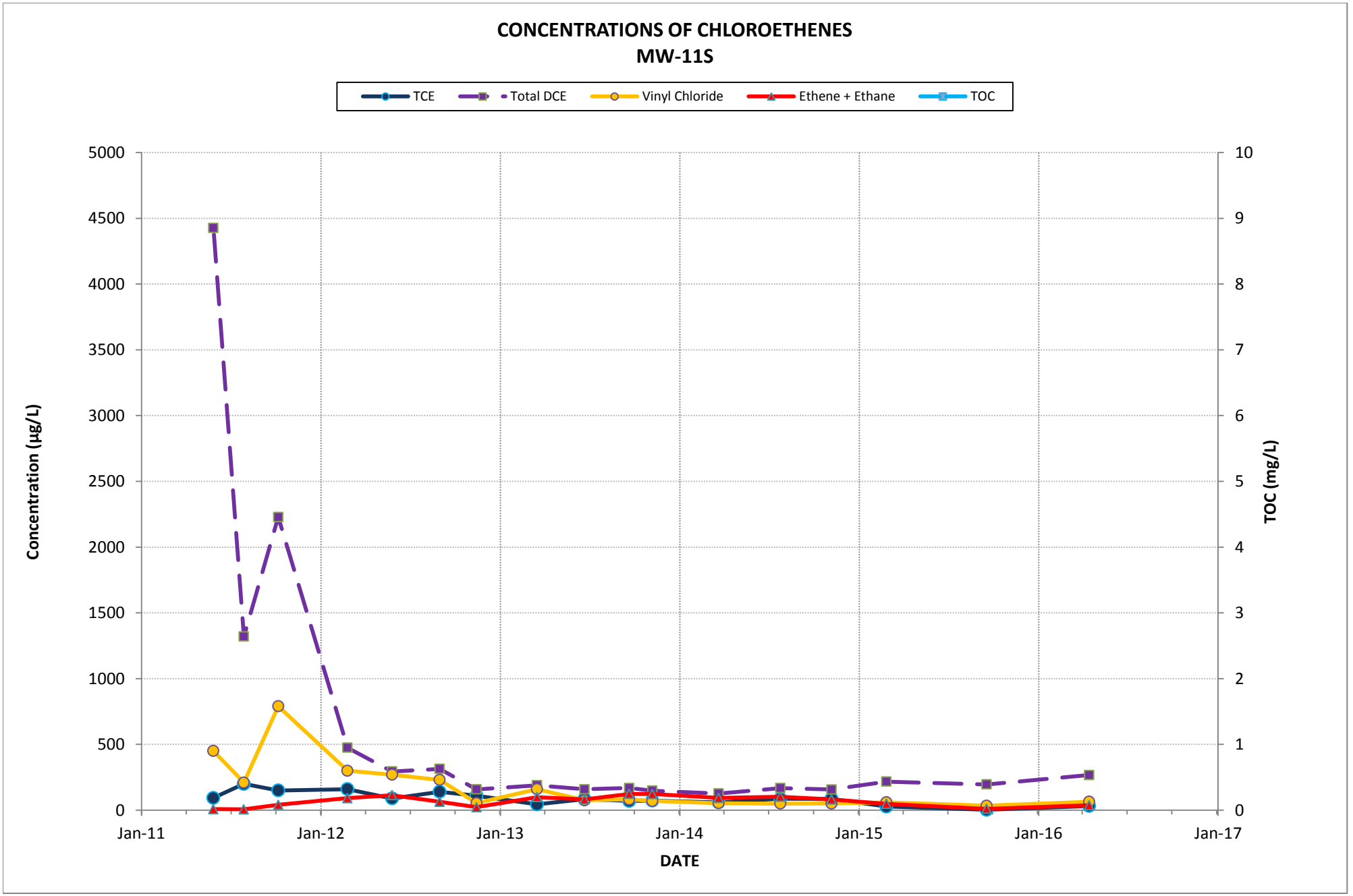

CONCENTRATIONS OF CHLOROETHENES
MW- 7D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
1000
900
800
700
600
500
400
300
200
100
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

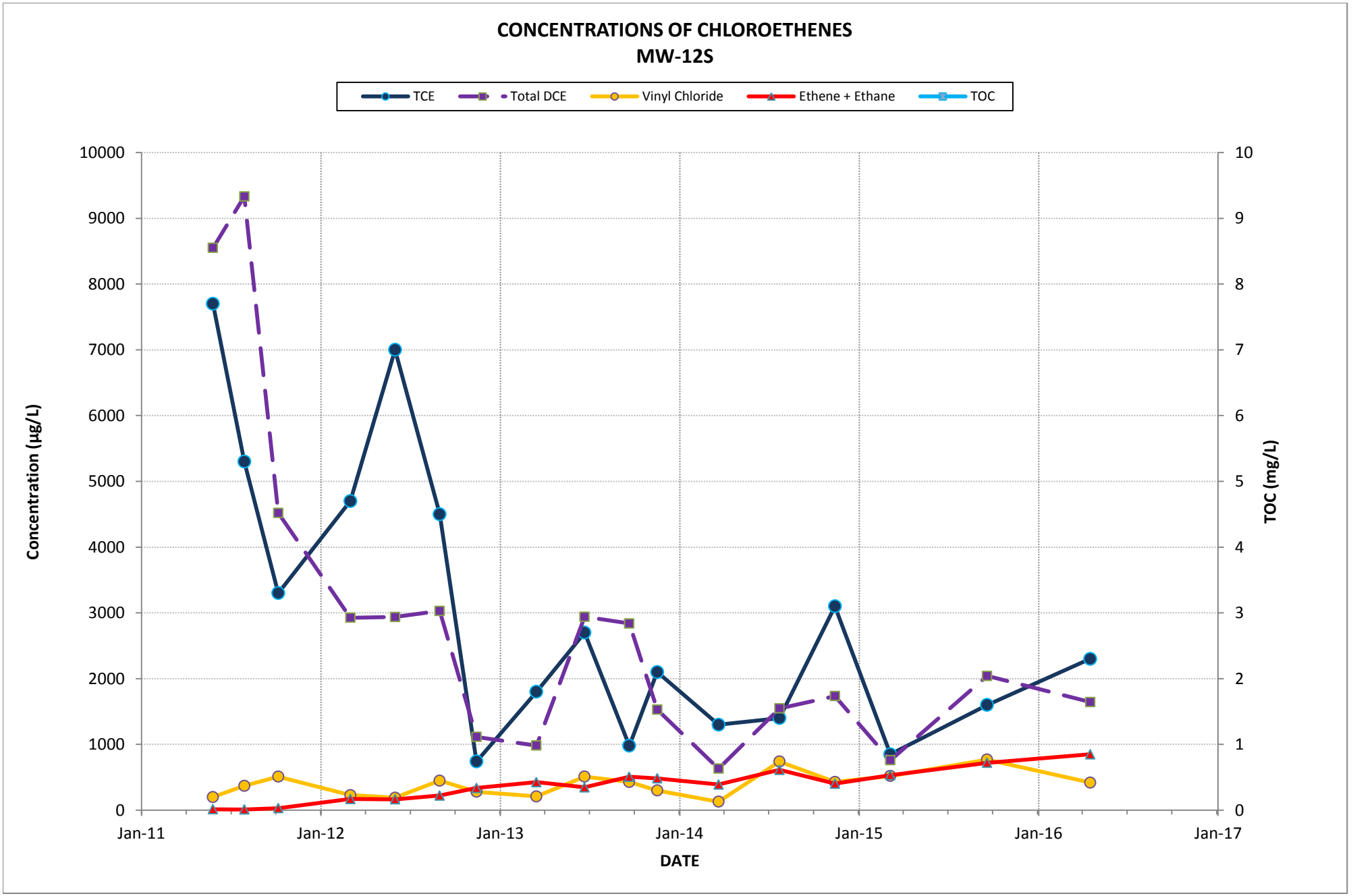

CONCENTRATIONS OF CHLOROETHENES
MW- 7S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
100
90
80
70
60
50
40
30
20
10
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

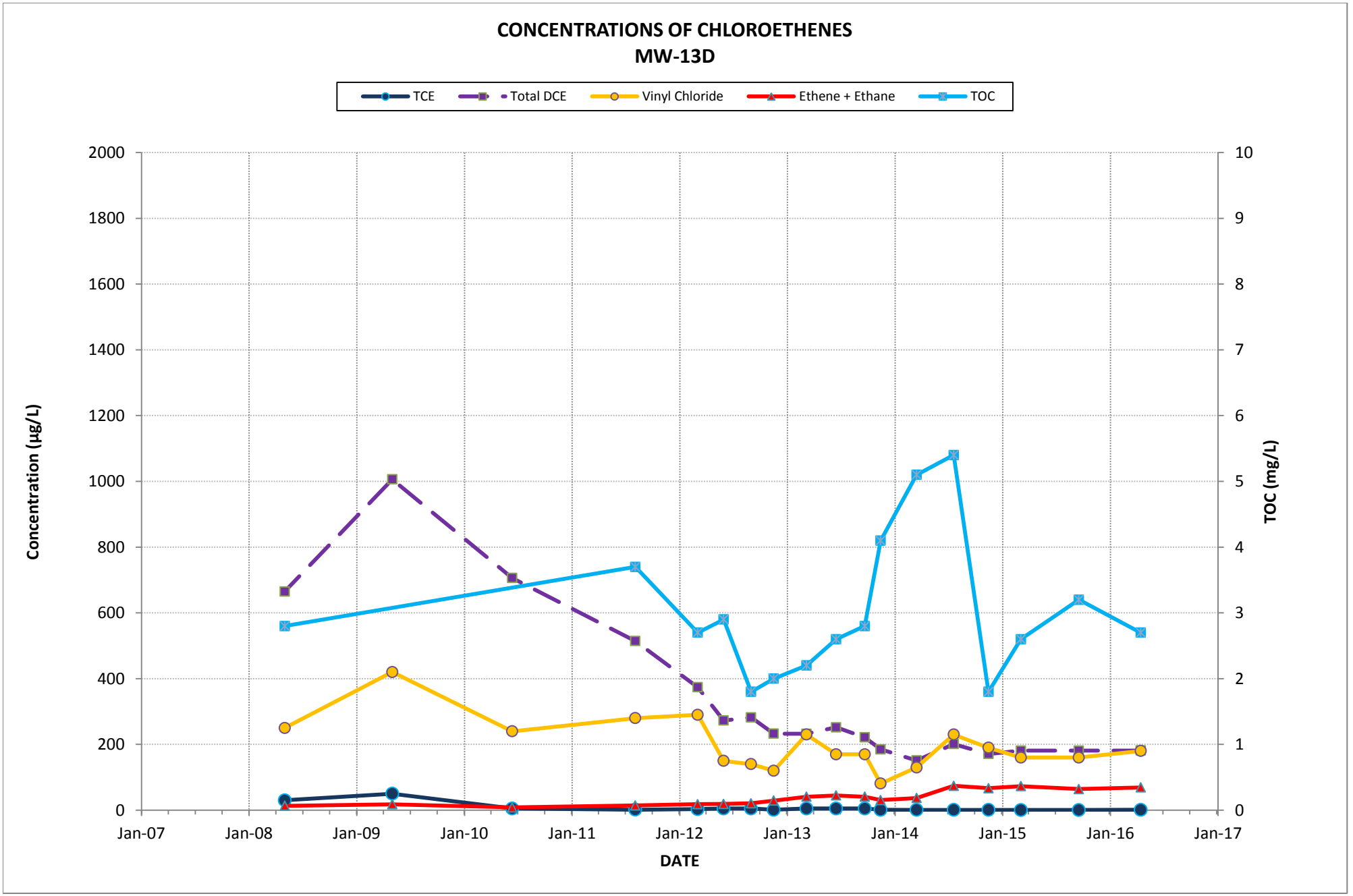

CONCENTRATIONS OF CHLOROETHENES
MW- 9S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
2000
1800
1600
1400
1200
1000
800
600
400
200
0
100
90
80
70
60
50
40
30
20
10
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

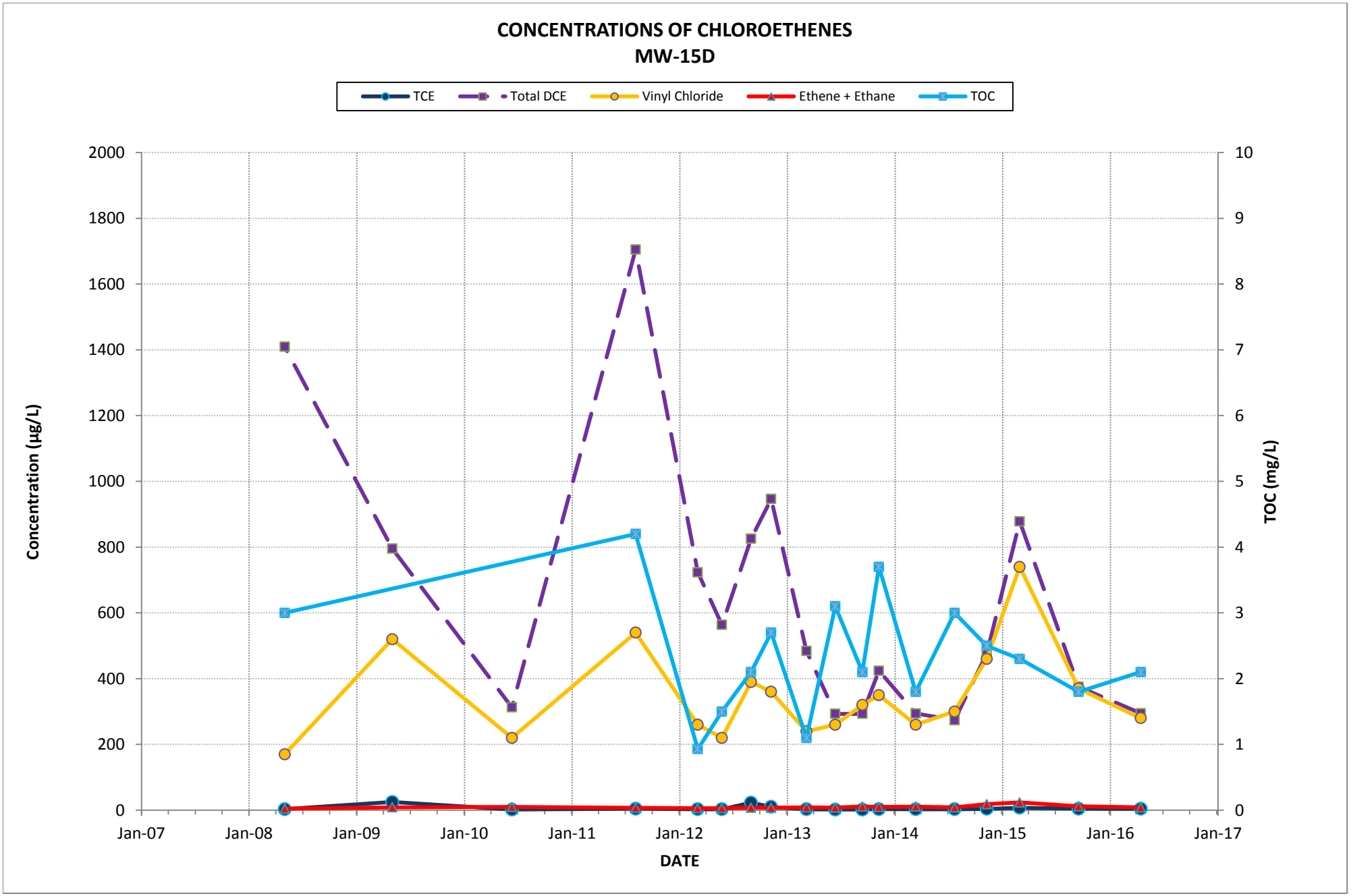

CONCENTRATIONS OF CHLOROETHENES
MW-10S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
6000
5000
4000
3000
2000
1000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

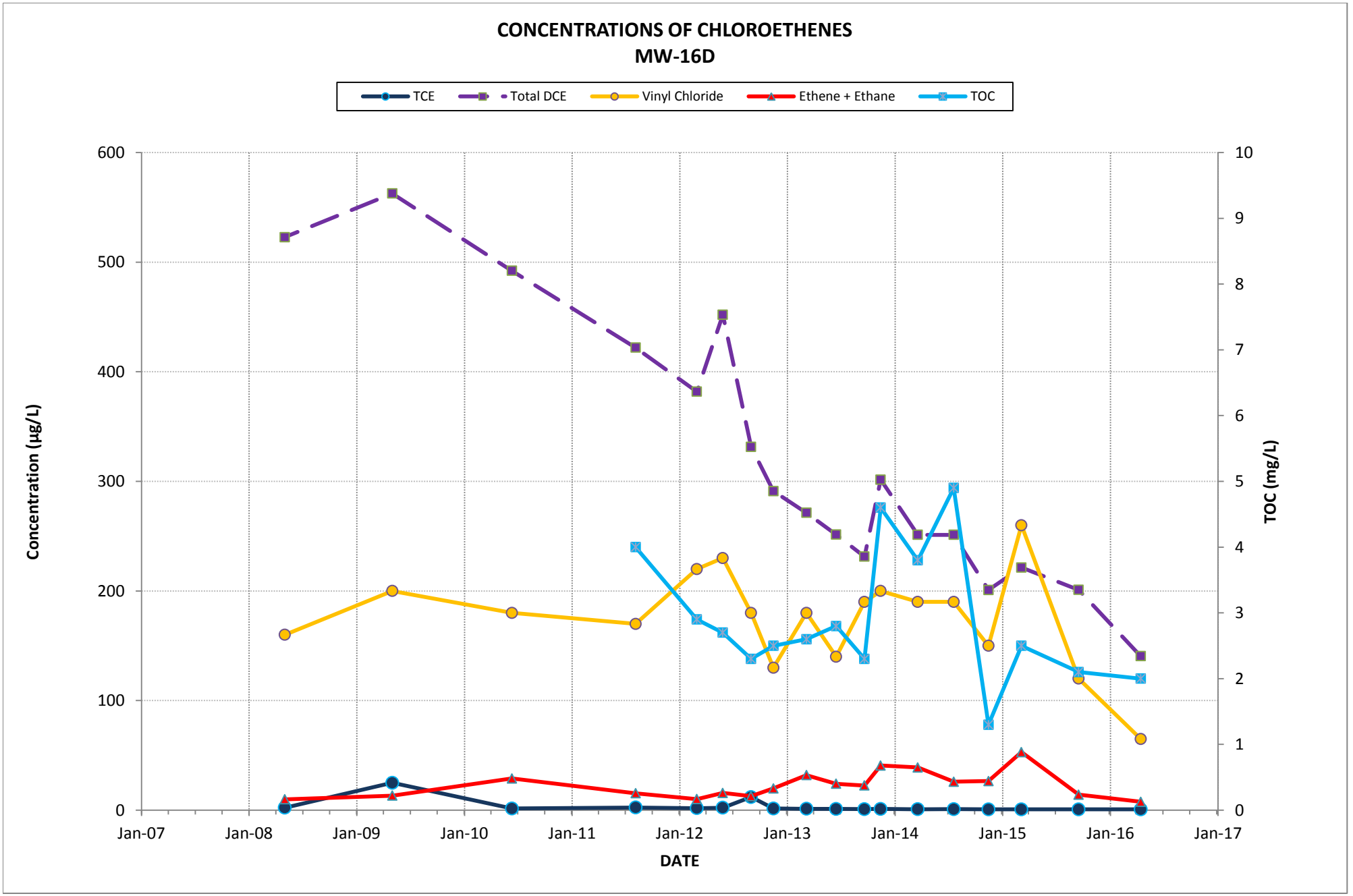

CONCENTRATIONS OF CHLOROETHENES
MW-11D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
6000
5000
4000
3000
2000
1000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

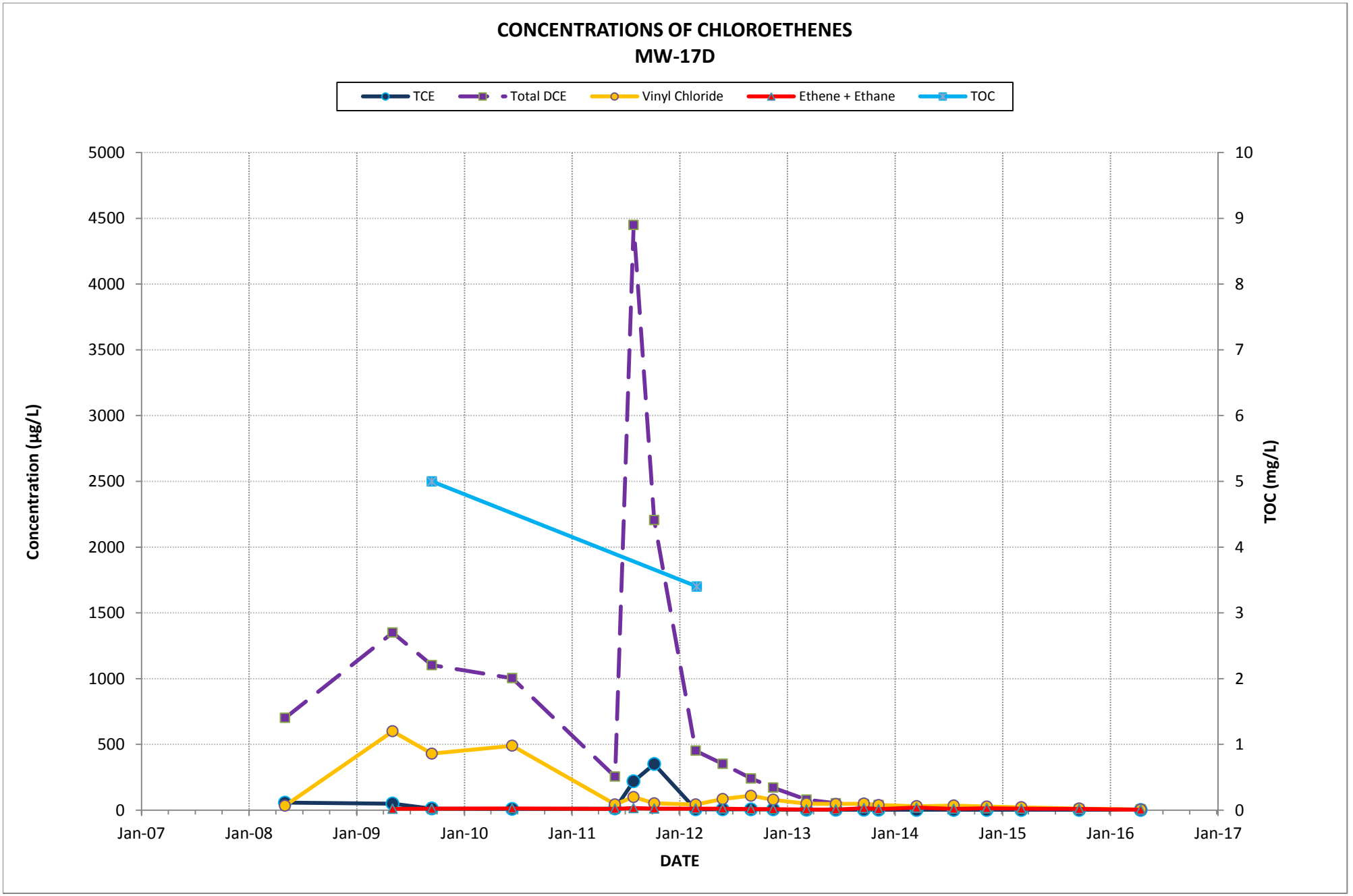

CONCENTRATIONS OF CHLOROETHENES
MW-11S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

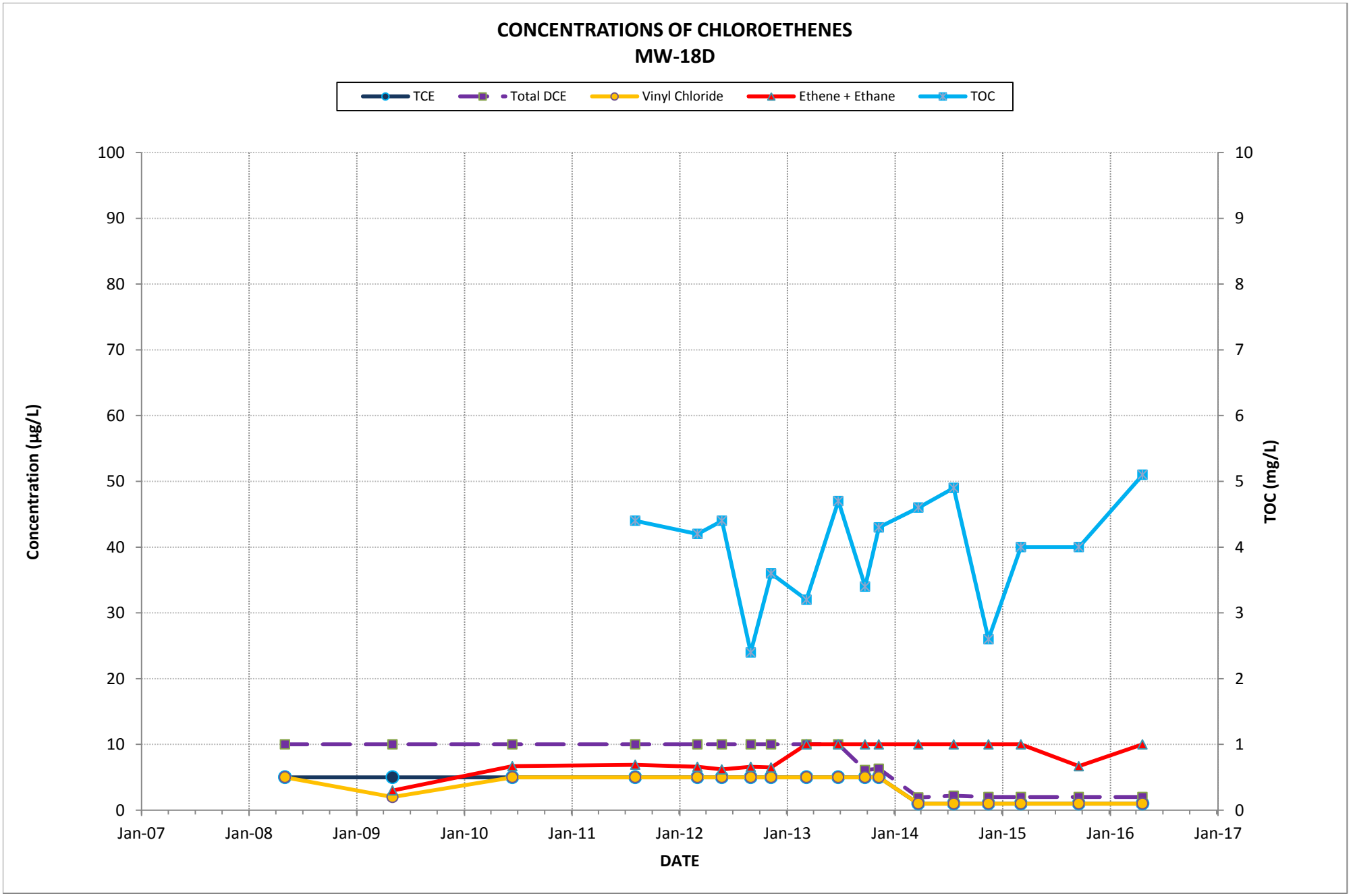

CONCENTRATIONS OF CHLOROETHENES
MW-12S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

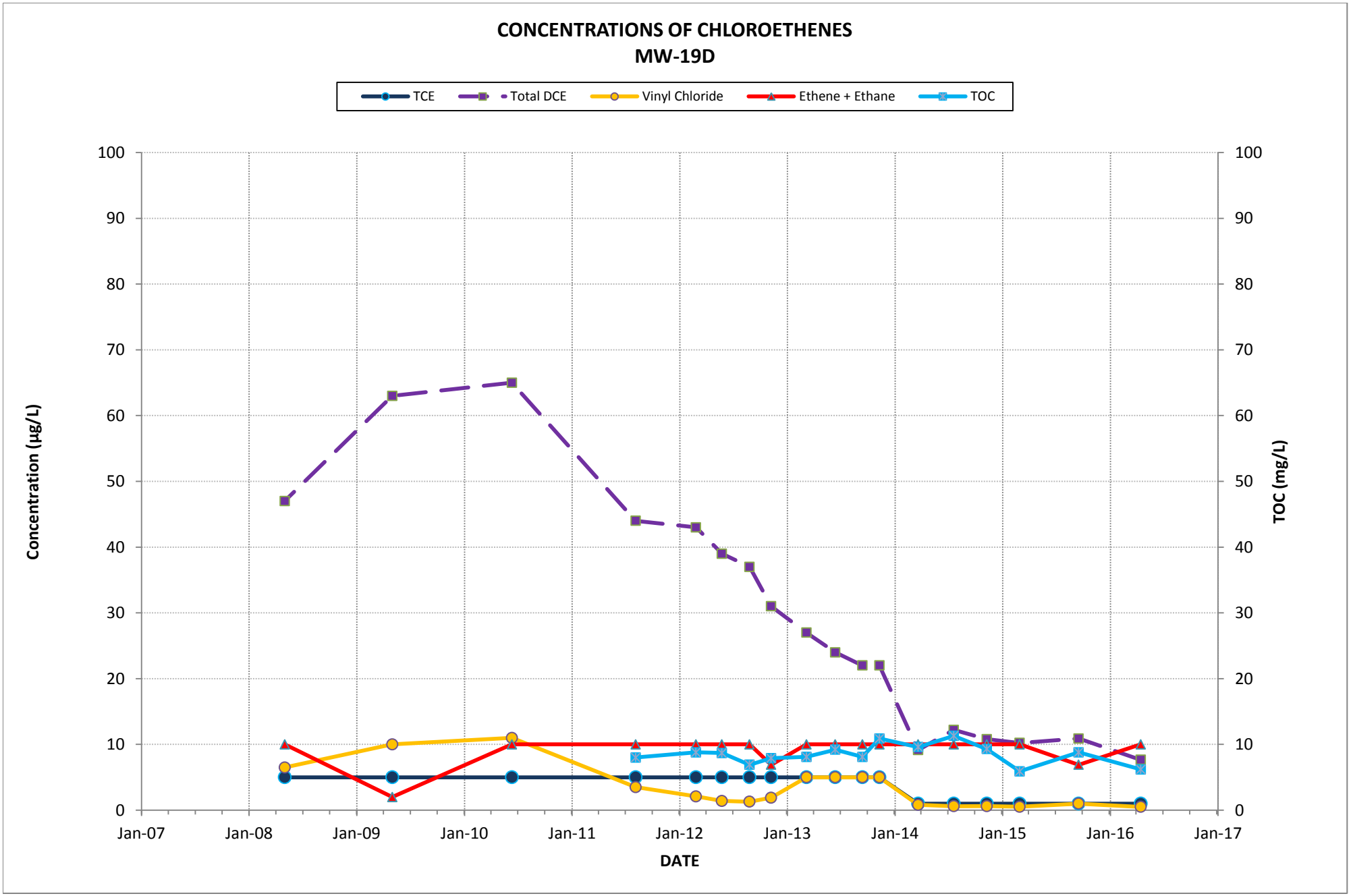

CONCENTRATIONS OF CHLOROETHENES
MW-13D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

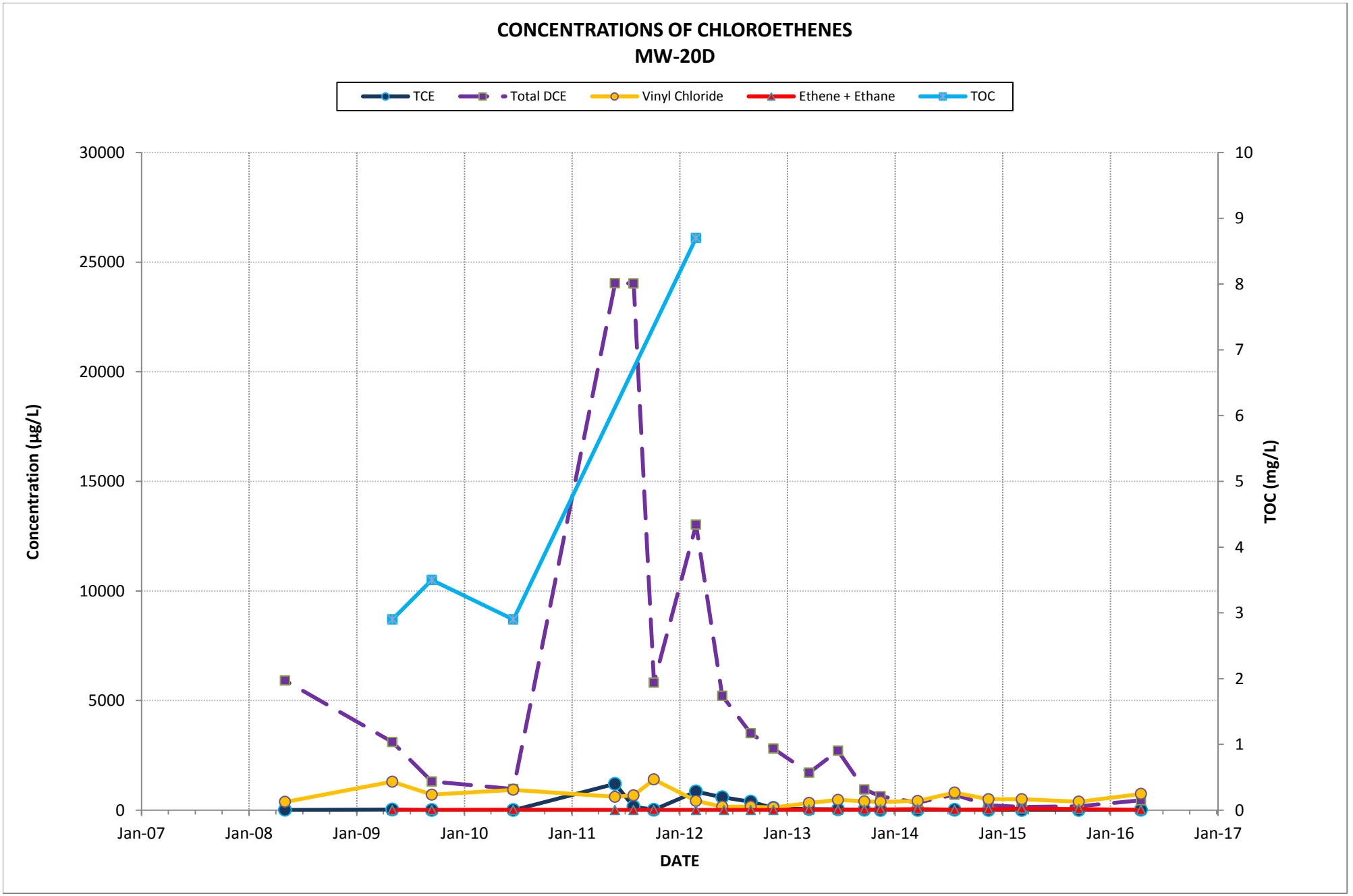

CONCENTRATIONS OF CHLOROETHENES
MW-15D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
2000
1800
1600
1400
1200
1000
800
600
400
200
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

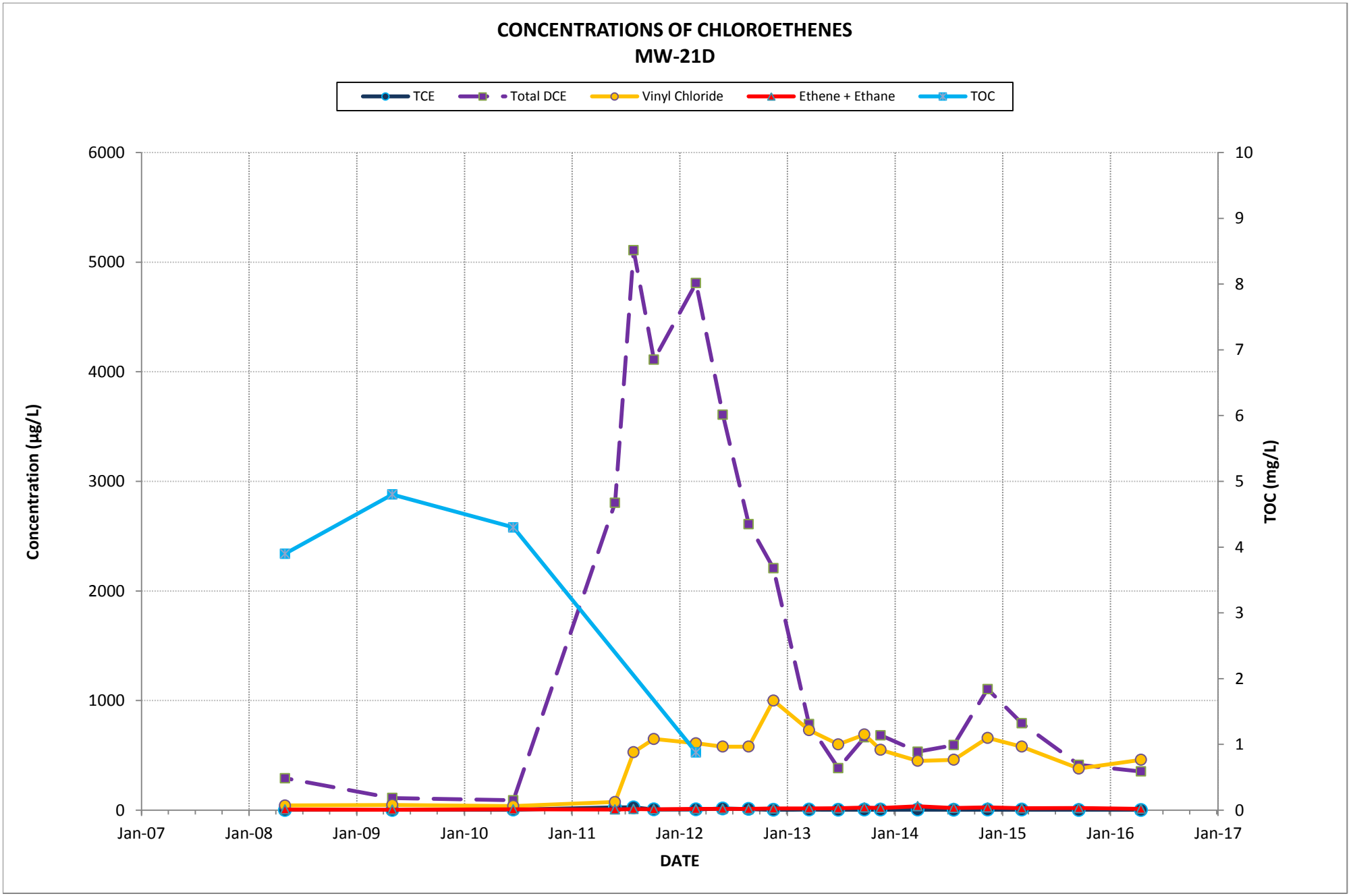

CONCENTRATIONS OF CHLOROETHENES
MW-16D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
600
500
400
300
200
100
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

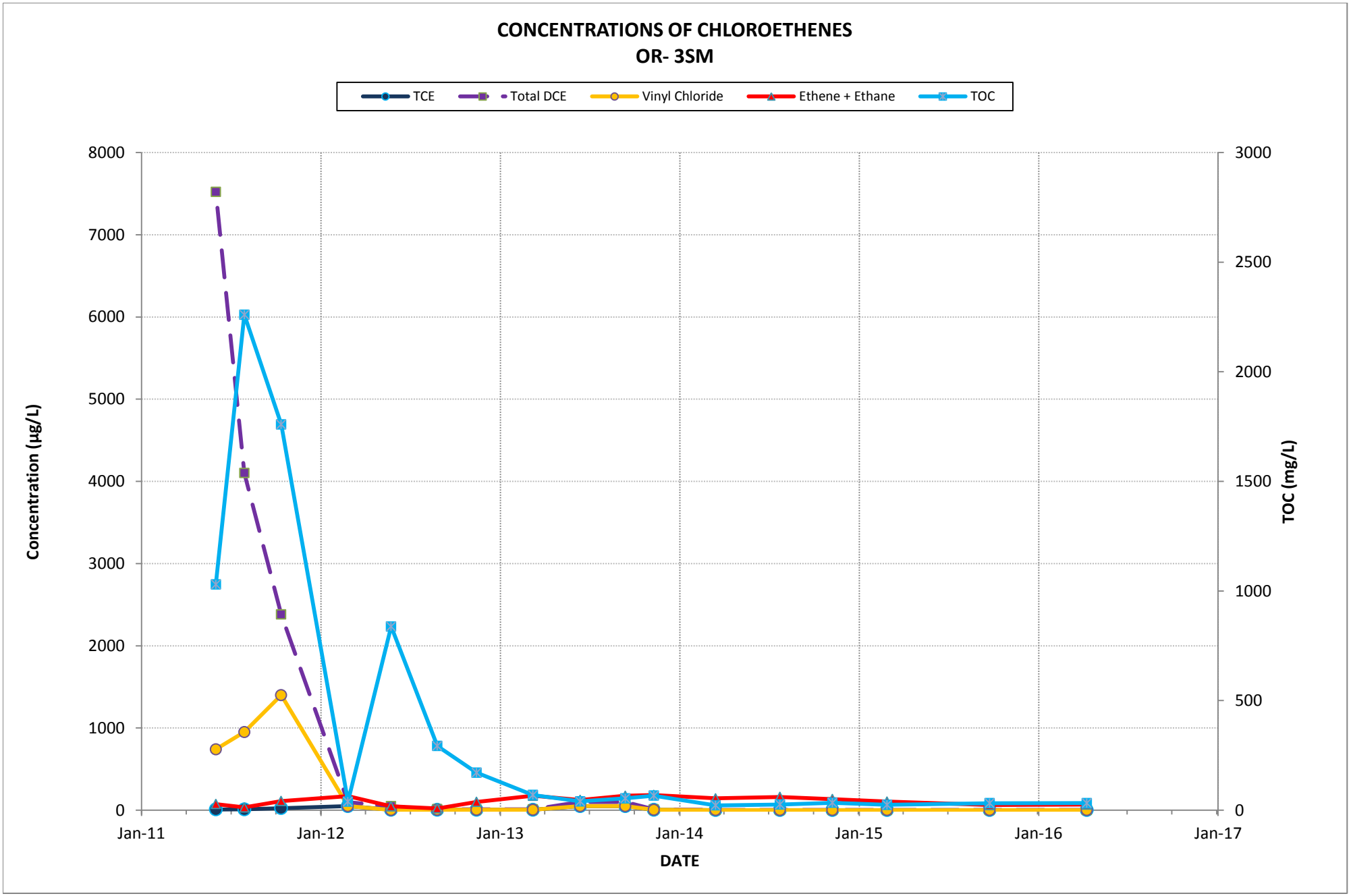

CONCENTRATIONS OF CHLOROETHENES
MW-17D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

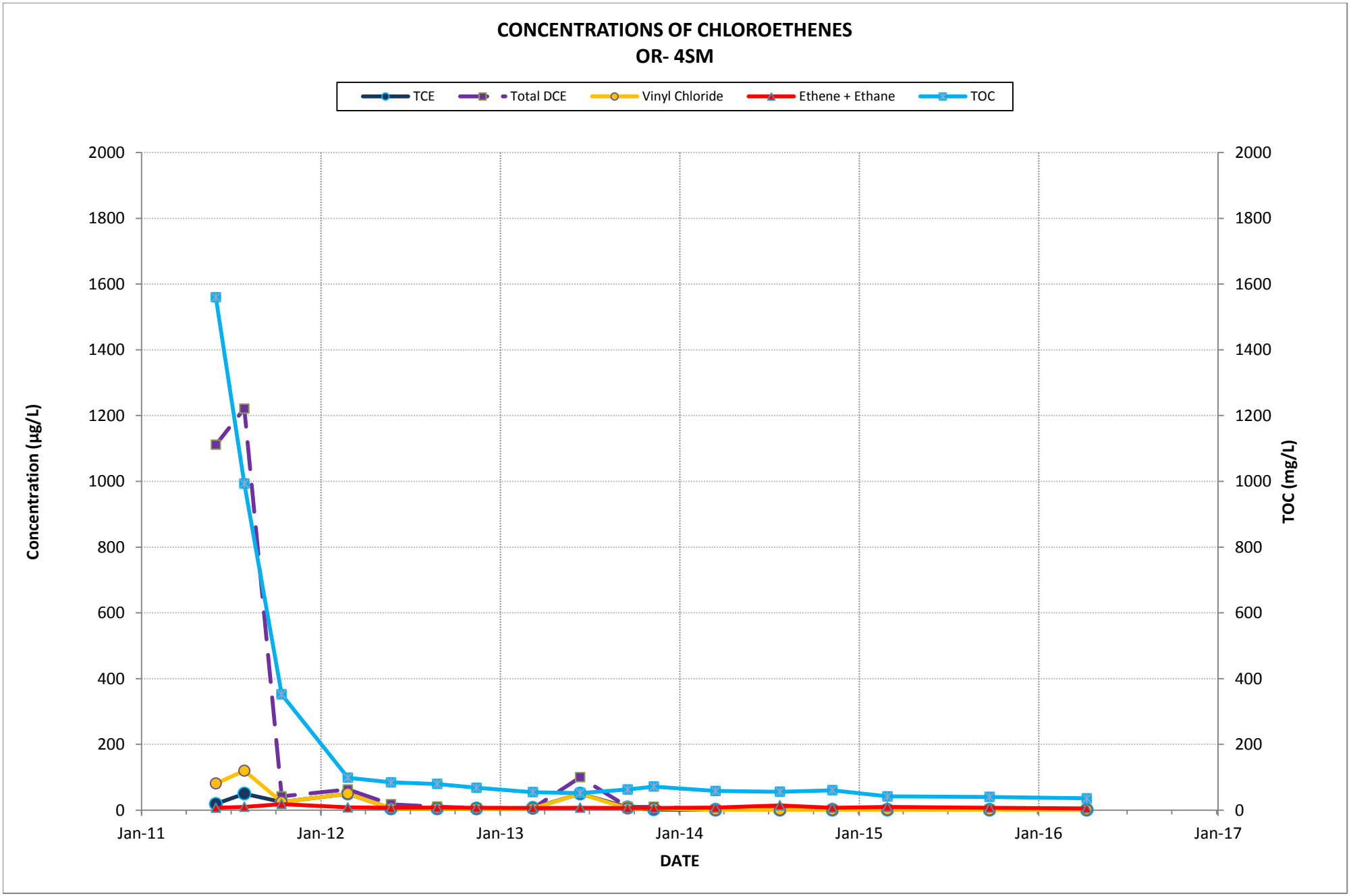

CONCENTRATIONS OF CHLOROETHENES
MW-18D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
100
90
80
70
60
50
40
30
20
10
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

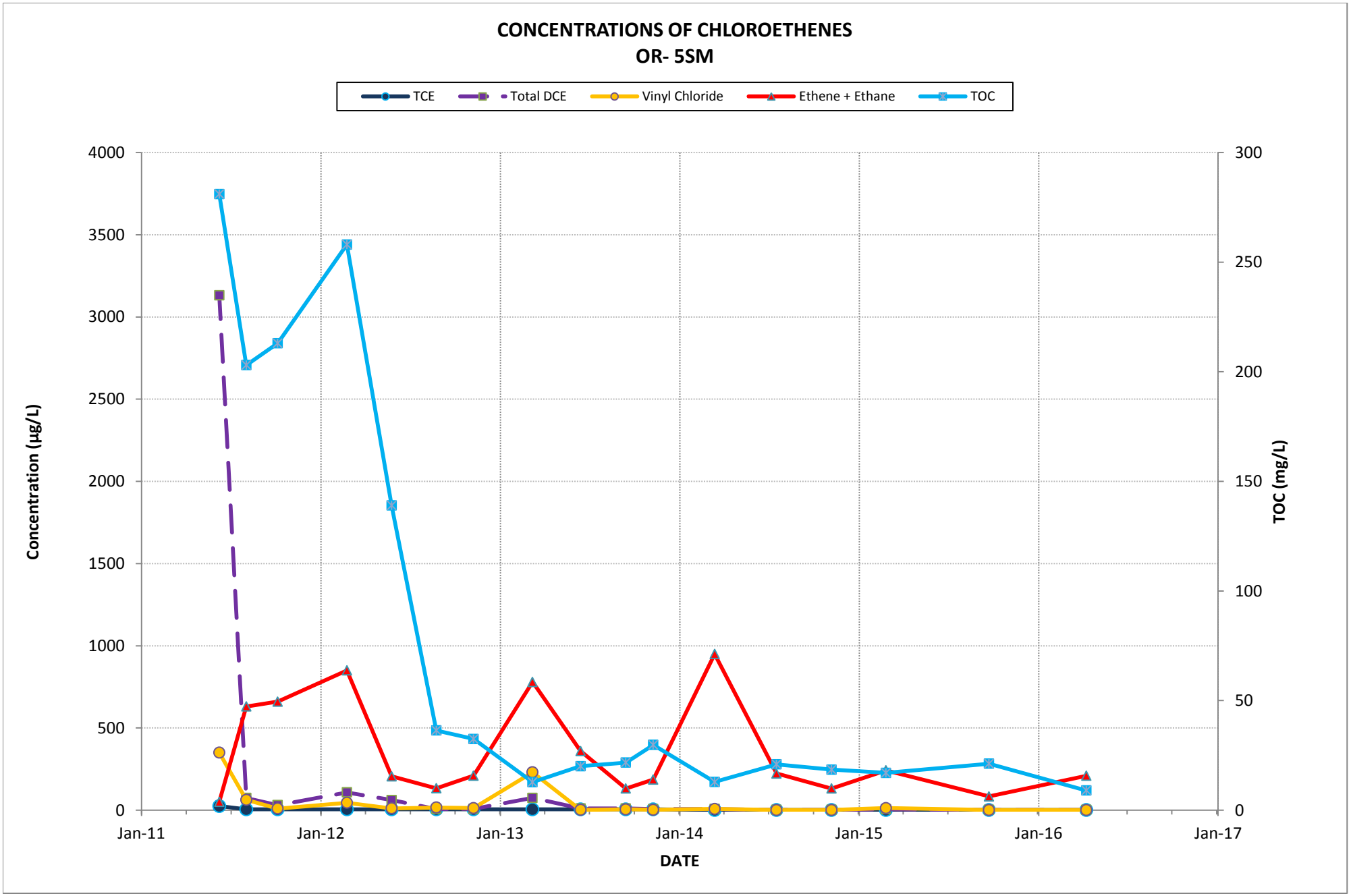

CONCENTRATIONS OF CHLOROETHENES
MW-19D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
0
10
20
30
40
50
60
70
80
90
100
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

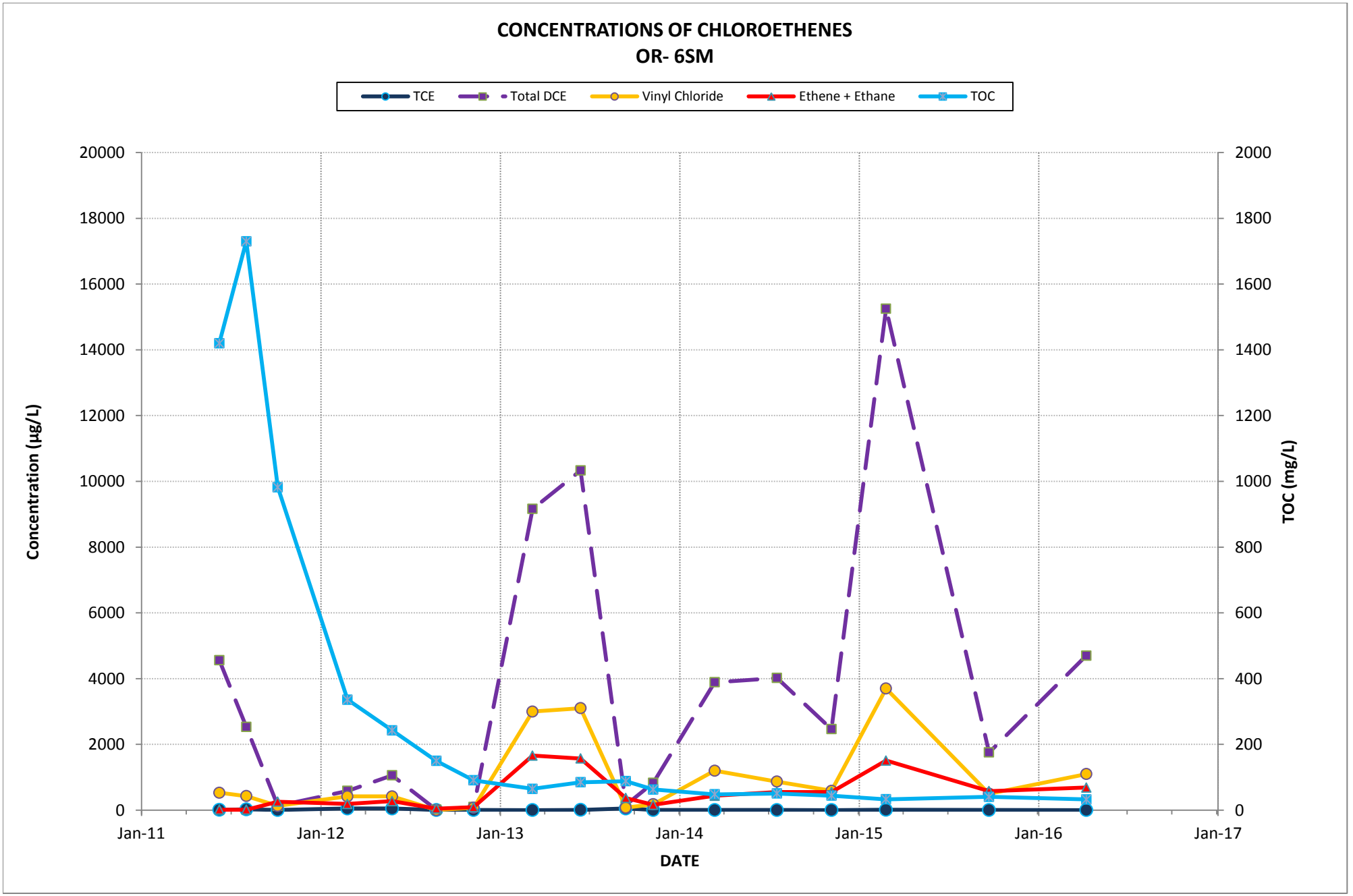

CONCENTRATIONS OF CHLOROETHENES
MW-20D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
30000
25000
20000
15000
10000
5000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

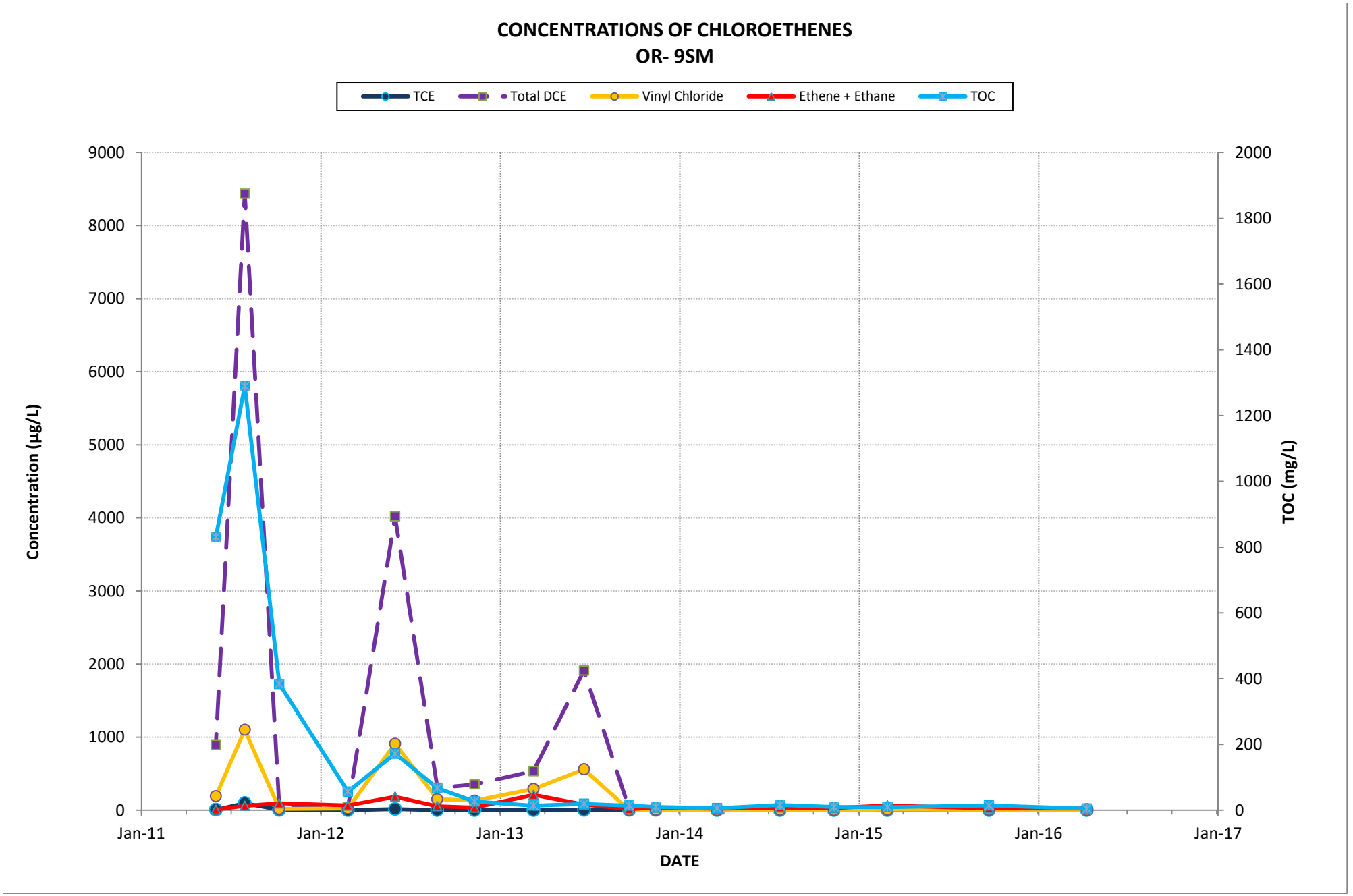

CONCENTRATIONS OF CHLOROETHENES
MW-21D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
6000
5000
4000
3000
2000
1000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

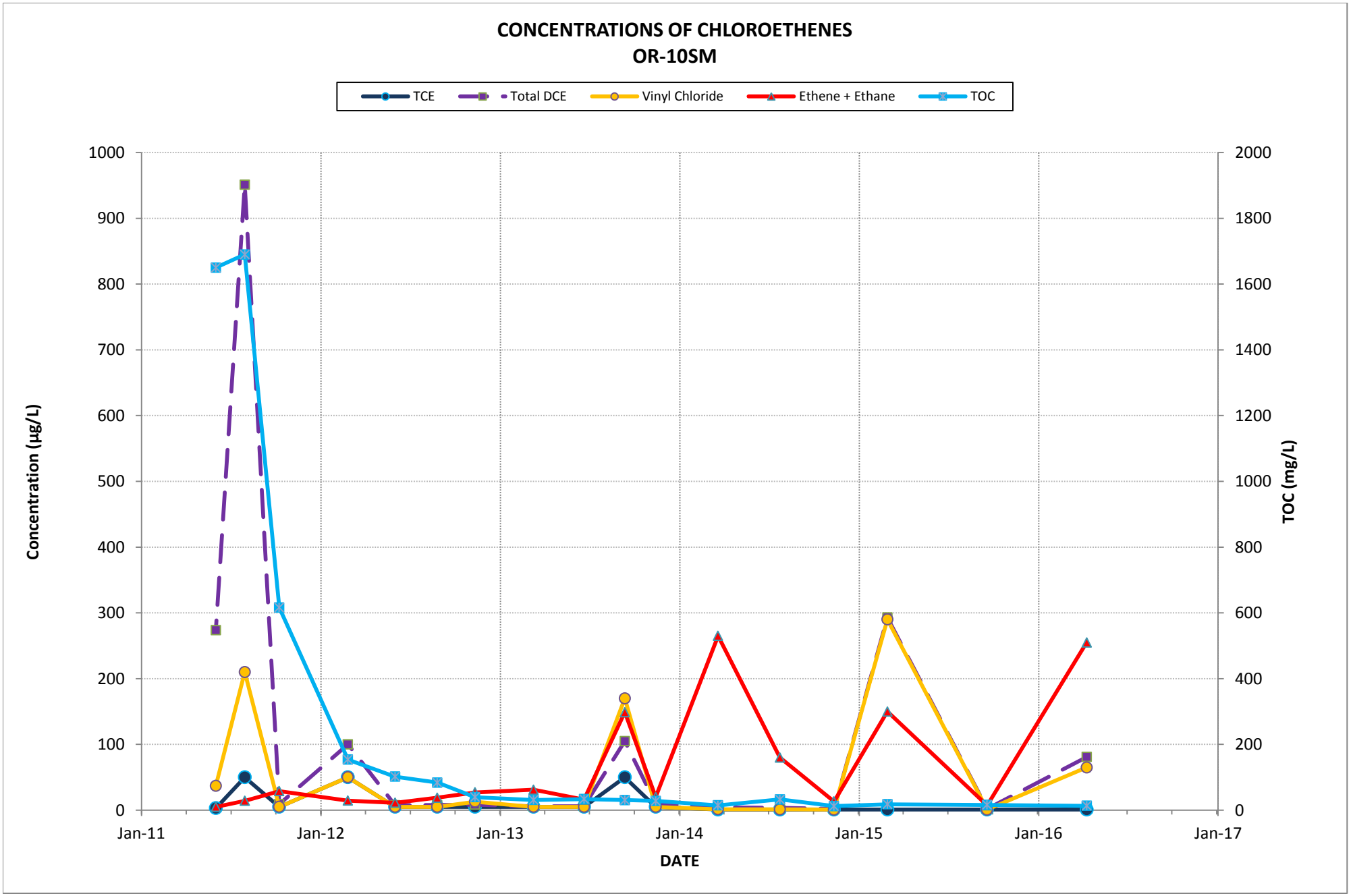

CONCENTRATIONS OF CHLOROETHENES
OR- 3SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
8000
7000
6000
5000
4000
3000
2000
1000
0
3000
2500
2000
1500
1000
500
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

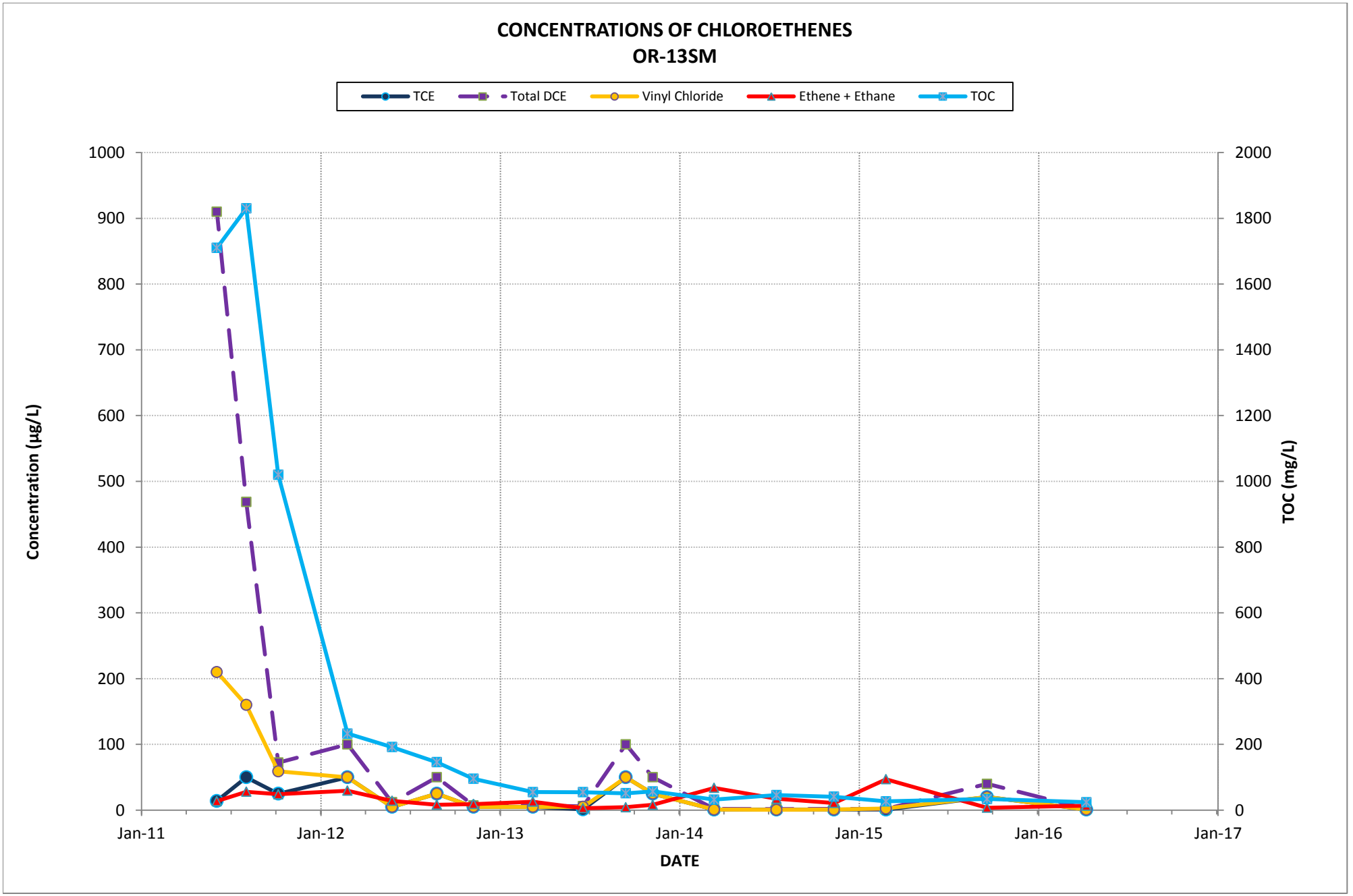

CONCENTRATIONS OF CHLOROETHENES
OR- 4SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

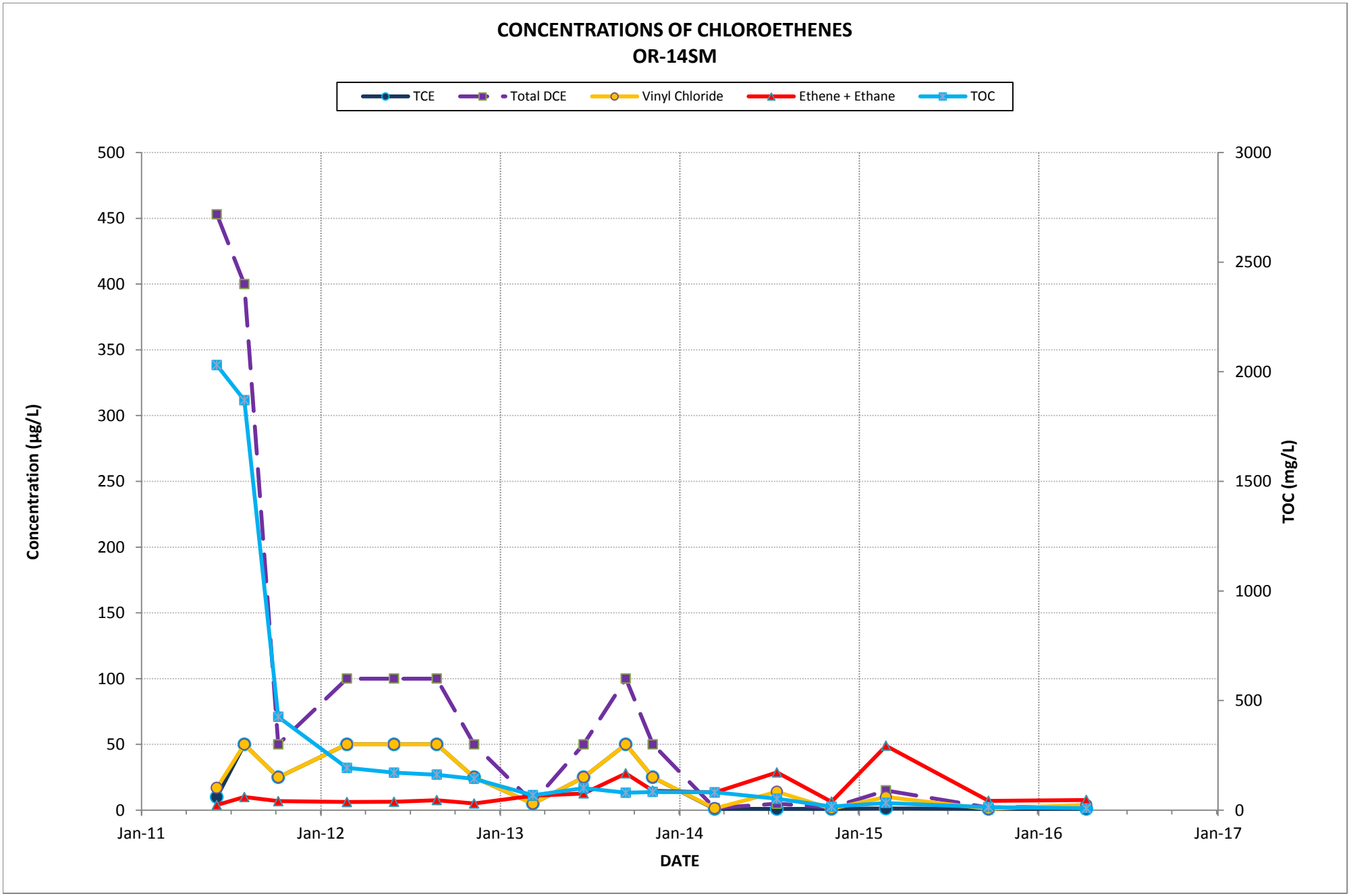

CONCENTRATIONS OF CHLOROETHENES
OR- 5SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
4000
3500
3000
2500
2000
1500
1000
500
0
300
250
200
150
100
50
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

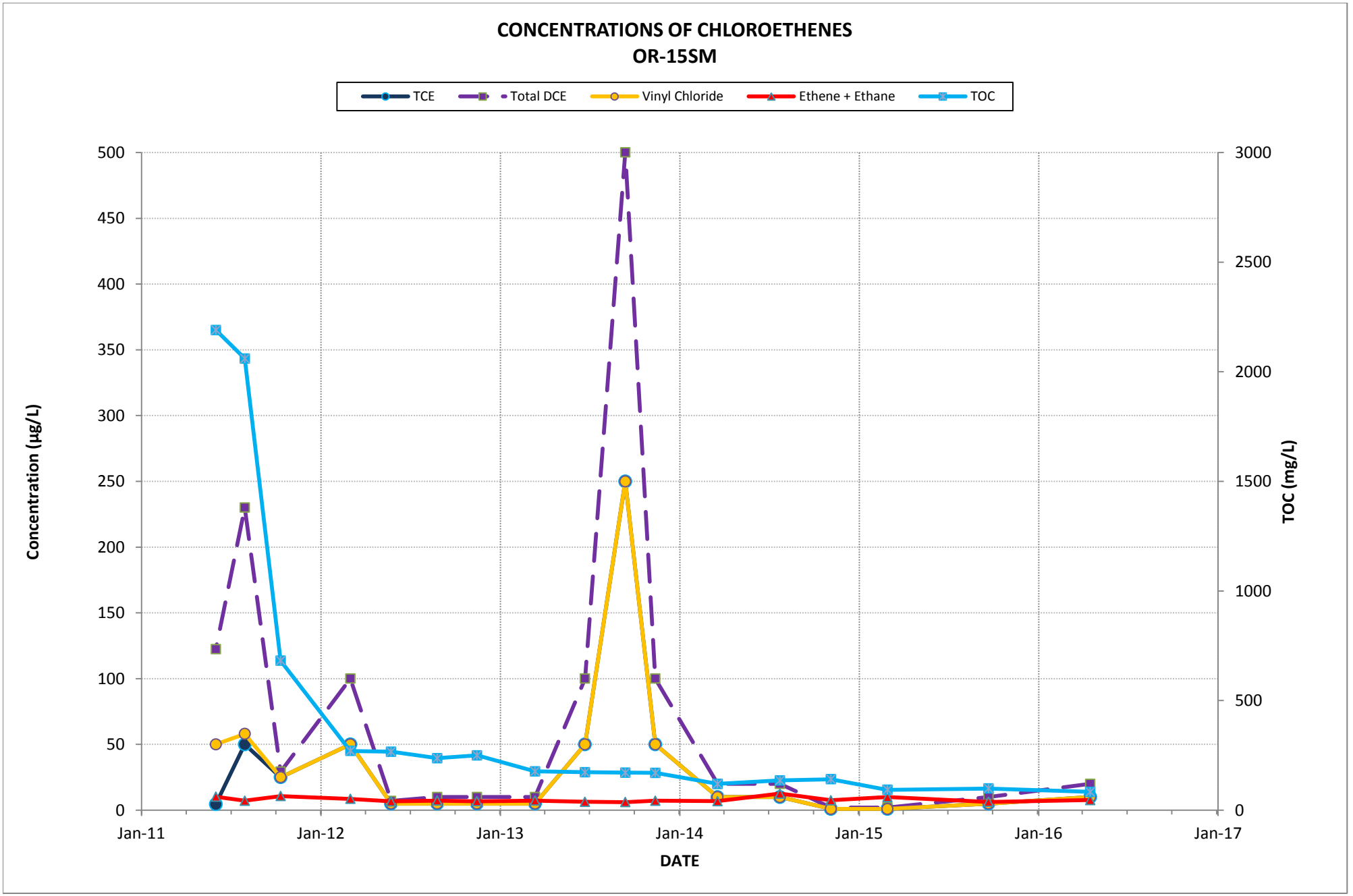

CONCENTRATIONS OF CHLOROETHENES
OR- 6SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

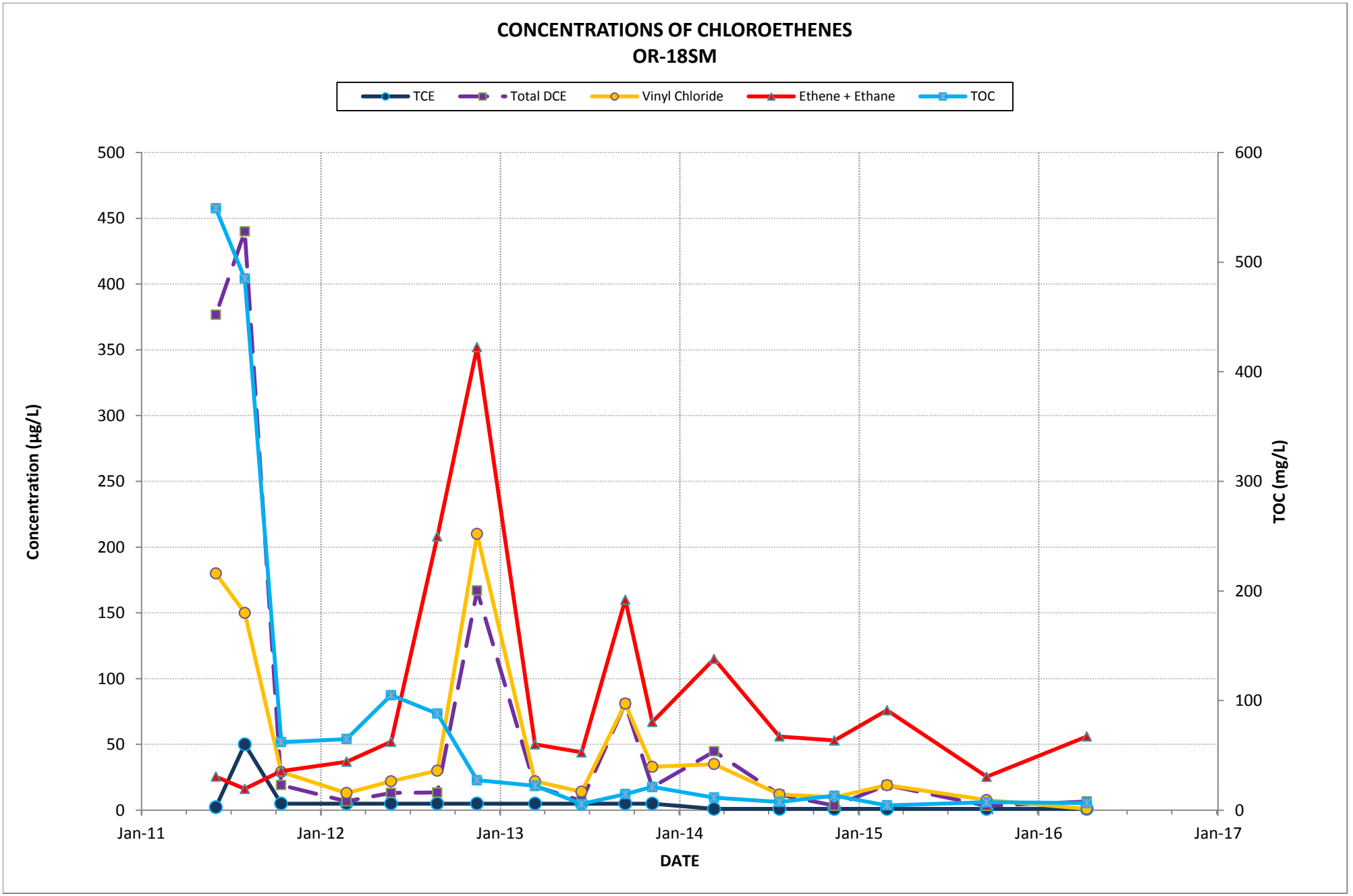

CONCENTRATIONS OF CHLOROETHENES
OR- 9SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

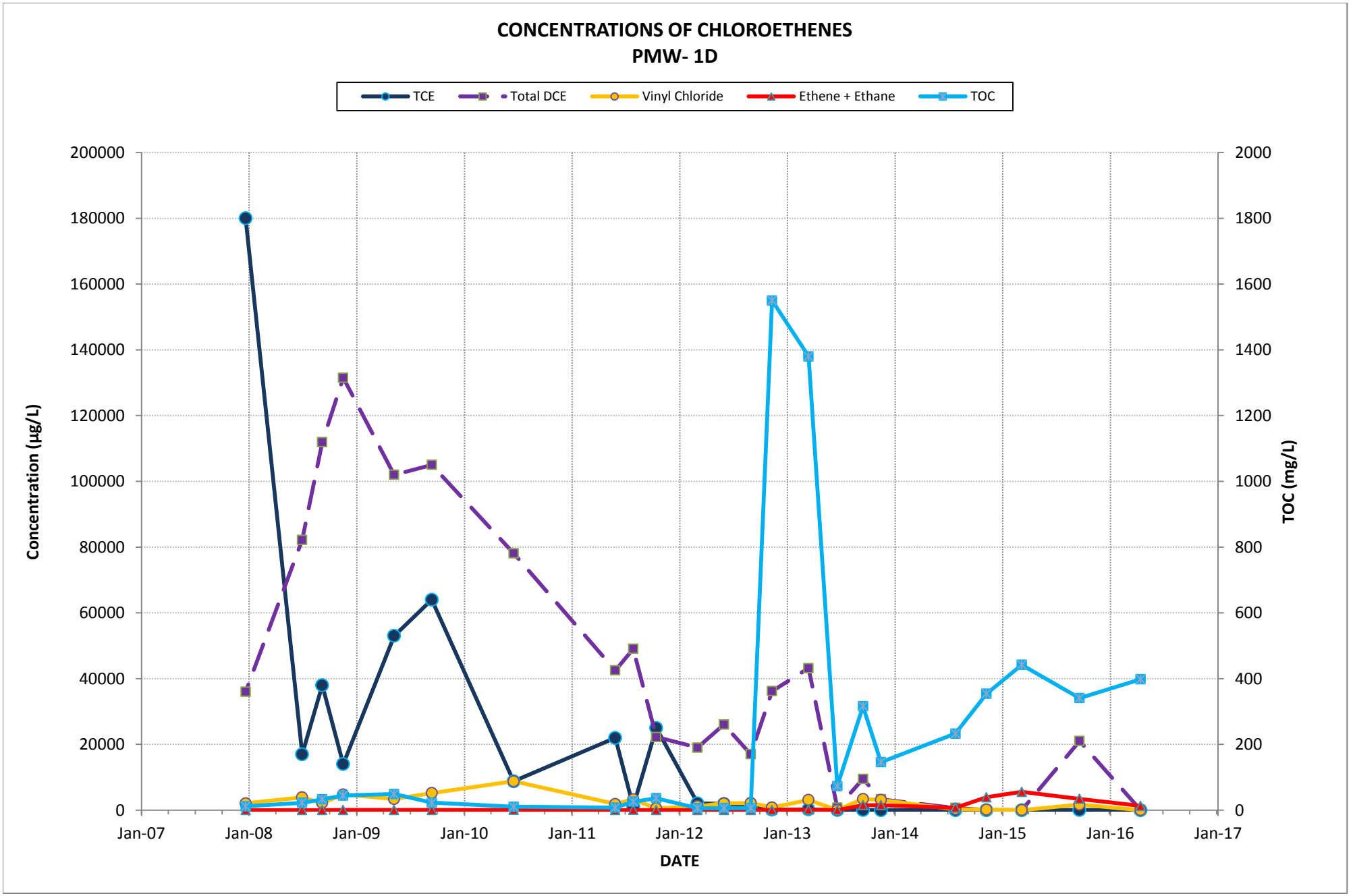

CONCENTRATIONS OF CHLOROETHENES
OR-10SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
1000
900
800
700
600
500
400
300
200
100
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

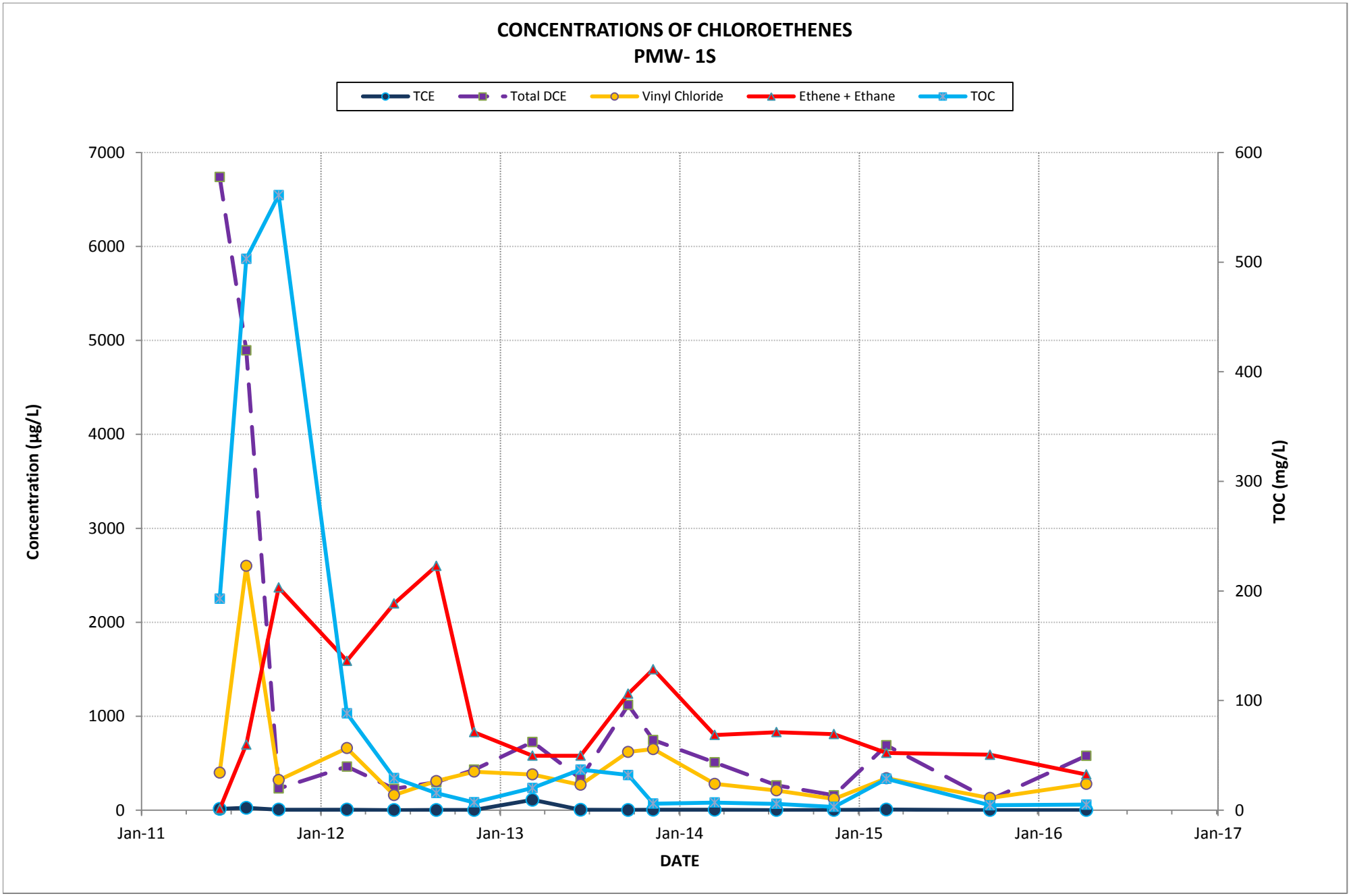

CONCENTRATIONS OF CHLOROETHENES
OR-13SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
1000
900
800
700
600
500
400
300
200
100
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

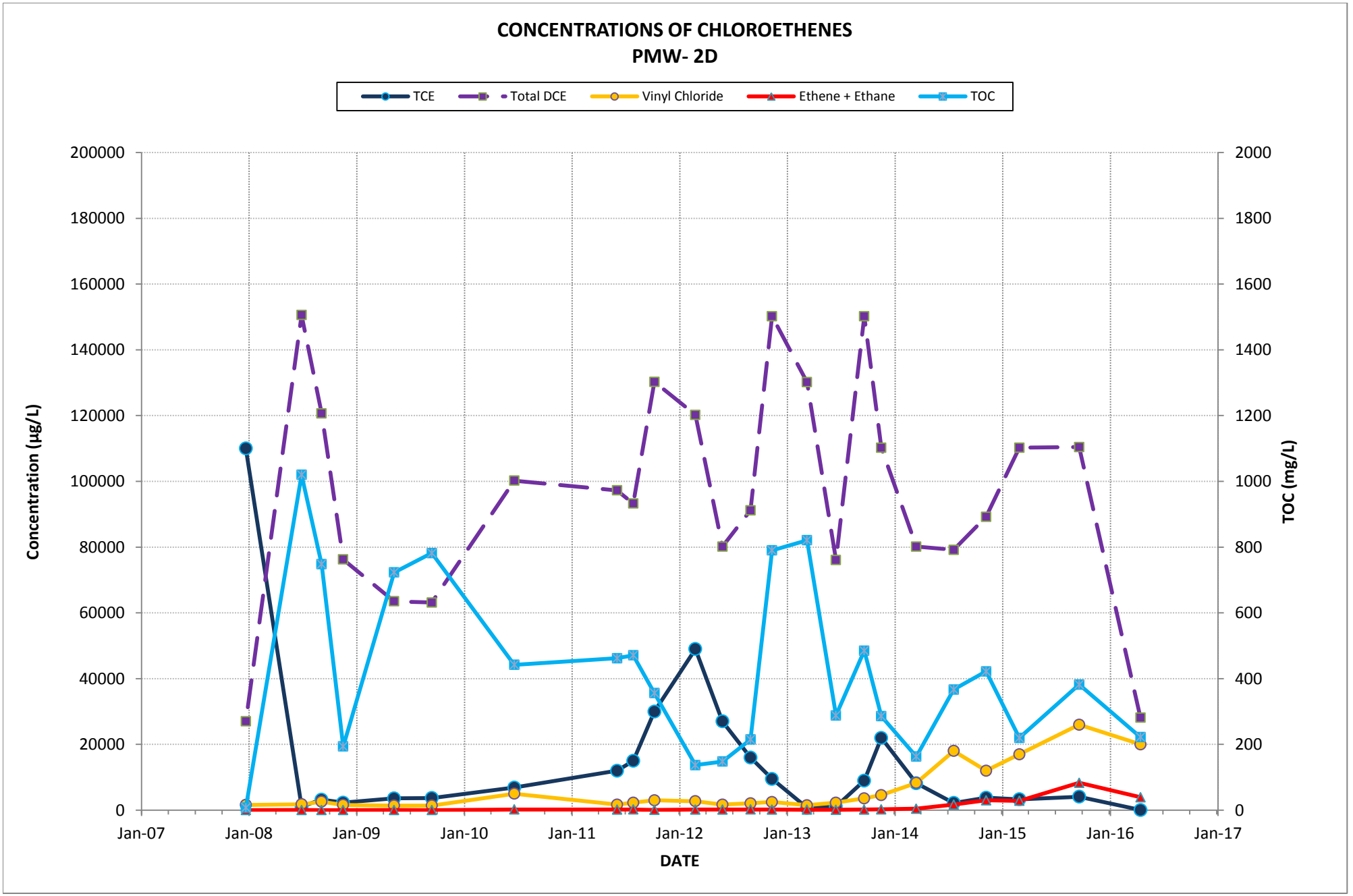

CONCENTRATIONS OF CHLOROETHENES
OR-14SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
500
450
400
350
300
250
200
150
100
50
0
3000
2500
2000
1500
1000
500
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

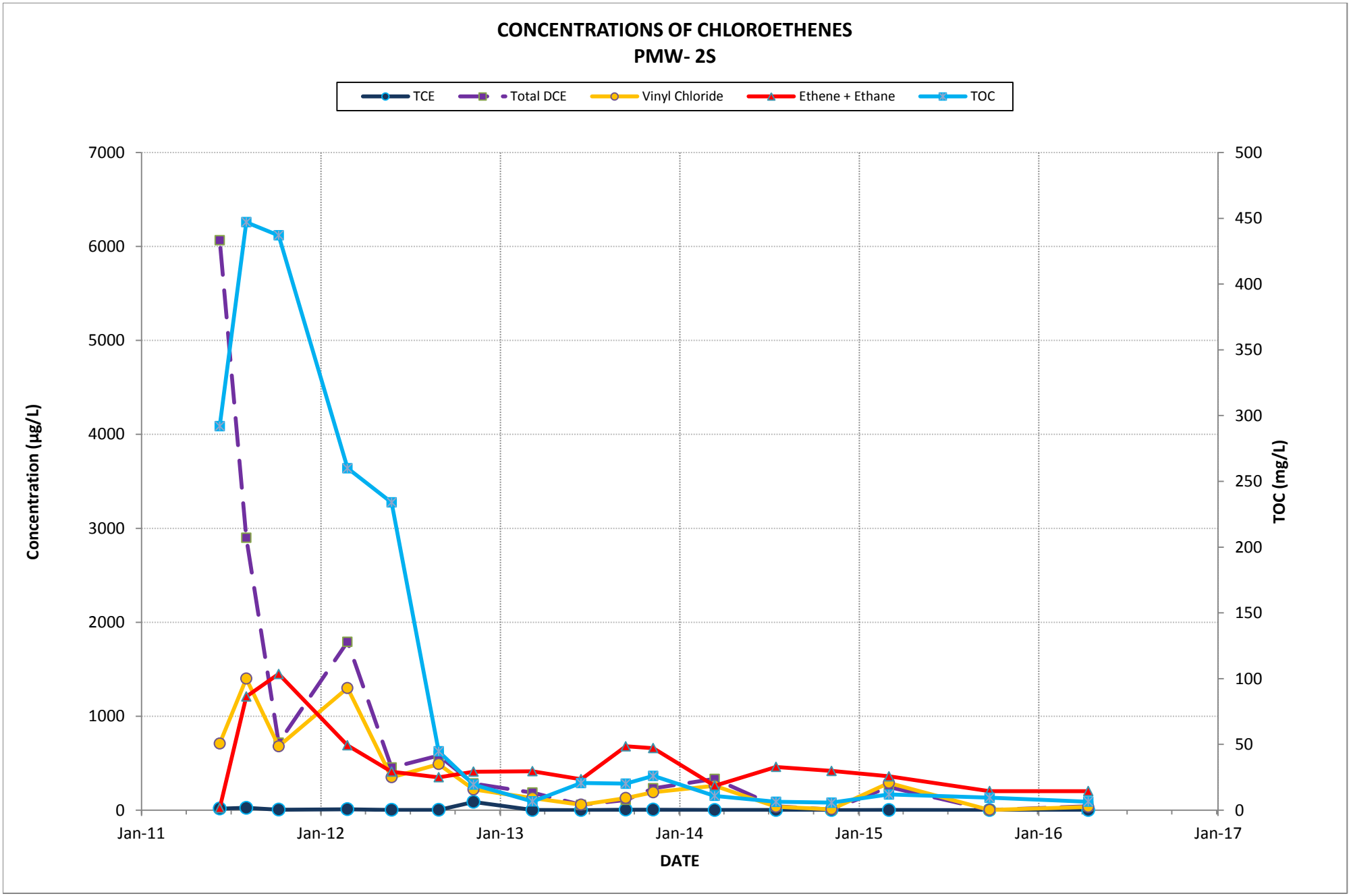

CONCENTRATIONS OF CHLOROETHENES
OR-15SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
500
450
400
350
300
250
200
150
100
50
0
3000
2500
2000
1500
1000
500
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

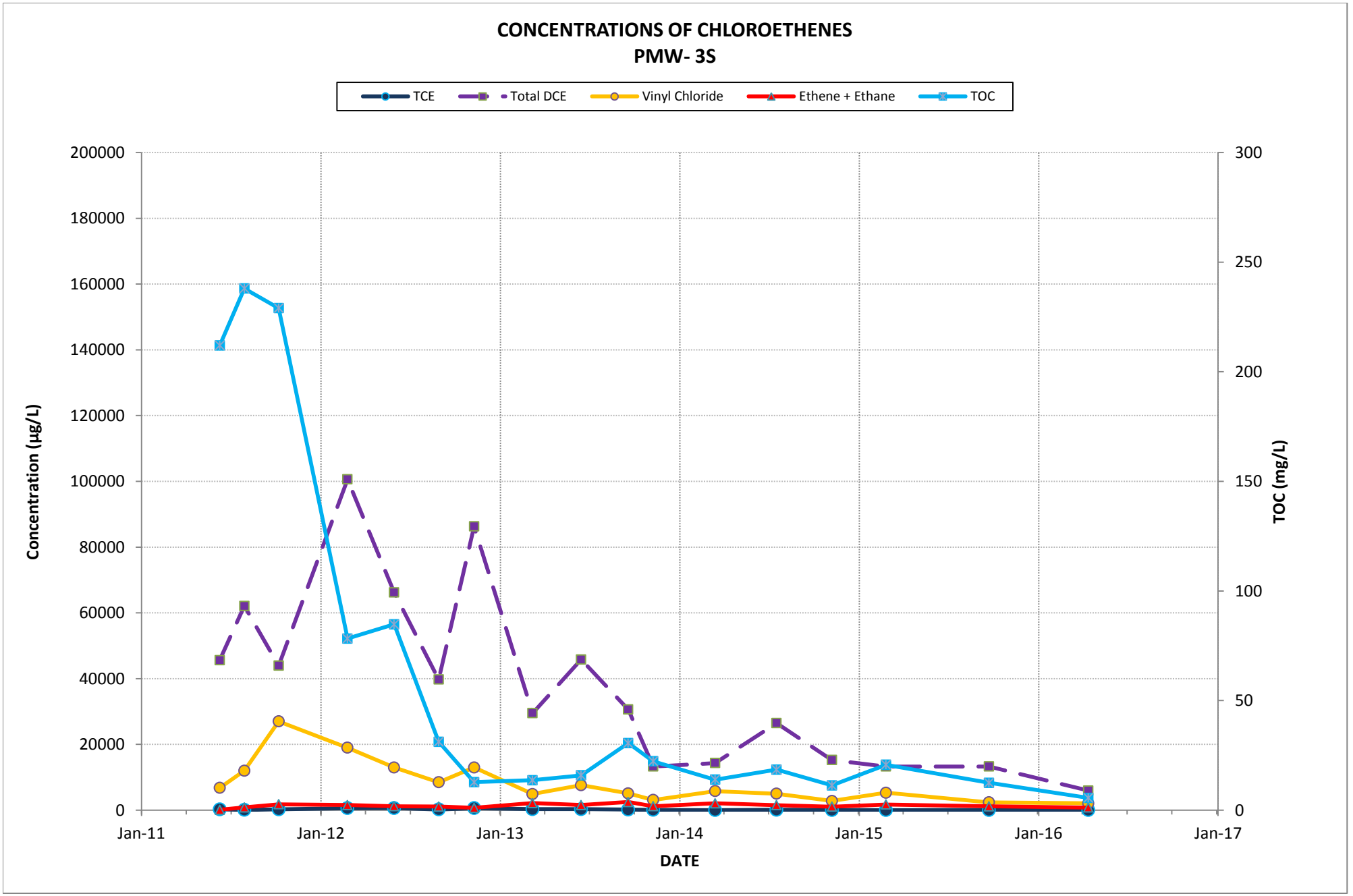

CONCENTRATIONS OF CHLOROETHENES
OR-18SM
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
0
50
100
150
200
250
300
350
400
450
500
600
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

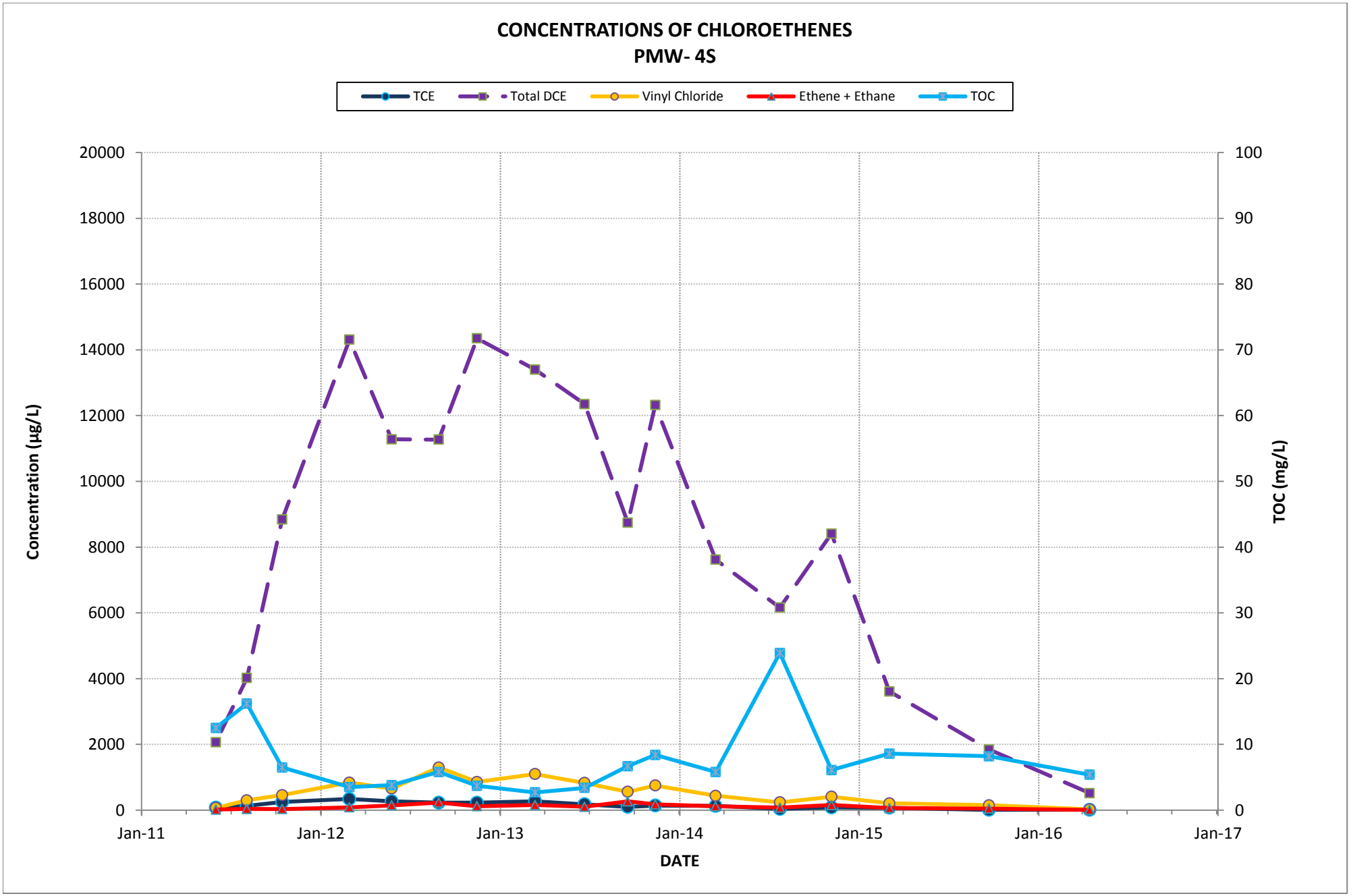

CONCENTRATIONS OF CHLOROETHENES
PMW- 1D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

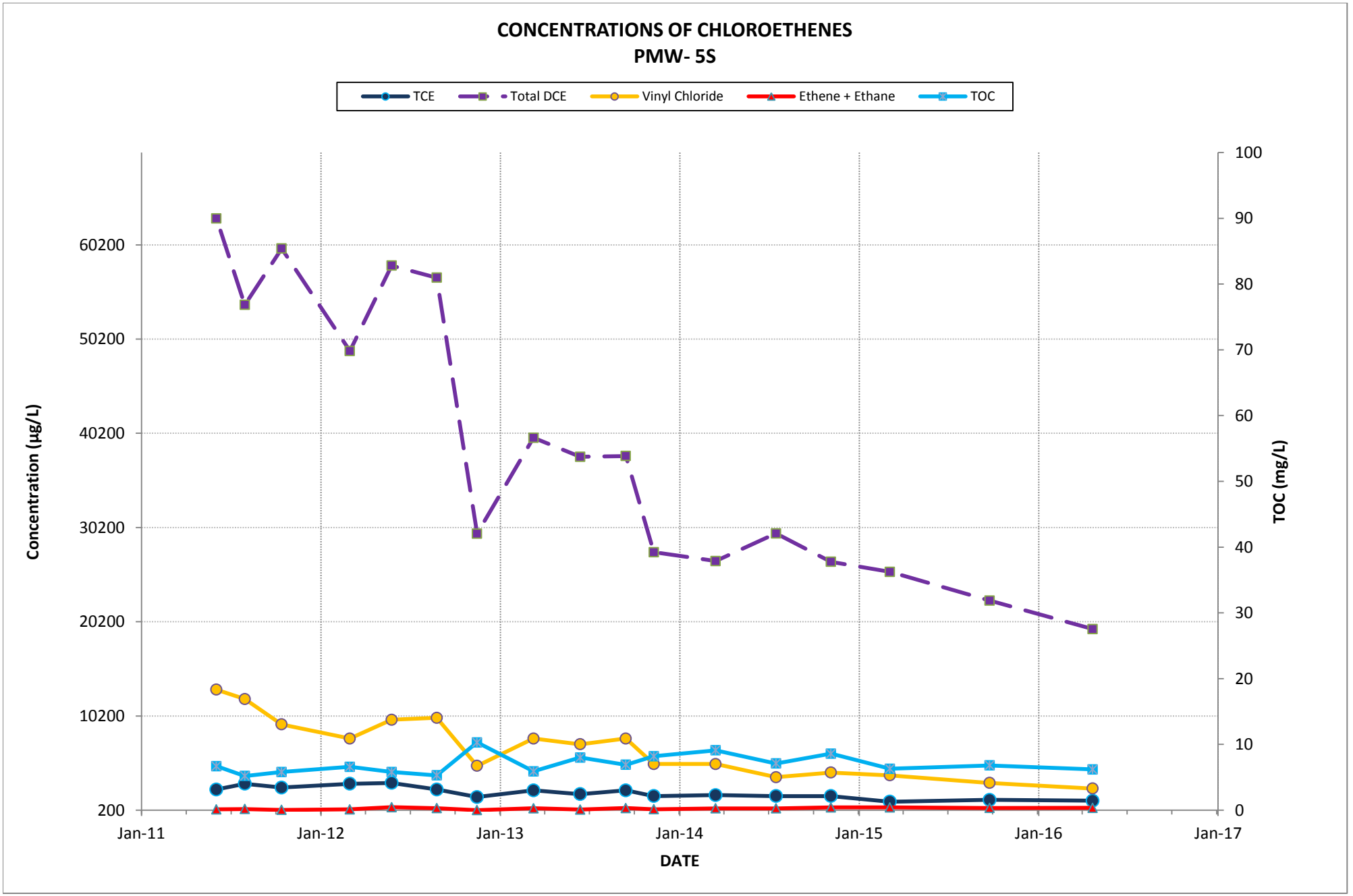

CONCENTRATIONS OF CHLOROETHENES
PMW- 1S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
0
1000
2000
3000
4000
5000
6000
7000
0
100
200
300
400
500
600
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

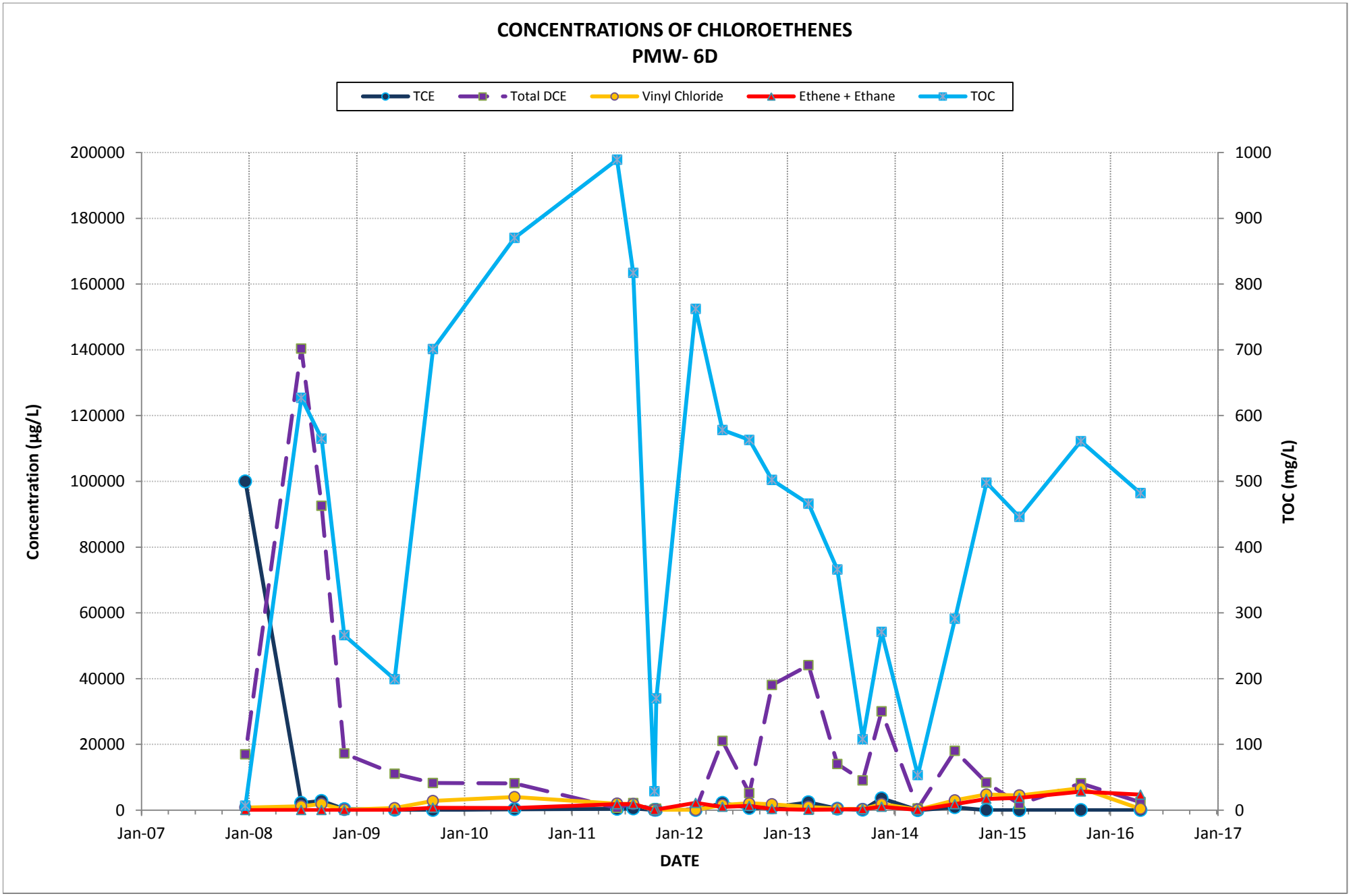

CONCENTRATIONS OF CHLOROETHENES
PMW- 2D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

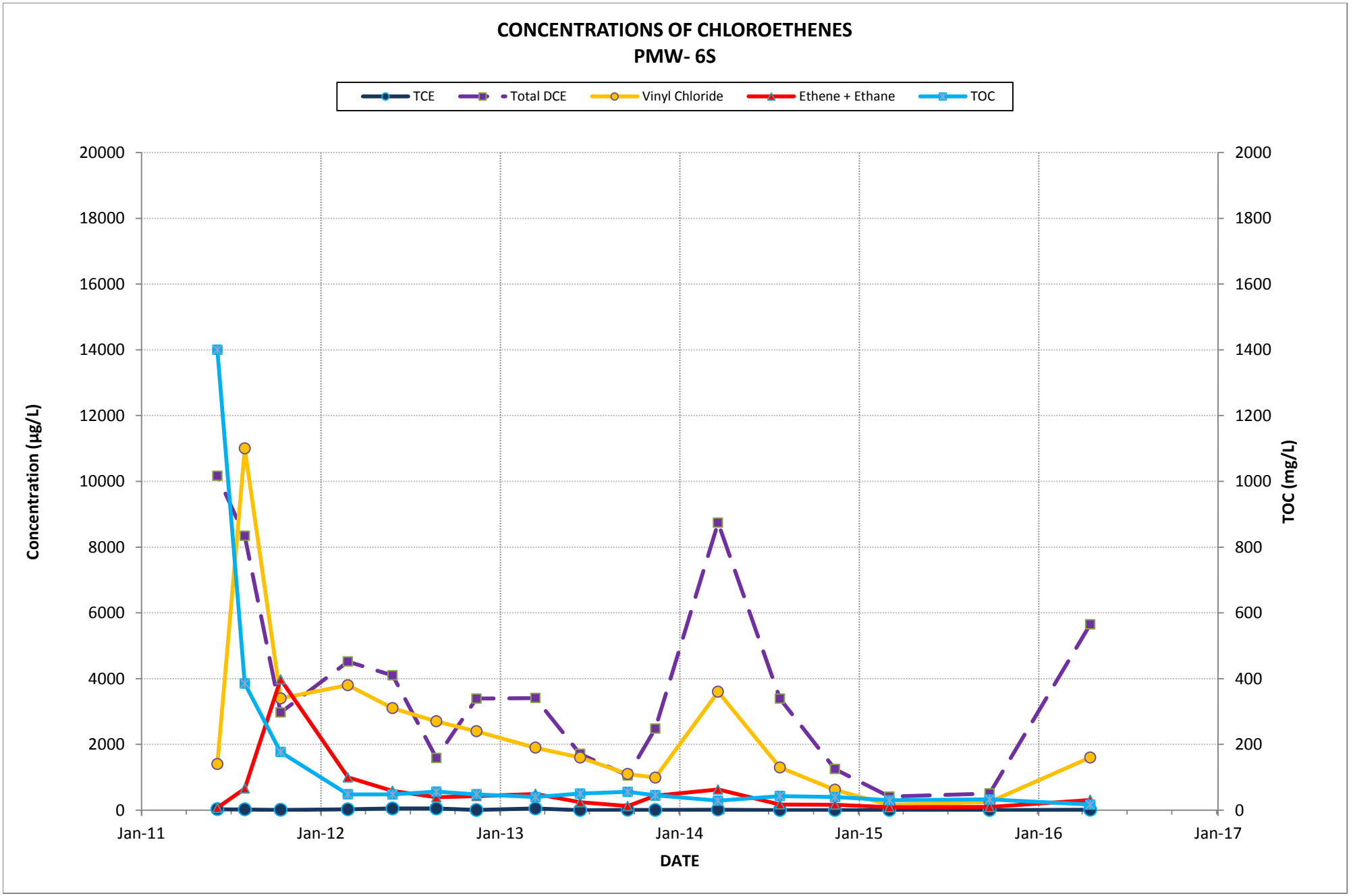

CONCENTRATIONS OF CHLOROETHENES
PMW- 2S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
7000
6000
5000
4000
3000
2000
1000
0
500
450
400
350
300
250
200
150
100
50
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

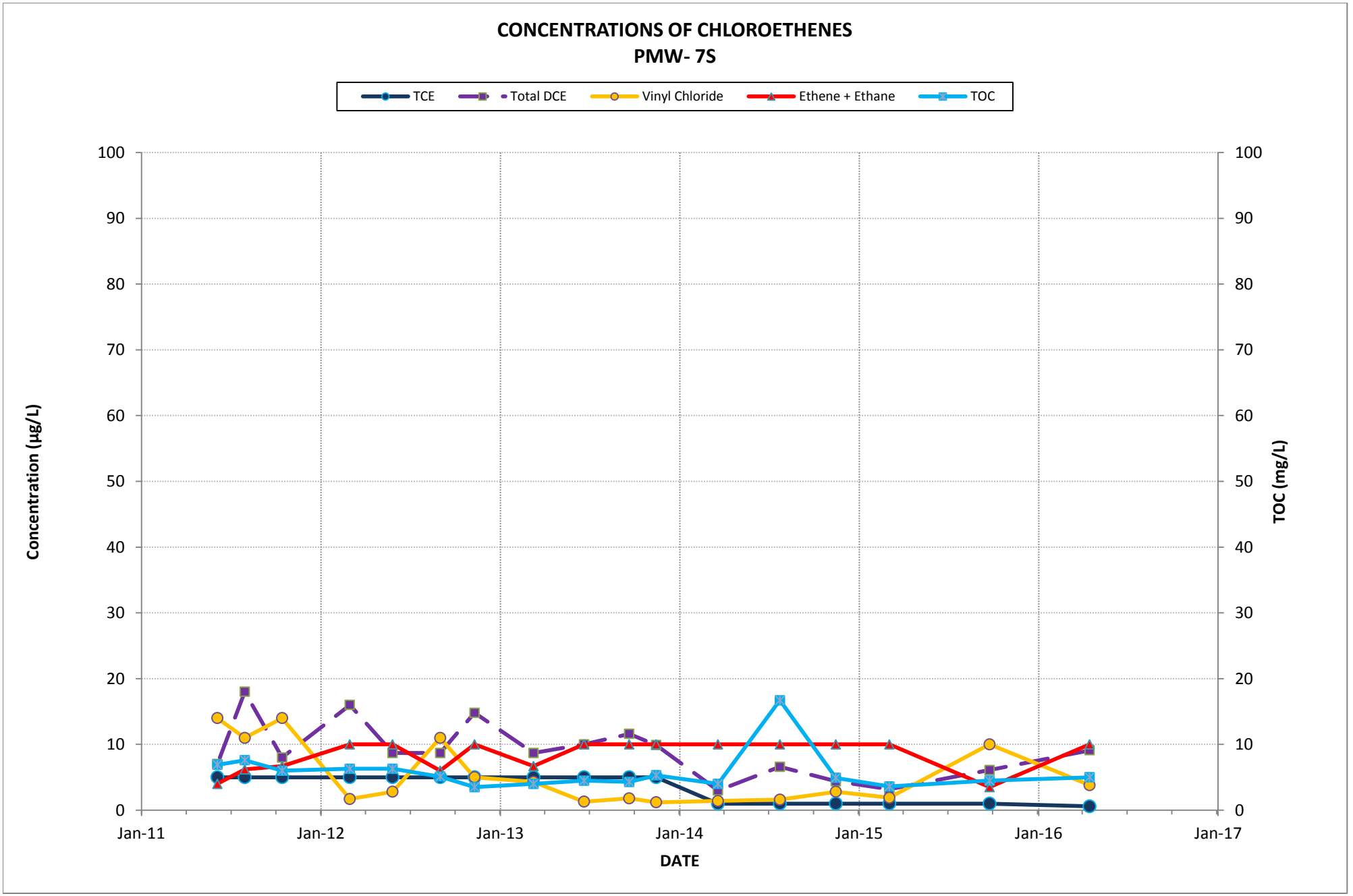

CONCENTRATIONS OF CHLOROETHENES
PMW- 3S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
300
250
200
150
100
50
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

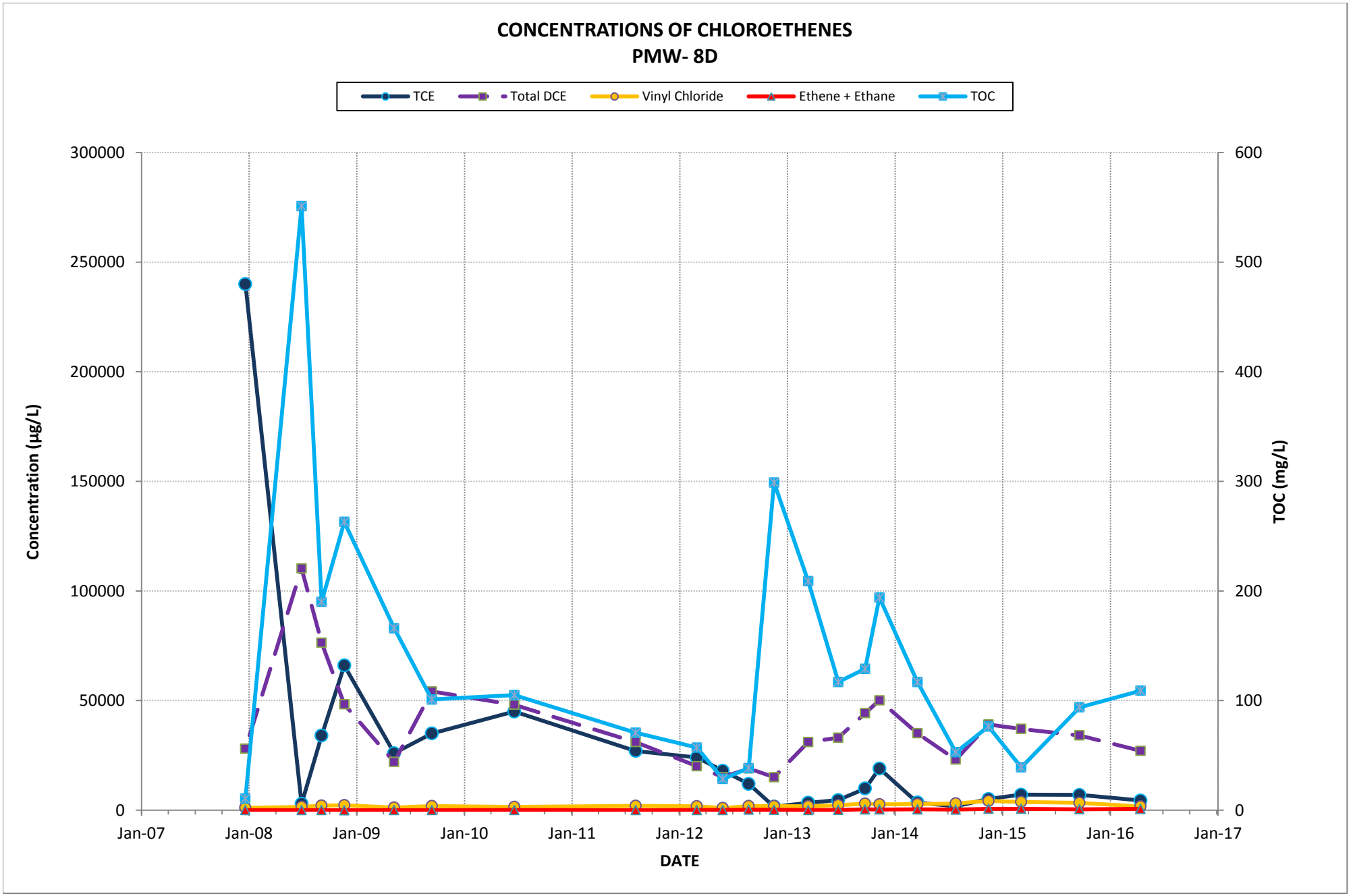

CONCENTRATIONS OF CHLOROETHENES
PMW- 4S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
100
90
80
70
60
50
40
30
20
10
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

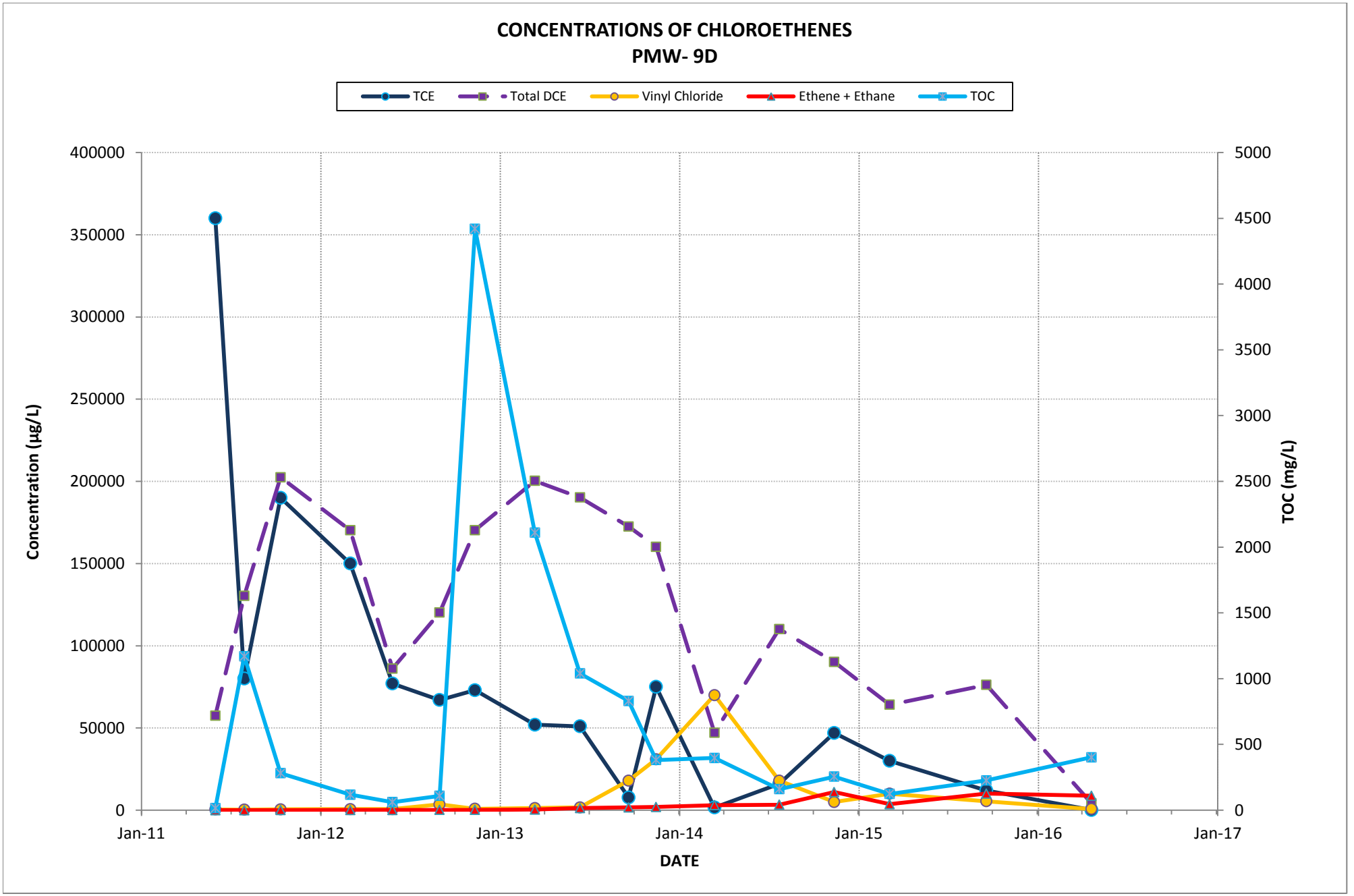

CONCENTRATIONS OF CHLOROETHENES
PMW- 5S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
60200
50200
40200
30200
20200
10200
200
100
90
80
70
60
50
40
30
20
10
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

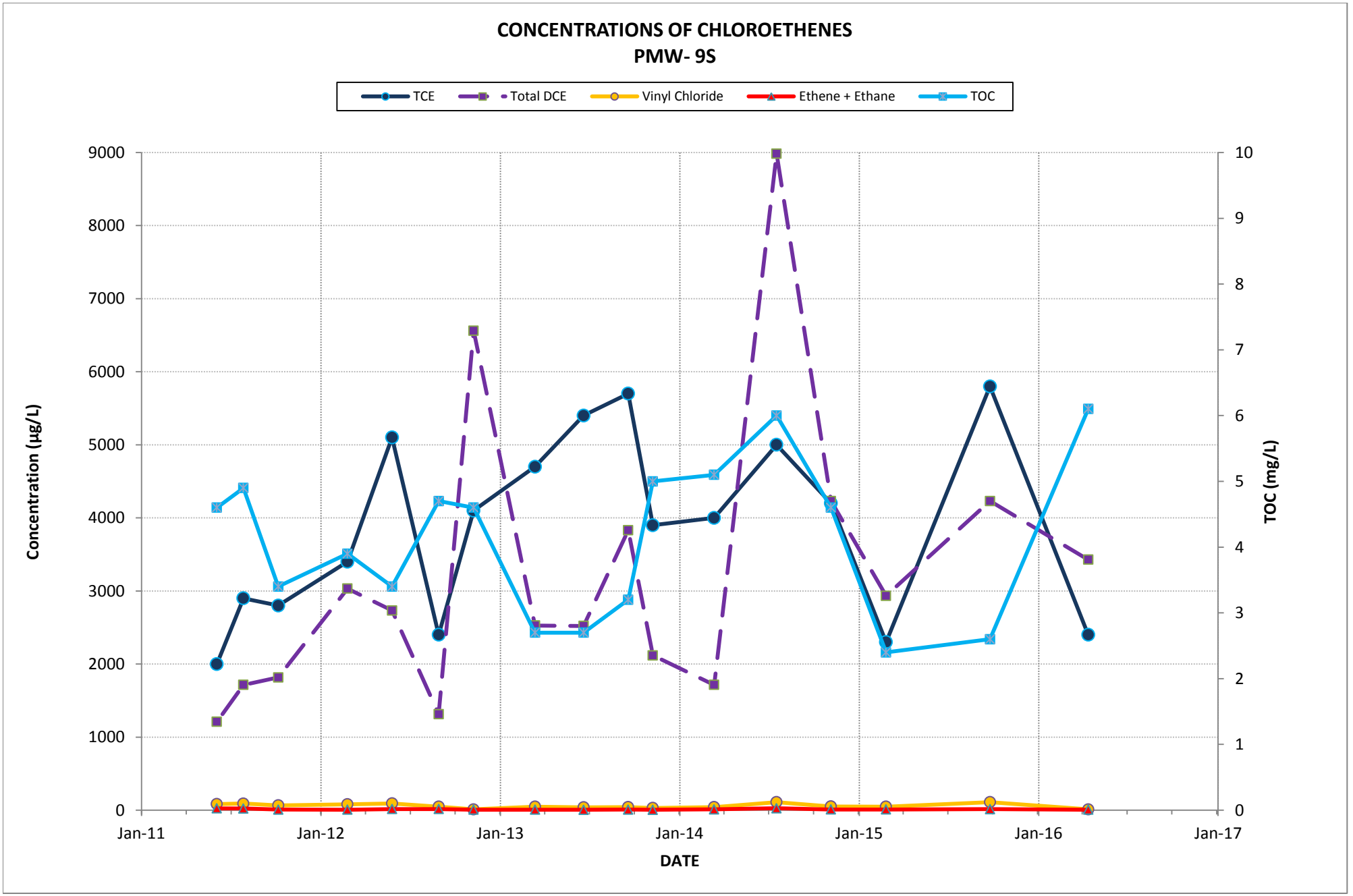

CONCENTRATIONS OF CHLOROETHENES
PMW- 6D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
1000
900
800
700
600
500
400
300
200
100
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

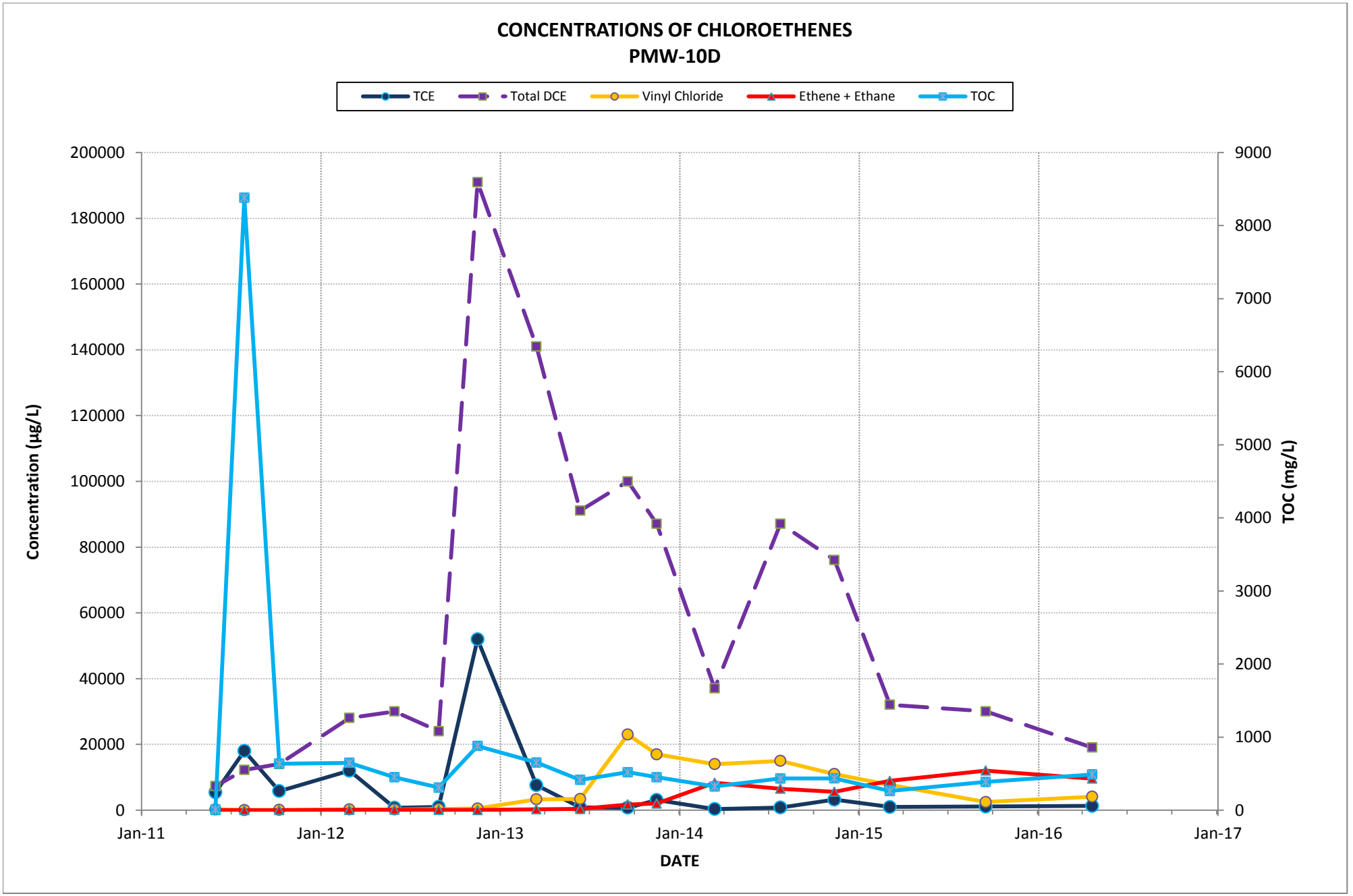

CONCENTRATIONS OF CHLOROETHENES
PMW- 6S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

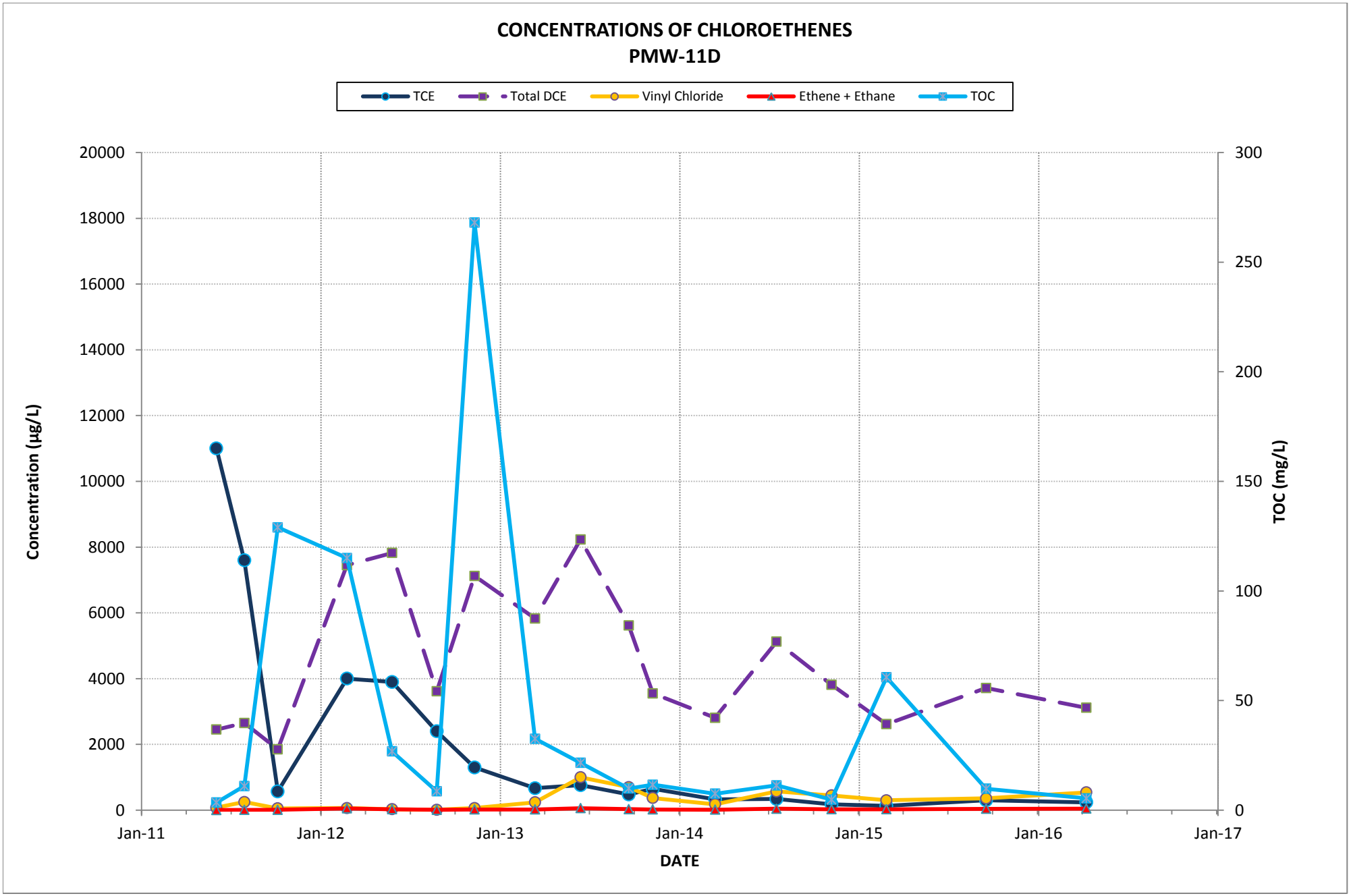

CONCENTRATIONS OF CHLOROETHENES
PMW- 7S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
0
10
20
30
40
50
60
70
80
90
100
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

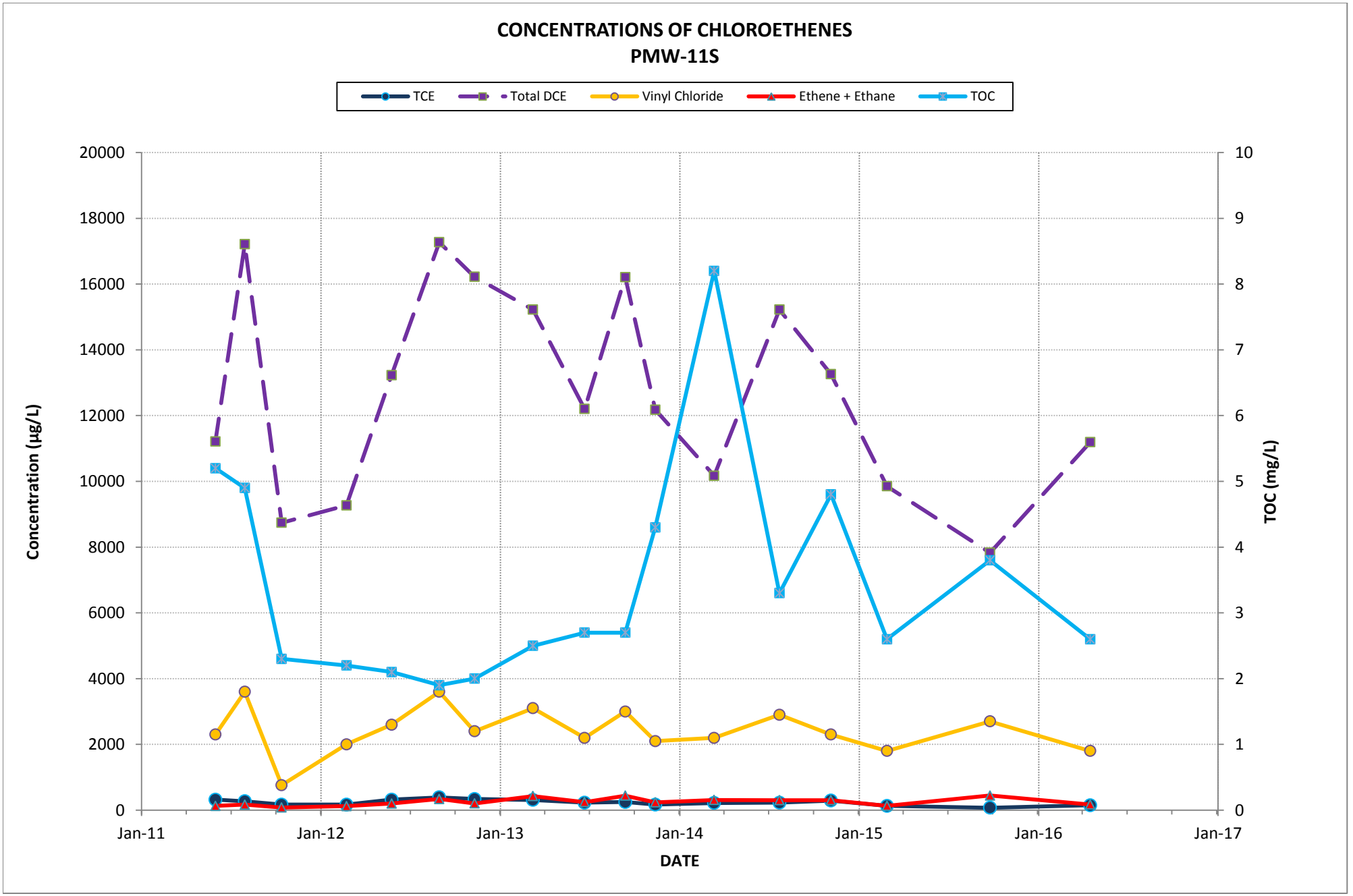

CONCENTRATIONS OF CHLOROETHENES
PMW- 8D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
300000
250000
200000
150000
100000
50000
0
600
500
400
300
200
100
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

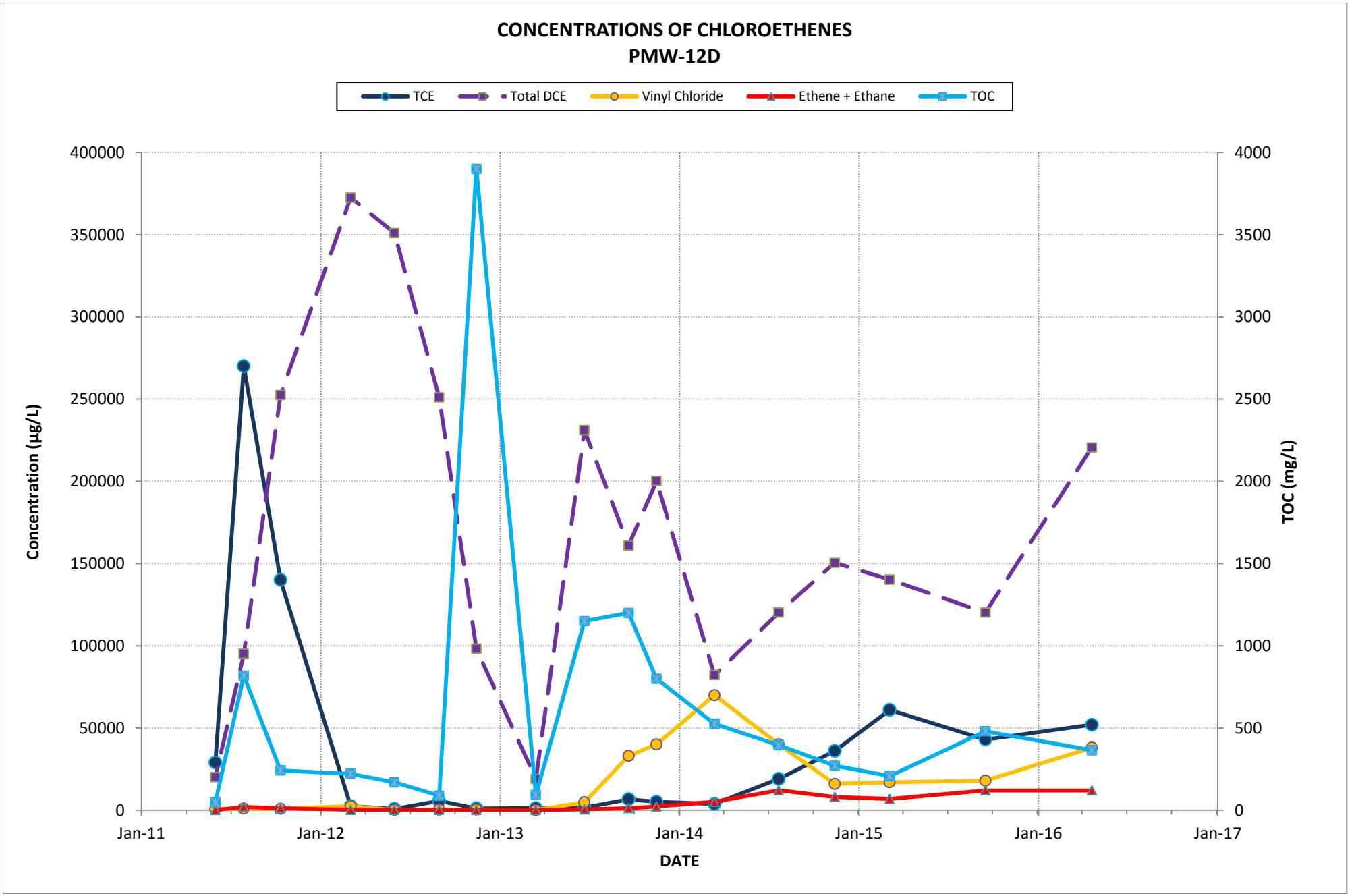

CONCENTRATIONS OF CHLOROETHENES
PMW- 9D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
400000
350000
300000
250000
200000
150000
100000
50000
0
5000
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

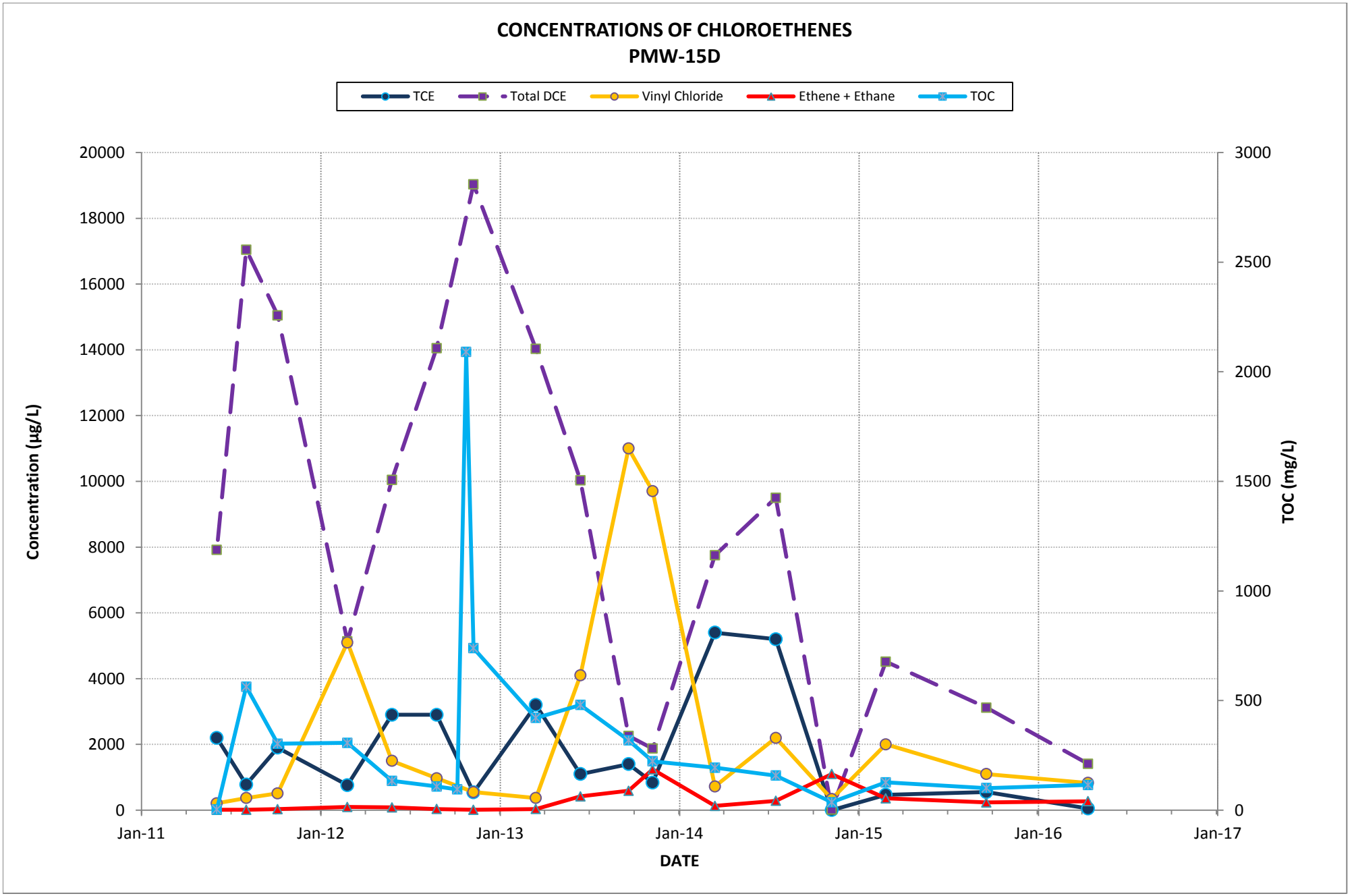

CONCENTRATIONS OF CHLOROETHENES
PMW- 9S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

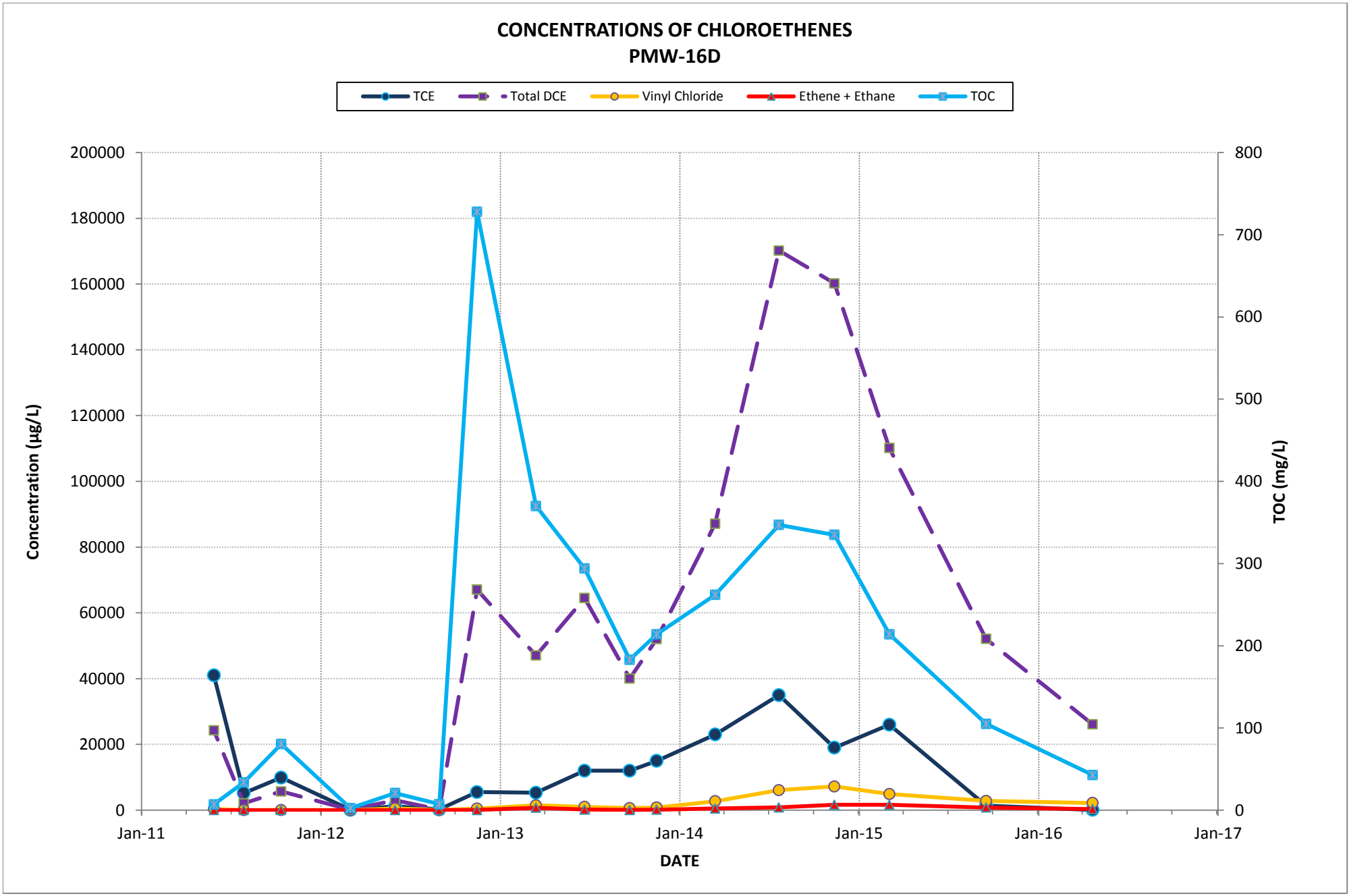

CONCENTRATIONS OF CHLOROETHENES
PMW-10D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

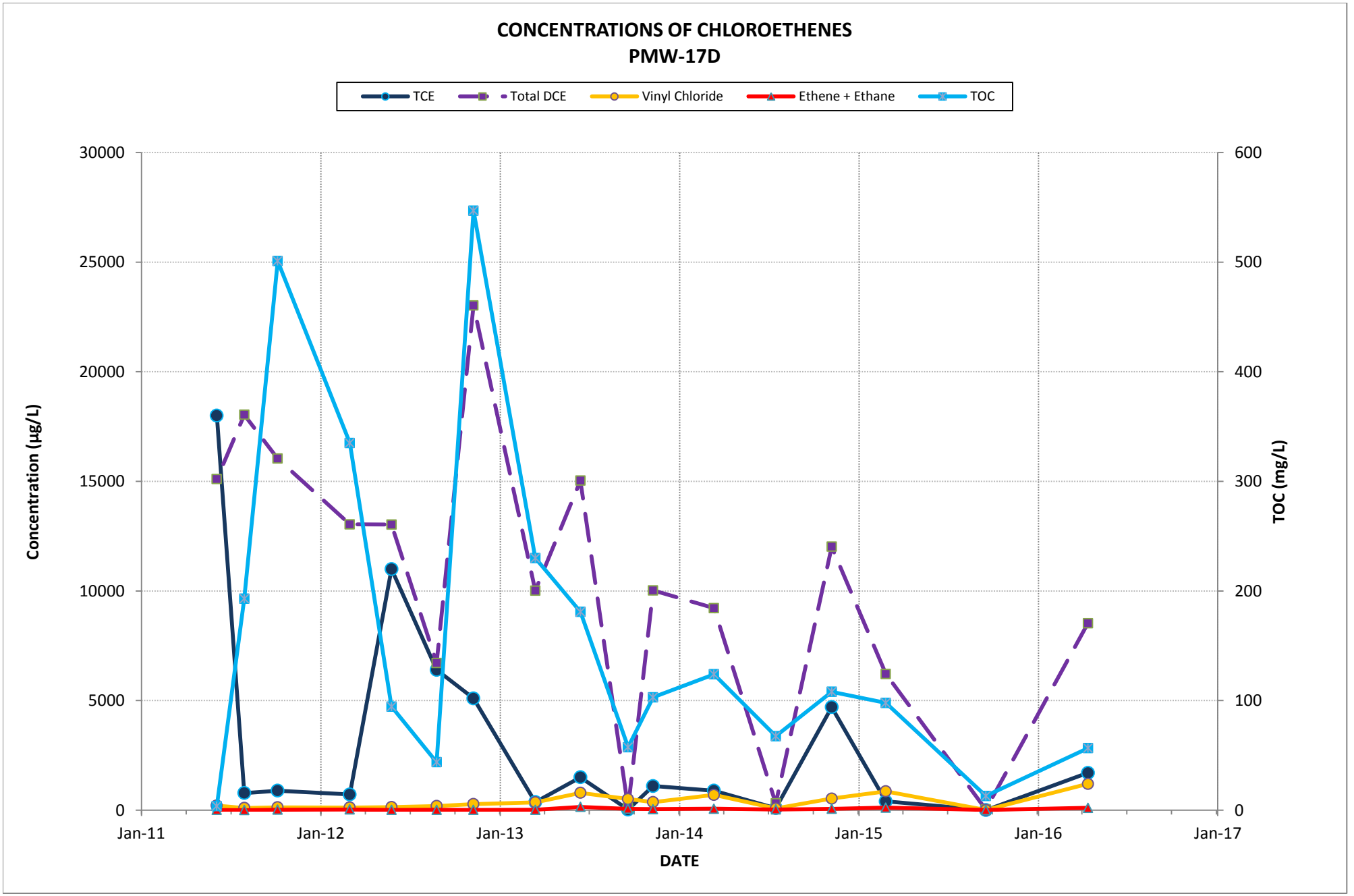

CONCENTRATIONS OF CHLOROETHENES
PMW-11D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
300
250
200
150
100
50
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

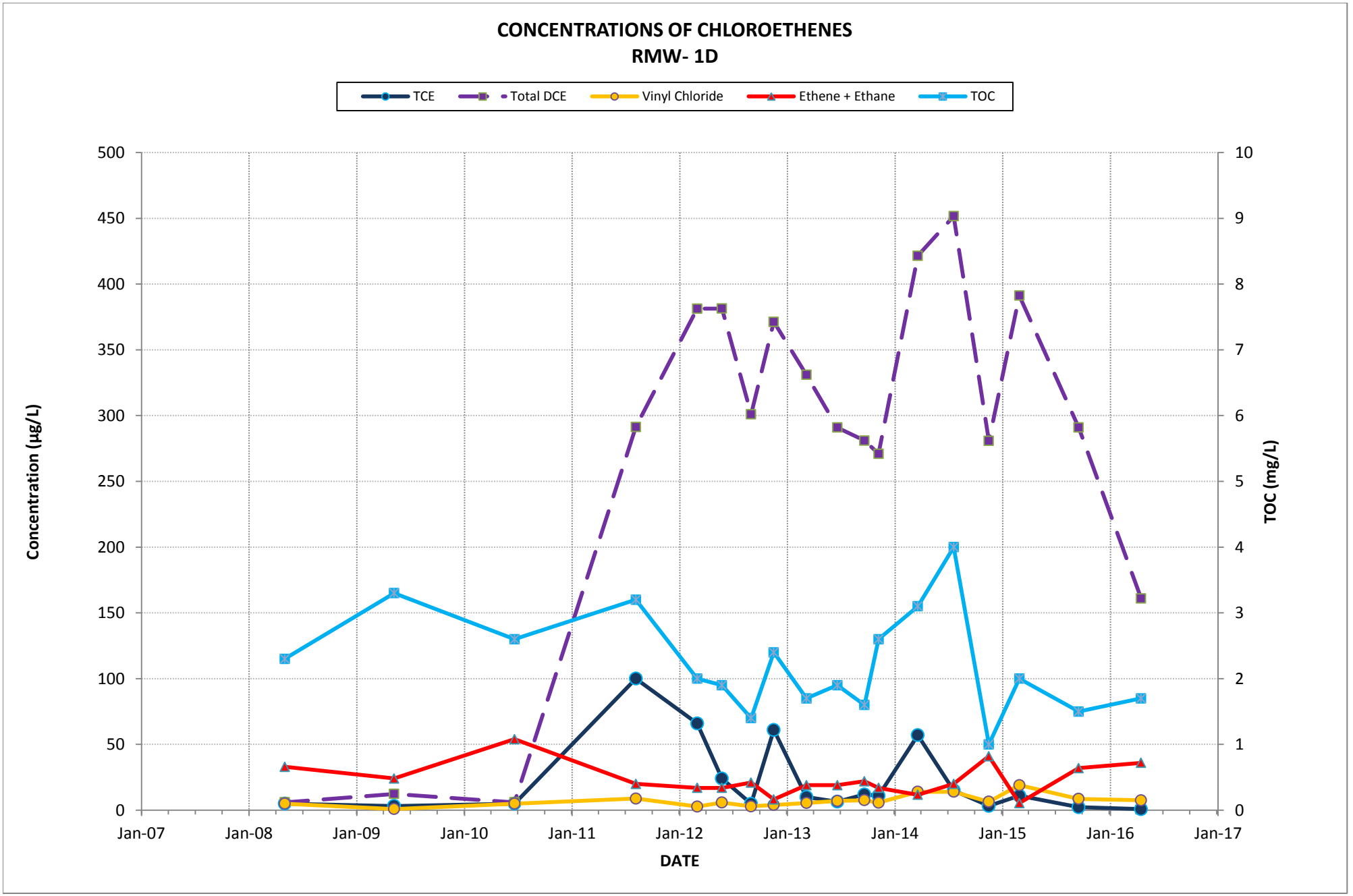

CONCENTRATIONS OF CHLOROETHENES
PMW-11S
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
10
9
8
7
6
5
4
3
2
1
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

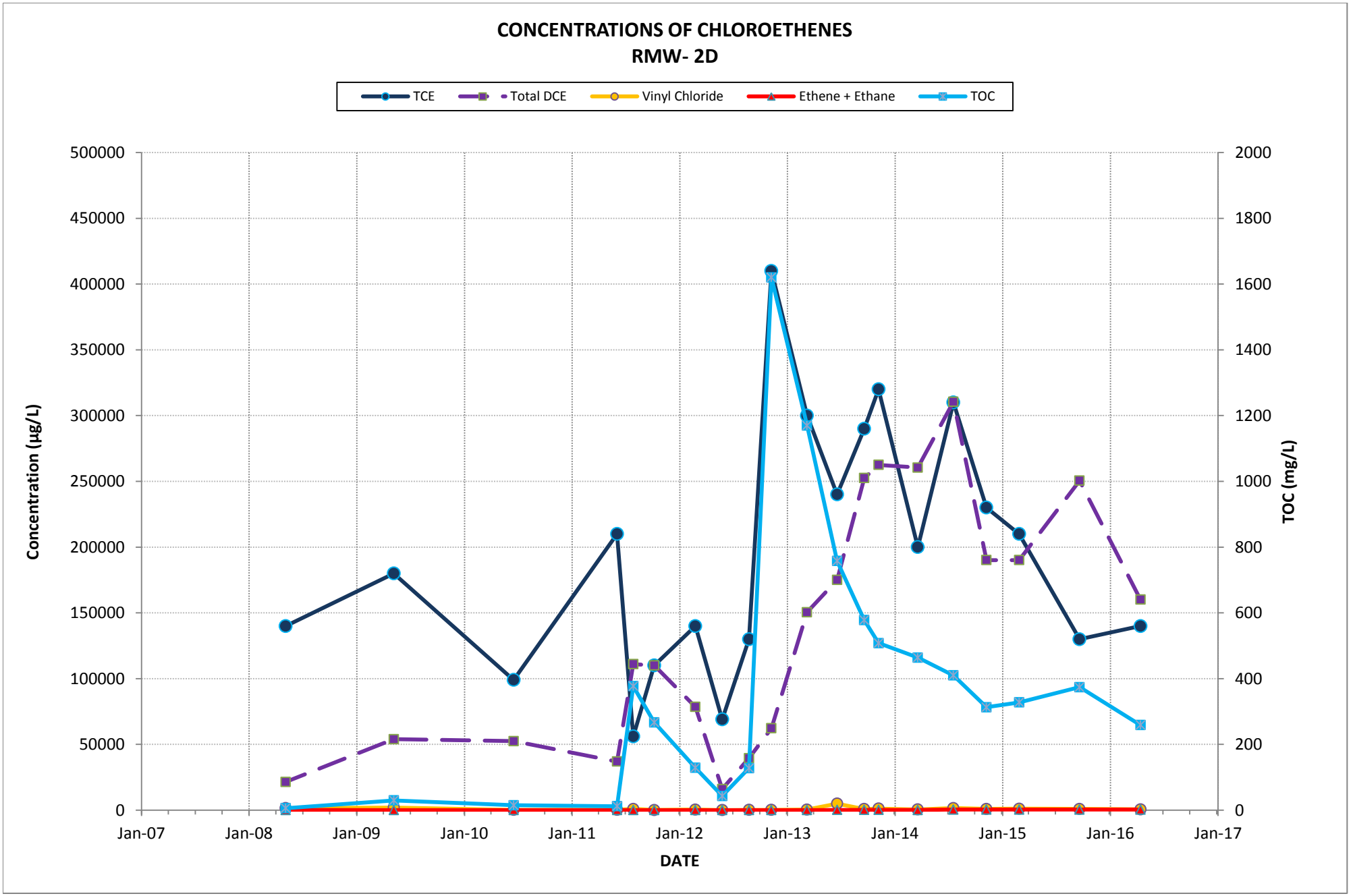

CONCENTRATIONS OF CHLOROETHENES
PMW-12D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
400000
350000
300000
250000
200000
150000
100000
50000
0
4000
3500
3000
2500
2000
1500
1000
500
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE

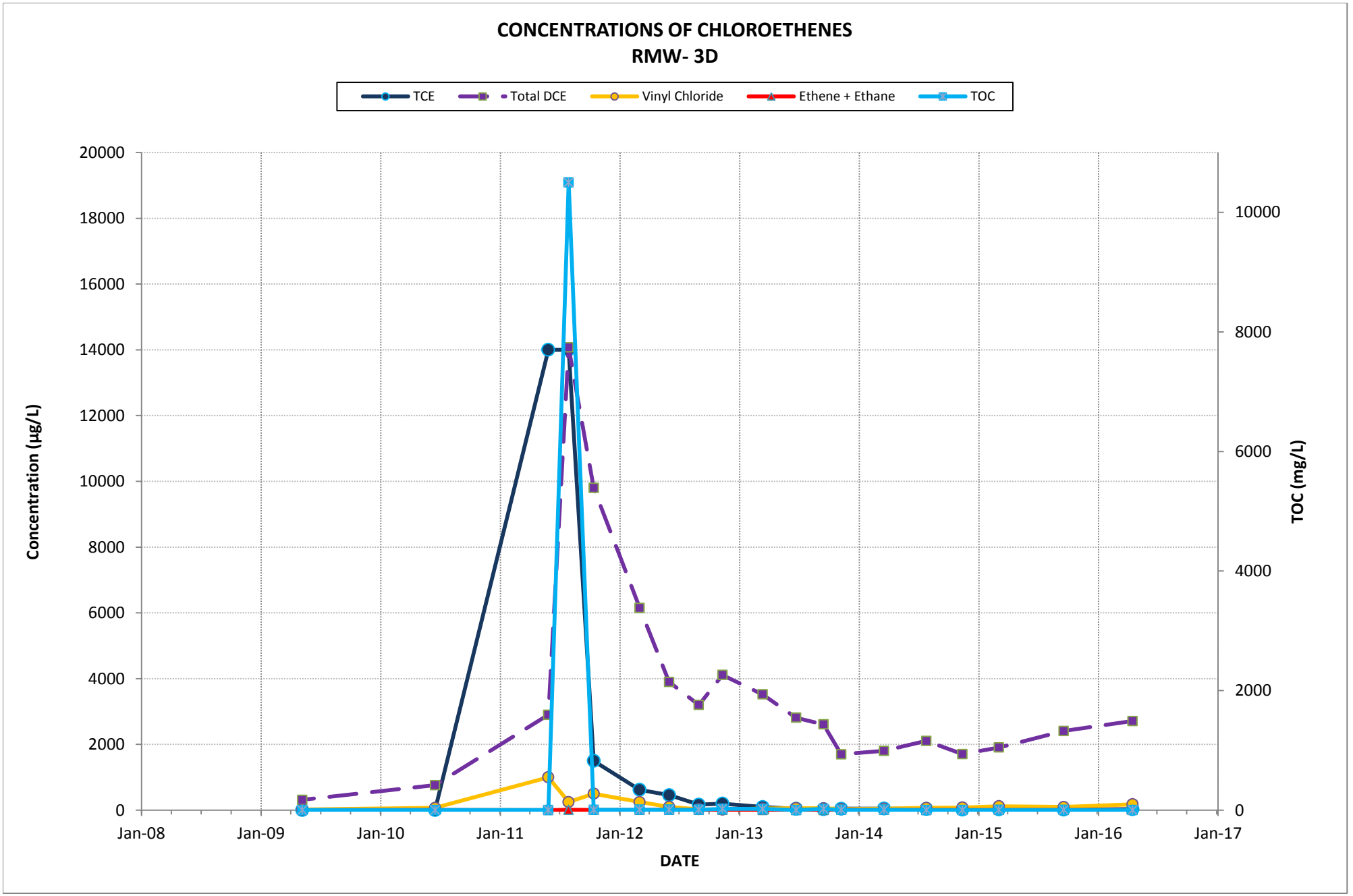

CONCENTRATIONS OF CHLOROETHENES
PMW-15D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
3000
2500
2000
1500
1000
500
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17

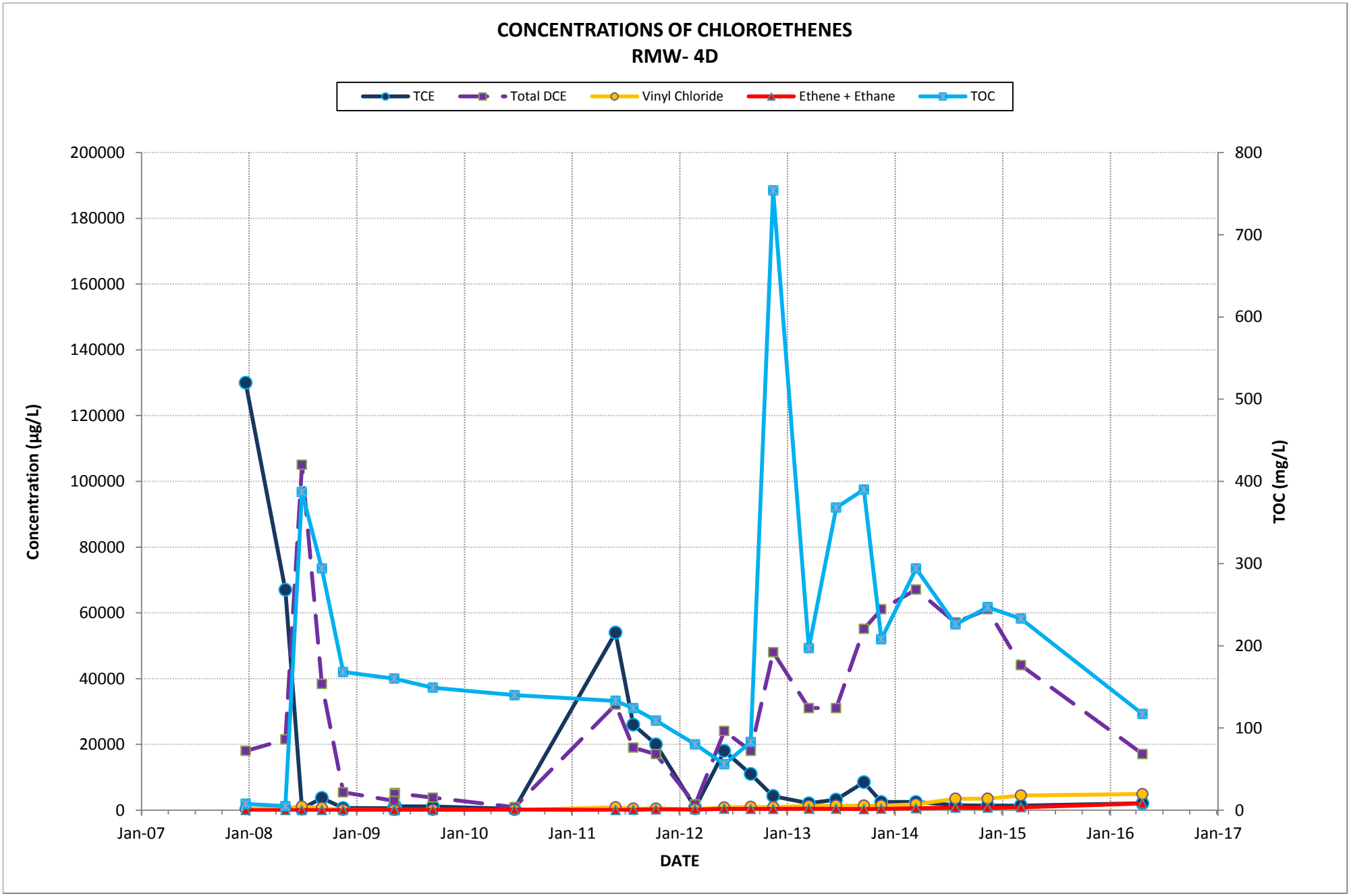

CONCENTRATIONS OF CHLOROETHENES
PMW-16D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
800
700
600
500
400
300
200
100
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE


CONCENTRATIONS OF CHLOROETHENES
PMW-17D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
30000
25000
20000
15000
10000
5000
0
600
500
400
300
200
100
0
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17
DATE


CONCENTRATIONS OF CHLOROETHENES
RMW- 1D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
0
50
100
150
200
250
300
350
400
450
500
0
1
2
3
4
5
6
7
8
9
10
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17


CONCENTRATIONS OF CHLOROETHENES
RMW- 2D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
500000
450000
400000
350000
300000
250000
200000
150000
100000
50000
0
2000
1800
1600
1400
1200
1000
800
600
400
200
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17


CONCENTRATIONS OF CHLOROETHENES
RMW- 3D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
20000
18000
16000
14000
12000
10000
8000
6000
4000
2000
0
10000
8000
6000
4000
2000
0
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17


CONCENTRATIONS OF CHLOROETHENES
RMW- 4D
TCE
Total DCE
Vinyl Chloride
Ethene + Ethane
TOC
Concentration (µg/L)
TOC (mg/L)
DATE
200000
180000
160000
140000
120000
100000
80000
60000
40000
20000
0
800
700
600
500
400
300
200
100
0
Jan-07
Jan-08
Jan-09
Jan-10
Jan-11
Jan-12
Jan-13
Jan-14
Jan-15
Jan-16
Jan-17