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October 15, 2014

Mr. Joseph Kelly
Project Manager
USEPA, Region 5
77 West Jackson Boulevard
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Chicago, IL 60604-3590

Subject: **RCRA 3008(h) Administrative Order on Consent (RCRA-05-2010-0012) –
Tecumseh Products Company
Third Quarter 2014 Progress Report – MID 005-049-440**

Dear Mr. Kelly:

Pursuant to Section VI of the above referenced Administrative Order on Consent (Consent Order) effective March 29, 2010, TRC Environmental Corporation (TRC), on behalf of the Respondent Tecumseh Products Company (TPC), submits this Third Quarter 2014 Progress Report. This report describes activities related to the Consent Order completed by TPC during the third quarter 2014 and planned for completion in the near future. The organization of this document includes, as major headings, the items required under Sections V through VIII of the Consent Order.

V. Project Manager

- The TPC Project Manager is Graham Crockford of TRC.
- The USEPA Project Manager is Joseph Kelly.

VI. Work to be Performed – Remedial Investigation Report and Environmental Indicators Reports

1. A description of activities related to the completion of the Remedial Investigation (RI) Report and the Environmental Indicator (EI) Reports:

- **Investigation Activities**

- **Characterize Releases at or from the Facility** – The findings of source area investigation activities completed through August 2012 are documented in the September 2012 Remedial Investigation and Groundwater Environmental Indicator Report (2012 RI/EI

Report). A Supplemental Groundwater Investigation Workplan was submitted and implemented during the first quarter 2013. A technical memorandum documenting the findings of those investigation activities was submitted as an attachment to the Second Quarter 2013 Progress Report. A passive soil gas survey (PSG) was completed through the central and southern portion of the former TPC building during the third quarter 2013. A Technical Memorandum which summarizes the findings of the 2013 passive soil gas survey was included as an Appendix to the First Quarter 2014 Progress Report. In April 2014 a supplemental PSG survey was conducted by TRC to further evaluate certain discrete areas requested by USEPA including the former engineering area, drum storage areas, tank area, areas adjacent to railroad spurs where loading and unloading may have occurred and the area east/southeast of the southern portion of the building where a number of outbuildings and two hazardous waste storage areas were located. A technical memorandum which summarized the findings of the 2014 PSG Survey was submitted to USEPA in June 2014. A source area membrane interface probe (MIP) investigation was conducted between June 2014 and July 2014. MIP data were submitted to USEPA as they became available. TRC is in the process of developing a 3D-visualization to facilitate evaluation of these data.

- **Define Appropriate Screening Criteria** – Screening criteria are described in detail in the 2012 RI/EI Report and the 2013 Supplement to the Current Human Exposures Under Control Environmental Indicator Report. Screening criteria include:
 - Generic Michigan Department of Environmental Quality (MDEQ) Part 201 Cleanup Criteria;
 - MDEQ Screening levels for the volatilization to indoor air migration pathway, as documented in the 2013 MDEQ *Guidance Document for the Vapor Intrusion Pathway*;
 - MDEQ Rule 57 Surface Water Quality Values; and
 - A site-specific groundwater contact criterion for trichloroethene (TCE) which reflects the 2011 revisions to TCE toxicity data.
- **Define Any Unacceptable Risks to Human Health** – As described in the 2011 Current Human Exposures Under Control Environmental Indicator Report (2011 EI Report), current human exposures to affected media are under control. In September 2013 the Supplement to the Current Human Exposures Under Control Environmental Indicator Report (2013 HE EI) was prepared and submitted to address USEPA comments (provided between December 2011 and October 2012) and to provide additional data and documentation verifying the 2011 EI Report. USEPA provided comments on the 2013 HE EI on January 31, 2014. During the May 2014 project meeting with USEPA, TPC agreed to attempt (contingent on owner agreement) to further verify this assessment at nine residential properties north of the site and one non-residential property east of the site.



During the third quarter 2014 TPC was able to complete indoor air sampling (5 total) and/or sub-slab depressurization/ventilation system installation (5 total) at each of the nine residential properties. No indoor air criteria exceedances were found. Following extended discussion, the owner of the non-residential property east of the site agreed to allow the installation of soil gas sample points at each corner of the main (occupied) building on that property. Soil gas sample points were installed in late September and the initial sample event was completed in October 2014. Analytical data are pending.

- **Define Any Unacceptable Risks to the Environment** – The potential for unacceptable risk to the environment related to the discharge of affected groundwater to nearby surface water and wetlands was evaluated in the 2012 RI/EI Report. This evaluation includes the use of site-specific mixing zone-based GSI criteria. Data collected to date do not indicate an unacceptable risk to the environment. This evaluation may be updated, as appropriate, prior to submittal of the Supplement to the Groundwater Stabilized Environmental Indicator Report due in July 2015.
- **Determine the Stability of Contaminated Groundwater** – An evaluation of the stability of contaminated groundwater was included in the 2012 RI/EI Report. As additional groundwater data become available, groundwater stability will be reviewed as appropriate. A Supplement to the Groundwater Stabilized Environmental Indicator Report will be provided by the agreed July 2015 due date.
- **Response and Mitigation Measures** – Response and mitigation measures conducted through 2013 are documented in the 2011 EI Report, the 2012 RI/EI Report and the 2013 Supplement to the Current Human Exposures Under Control Environmental Indicator Report. These measures include:
 - A local groundwater use ordinance;
 - The decommissioning of private wells in the vicinity of affected groundwater;
 - A Declaration of Restrictive Covenant and License Agreement Regarding Environmental Work for the site;
 - Mitigation of on-site indoor air in areas that were occupied or are expected to be occupied in the future, including:
 - Installation of a sub-slab depressurization/ventilation (SSDV) system in S-Building (the office area for the site manager)¹; and
 - Installation of a soil vapor extraction (SVE) system in P-Building.

¹ At present the building is no longer occupied by the site manager or any other regular employees. The site owner has disconnected electrical service. Consequently this SSDV is not, at present, operational.



- Monitoring and mitigation of off-site indoor air including:
 - Installation of a SSDV system at one residential property east of the site and five residential properties north of the site;
 - Completion of crawlspace sampling activities at four residential properties east of the site and one residential property north of the site;
 - Completion of indoor air sampling at three residential properties north of the site;
 - Installation of a permeable reactive barrier (PRB) downgradient of the southern source area to address the potential off-site vapor intrusion pathway, by treating shallow groundwater affected with chlorinated volatile organic compounds (CVOCs) before the groundwater migrates off-site (a summary of PRB performance over the past year is included as Appendix A); and
 - Installation of a perimeter SVE system as described in the November 2013 Workplan to Install a Perimeter Soil Vapor Extraction System.²
- **Reporting and Summary of Work Completed**
 - **Environmental Indicators Report: Current Human Exposures under Control** – TRC submitted the Current Human Exposures Under Control Environmental Indicators Report (2011 EI Report) to USEPA on September 29, 2011. USEPA provided TPC with comments regarding the 2011 EI Report on December 5, 2011. TPC responded to USEPA comments on December 19, 2011. On December 28, 2011, USEPA proposed an extension for USEPA to complete the CA-725 Form until December 12, 2012, so that confirmation indoor air/crawlspace sampling data from the residential properties east of the site (610 Mohawk, 704 Mohawk, 502 Mohawk, 505 South Maumee Street and 507 South Maumee Street) could be evaluated by USEPA. This work was completed as intended during the fourth quarter 2012. However during an October 29-30, 2012 project meeting, USEPA requested additional work, which TPC set forth in a Technical Memorandum dated December 5, 2012 and Revised December 19, 2012. Those action items included:
 - Table summaries related to the conceptual site model (included in the Fourth Quarter 2012 Quarterly Progress Report); and
 - Four consecutive soil gas sample events at soil gas monitoring locations north and west of the site after SVE system installation (through second quarter 2013), in order to further document the effectiveness of the SVE system.

² Operation of the perimeter SVE system began on March 7, 2014, using a rental SVE blower unit. The permanent blower enclosure was installed on July 10, 2014. A construction documentation report for the perimeter SVE system will be completed following completion of the initial system performance evaluation.

On March 6, 2013, USEPA extended the date for the Current Human Exposures Demonstration to September 30, 2013 to allow TPC to complete the above described work. Consistent with this extension, the Supplement to the Current Human Exposures EI Report was submitted to USEPA on September 30, 2013 (2013 HE EI). USEPA provided comments on the 2013 HE EI on January 31, 2014. During the May 2014 project meeting with USEPA, TPC agreed to attempt (contingent on owner agreement) to further verify this assessment at nine residential properties north of the site and at one non-residential property east of the site. As described above, that work, in large part, was completed during the third quarter 2014.

- **Environmental Indicators Report: Groundwater Stabilized** – TRC submitted the 2012 RI/EI Report to USEPA on September 28, 2012. During the October 29-30, 2012 project meeting, USEPA requested the following:
 - Additional sample events at monitoring wells where VOC concentration data exhibit relatively high standard deviation.
 - Preparation of a workplan to address USEPA comments regarding groundwater stability and remedial investigation activities. The Supplemental Groundwater Investigation Workplan for the Former Tecumseh Products Company Site in Tecumseh, Michigan was submitted and implemented during the first quarter 2013.
 - Installation of additional monitoring wells and subsequent monitoring at those locations in accordance with the Supplemental Groundwater Investigation Workplan.

On March 6, 2013, USEPA extended the date for the Remedial Investigation and Groundwater Environmental Indicator Determination to July 31, 2015. This extension will allow TPC to complete eight quarterly sample events at new monitoring locations prior to the submittal of a Supplement to the 2012 RI/EI Report.

- **Remedial Investigation Report** – TRC submitted the Remedial Investigation Report with the 2012 RI/EI Report to USEPA on September 28, 2012. As described above, USEPA extended the date for the Remedial Investigation and Groundwater Environmental Indicator Determination to July 31, 2015. TPC will provide USEPA with a Supplement to the 2012 RI/EI Report following completion of the additional investigation and monitoring activities described in the Supplemental Groundwater Investigation Workplan.

2. A Summary of Activities during the Reporting Period

- July 2014 – The MIP investigation as outlined in the March 2014 Scope of Work and discussed during the May 2014 project meeting was completed.



- July 2014 – TPC communicated with the property owners of the nine residential parcels located north of the site in order to obtain access for further vapor intrusion evaluation, as discussed during the May 2014 project meeting.
- July 2014 – Operation and maintenance of the perimeter SVE system including installation of the permanent blower enclosure, system start-up, system-wide stepped-rate tests, system balance, scheduled system inspections 1 week and 3 weeks after system start-up, field measurement of the TCE concentrations, and collection of exhaust samples for VOCs analysis.
- July 2014 – Operation and maintenance of the P-Building SVE system was completed including flow and pressure measurements at each extraction well, field measurement of TCE concentrations to determine the appropriate timeline for carbon change out, collection of exhaust samples for VOCs analysis, and completion of piping repairs at soil gas extraction well SVE-01.
- July 2014 – The regular SSDV system inspection was completed at 704 Mohawk. At the request of the homeowner, the inspection did not include access to the interior of the house.
- July 2014 – Vacuum pressure and methane concentrations were measured at all PRB vent locations. Methane concentrations were also measured at the two downgradient soil gas sample points (SG-02 and SG-03R).
- July 2014 – The third quarter groundwater sample event was completed, including collection of 31 samples for volatile organic compound (VOC) analysis. A summary and evaluation of field activities and groundwater data are provided in Appendix B.
- July 2014 – The second quarter 2014 off-site soil gas sample event was completed. A technical memorandum summarizing soil gas sampling activities and analytical data collected during the third quarter 2014 is provided in Appendix C.
- July 2014 – Indoor air sampling was completed at four residential properties north of the site.
- July 2014 – Crawlspace sampling was completed at one residential property north of the site.
- July-August 2014 – SSDV systems were installed at five residential properties north of the site.
- August 2014 – Results of the July 2014 indoor air and crawlspace sampling were reported to homeowners.
- August 2014 – Regular operation and maintenance of the P-Building SVE system was completed including field measurement of TCE concentrations to determine the appropriate timeline for carbon change out.
- August 2014 – Operation and maintenance of the Perimeter SVE system was completed including a scheduled system inspection approximately 7 weeks after system start-up, field measurement of the TCE concentrations, and collection of exhaust samples for VOCs analysis.



- September 2014 – Completion of a soil gas re-sample event at SG-02 and SG-03R to further evaluate data reported in July 2014 which were inconsistent with historical data (Appendix C).
- September 2014 – Regular operation and maintenance of the P-Building SVE system was completed including field measurement of TCE concentrations to determine the appropriate timeline for carbon change out and trimming of vegetation around the blower enclosure to help maintain good ventilation.
- September 2014 – Operation and maintenance of the Perimeter SVE system was completed including installation of a condensate drain line from the carbon vessels back to the knock out tank, carbon change out, and field measurement of the TCE concentrations.
- September 2014 – VOC data for samples collected at soil borings B-58 through B-67 were reported by the analytical laboratory. Originally only data for BTEX compounds (benzene, toluene, ethyl benzene and xylenes) were reported for these samples. Data are tabulated in Appendix D.
- September 2014 – soil gas sample points were installed around the building perimeter at an off-site non-residential property to further evaluate the potential for vapor intrusion.

3. A Summary of Contacts with Representatives of Local Community, Public Interest Groups, or State Government during the Reporting Period

- At the request of one property owner, TRC provided that owner with a copy of the Second Quarter 2014 Progress Report.
- TRC communicated with the Tecumseh District Library personnel in order to update the public repository at the Tecumseh District Library in August 2014.
- TRC communicated with the owner of a residential property east of the site regarding the operation and maintenance of the SSDV system.
- TPC communicated with the owner of a non-residential property east of the site regarding access to install and sample soil gas sample points around the perimeter of the building.
- TPC communicated with the City of Tecumseh and Patrick Hoffman, the realtor for the site, regarding the status of ongoing demolition and the proposed sale of the property.
- Throughout the third quarter 2014, TRC communicated with the City of Tecumseh Fire Department regarding the fire watch activities to help ensure safe access to the building, as required by the City of Tecumseh.
- USEPA and TPC communicated with representatives from the Michigan Department of Environmental Quality and the Michigan Department of Community Health regarding proposed SSDV system installations at certain properties north of the site.



4. A Summary of Problems and Potential Problems Encountered During the Reporting Period

- No new problems were noted during the third quarter 2014.

5. Action Taken to Rectify Problems Identified Above

- No new problems were noted during the third quarter 2014.

6. Changes in Personnel During Reporting Period

- No TPC/TRC project personnel have changed.

7. Projected Work for the Next Reporting Period

- Use MIP data and associated 3D-visualization to develop a confirmation sampling plan;
- Begin implementation of off-site high resolution site characterization using MIP data and associated 3D-visualization to help select sampling locations;
- Provide homeowners with SSDV system installation documentation (5 total);
- Meet with the owners of residential properties north of the site who have not yet agreed to a SSDV system (3 total) to request, again, permission to install the proposed SSDV system;
- Review and evaluate soil gas data collected at the non-residential property east of the site;
- Prepare and submit a construction documentation report for the perimeter SVE system;
- Continue routine perimeter SVE system operation and maintenance, including completion of carbon change out as needed;
- Continue routine P-Building SVE system operation and maintenance, including completion of carbon change out as needed;
- Conduct a quarterly SSDV system performance evaluation at the residential property located at 704 Mohawk;
- Conduct and evaluate the fourth quarter 2014 groundwater sampling event;
- Complete and evaluate the fourth quarter 2014 off-site soil gas sample event;
- Complete and evaluate the fourth quarter 2014 PRB groundwater sample event; and
- Collect gas composition readings at vents installed along the length of the PRB.

VI. Work to be Performed – Final Corrective Measures Proposal

Preparation of the Final Corrective Measures Proposal will be initiated following completion of the Supplement to the RI and Groundwater EI Report.



VI. Work to be Performed – Final Corrective Measures Implementation

Work related to the Final Corrective Measures Implementation will be initiated following USEPA's Final Decision.

VI. Work to be Performed – Establish Public Repository of Information

TPC established a public repository in the City Clerk's office at City Hall in August 2010. To address USEPA comments, the public repository was relocated to the Tecumseh District Library in November 2011. A notice sheet has been posted on the bulletin board at the Tecumseh District Library which lists and briefly describes the documents included in the public repository. TPC updates the public repository as appropriate.

VII. Access

The process of initiating contact with the owners of 10 additional parcels, in order to obtain access agreements, began in June 2014. During the third quarter 2014, access agreements were obtained to install SSDV systems at five residential properties north of the site. TPC has requested access agreements for SSDV system installment at the remaining residential properties, but the owners have not agreed. In addition, TPC obtained an access agreement to install and sample soil gas sample points at a non-residential property east of the site.

VIII. Cost Estimates and Assurances of Financial Responsibility

In accordance with the Consent Order, TPC submitted an annually updated cost estimate on January 30, 2014. Based on comments from USEPA, and additional work as outlined in the SOW, a revised cost estimate was submitted on April 8, 2014. This April 2014 Revised Cost Estimate includes the anticipated costs of additional work to be completed in response to USEPA's January 31, 2014 comment letter. Financial assurance for the April 2014 Revised Cost Estimate was established in September 2014 following USEPA review and approval.

If you have any questions regarding this progress report, or the attachments, please contact me at (734) 585-7813, or gcrockford@trcsolutions.com.

Sincerely,

TRC Environmental Corporation


Graham Crockford, C.P.G.
Project Manager



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USEPA, Region 5
October 15, 2014
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Attachments:

- Appendix A: Third Annual Performance Monitoring Report: Permeable Reactive Barrier
Downgradient of the Southern Source Area
- Appendix B: Summary of the Third Quarter 2014 Groundwater Monitoring Event
- Appendix C: Third Quarter 2014 Soil Gas Sample Event
- Appendix D: Tables of VOC Data for BTEX Investigation Locations

cc: Susan Perdomo, USEPA
Michael Beedle, USEPA
Gregory Rudloff, USEPA
Colleen Olsberg, USEPA
Bhomma Sundar, USEPA
David Petrovski, USEPA
Mario Mangino, USEPA
Daniel Mazur, USEPA
Chris DeWetter, Tecumseh Products Company
Jason Smith, Tecumseh Products Company
Douglas McClure, Conlin, McKenney & Philbrick, PC
Stacy Metz, TRC Environmental Corporation
Dave Roberts, Tecumseh Food, Machinery & Engineering, LLC
Tecumseh District Library – Public Repository
Mary Speer, Resident



Appendix A
**Third Annual Performance Monitoring Report: Permeable
Reactive Barrier Downgradient of the Southern Source Area**

Technical Memorandum

To: Jason Smith, Tecumseh Products Company

From: Stacy Metz and Graham Crockford, TRC

Subject: Third Annual Performance Monitoring Report
Permeable Reactive Barrier Downgradient of the Southern Source Area
Former Tecumseh Products Company Site in Tecumseh, Michigan
(RCRA-05-2010-0012)

Date: October 10, 2014

cc: Chris DeWetter, Tecumseh Products Company
Douglas McClure, Conlin, McKenney & Philbrick, PC

Project No.: 186299.0001.0000, Phase 1

Background

Tecumseh Products Company (TPC) has retained TRC Environmental Corporation (TRC), to assist with environmental investigation and remediation activities at the former TPC site located at 100 East Patterson Street in Tecumseh, Michigan. Investigation activities indicate that shallow groundwater affected by chlorinated volatile organic compounds (CVOCs) has migrated off-site at concentrations above residential and non-residential groundwater screening levels for vapor intrusion (GWSLs).

In May 2011 a permeable reactive barrier (PRB) was installed in two sections as described in the "Construction Documentation Report for the Permeable Reactive Barrier Downgradient of the Southern Source Area" (TRC, February 2012). Groundwater monitoring has been performed, specifically to monitor the performance of the PRB, according to the "Workplan Addendum to Install Additional PRB Performance Monitoring Wells at the Former Tecumseh Products Site in Tecumseh, Michigan" (Workplan Addendum) which was submitted to USEPA on July 8, 2011. The September 2012 Performance Monitoring Report documented the results of the PRB monitoring activities through July 2012. Data provided in that report indicated that during the first year of operation the PRB enabled reductive dechlorination of the CVOCs in the shallow groundwater flow system by establishing favorable geochemical conditions and by providing a food source for de-halogenating bacteria. The results of the PRB monitoring activities through June 2013 were provided in the September 2013 Second Annual PRB Performance Monitoring Report. Data provided in that report indicate that the PRB continued to enable reductive dechlorination of the CVOCs in the shallow

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groundwater flow system by maintaining favorable geochemical conditions and by providing a food source for de-halogenating bacteria.

Summary of PRB Design and Installation

The site perimeter downgradient (east) of the southern source area is divided into two sections. PRB Section 1 is located adjacent to Maumee Street, and PRB Section 2 is located along the eastern site perimeter adjacent to parcel 325-0261-00 located at 805 South Maumee Street (Figure 1). Given the physical site constraints, two different installation techniques were used:

- *In situ* soil blending was used to deliver the Adventus product DARAMEND® to the subsurface in areas where the target treatment zone was relatively shallow (up to 18 feet below ground surface [ft bgs]) and free of obstacles, e.g., the majority of PRB Section 1; and
- Injections were used to deliver the Redox Tech, LLC (Redox Tech) product ABC®+ to portions of the reactive barrier further below ground surface (>18 ft bgs) and in the vicinity of obstacles, e.g., all of PRB Section 2, to increase the depth of portions of PRB Section 1, in the vicinity of an existing sewer pipe, and adjacent to the southern perimeter fence.

The Construction Documentation Report for the Permeable Reactive Barrier Downgradient of the Southern Source Area (TRC, February 2012) describes PRB design and installation in more detail, including design depth and chemical dosing.

Summary PRB Performance Monitoring Activities

The Workplan Addendum, which was submitted to USEPA on July 8, 2011, describes the performance monitoring network, including the purpose of each well in evaluating PRB performance, hydraulic conductivity testing, and the groundwater sampling program. In response to USEPA comments (documented in the May 30, 2012 USEPA letter “Re: Summary of March 5-6, 2012 Meeting”), one additional up gradient PRB monitoring well (PRB-16s) was installed on August 2, 2012.

Groundwater monitoring began as soon as feasible following PRB installation, in August 2011. Groundwater sample events are conducted in general accordance with the Workplan Addendum, the September 2013 Second Annual Performance Monitoring Report, and the Quality Assurance Project Plan (QAPP). The PRB monitoring program is evaluated and modified as appropriate. As proposed in the September 2013 Second Annual Performance Monitoring Report, the frequency of groundwater performance monitoring was reduced to semi-annual in the fourth quarter 2013. The third quarter 2013 PRB performance groundwater sample event was completed between August 26 and August 27, 2013; the fourth quarter 2013 PRB performance groundwater sample event was completed between November 13 and November 15, 2013; and the second quarter 2014 groundwater sample event was completed between May 28, 2014 and June 5, 2014. During each sample event the following field activities were completed:

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- Measurement of groundwater elevations at all 19 PRB monitoring well locations;
- Collection of groundwater samples at all 19 PRB monitoring well locations, and measurement of field parameters (pH, conductivity, turbidity, temperature dissolved oxygen, and redox potential) at these locations;
- Analysis of all 19 PRB groundwater samples for VOCs; and
- Analysis of samples collected at shallow PRB monitoring locations installed within and downgradient of PRB Section 1 (PRB-01s, PRB-02s, PRB-04s, PRB-06s, PRB-07s, PRB-08s, and PRB-09s) for dissolved gasses (methane, ethane and ethylene).

A present no changes are proposed for the PRB groundwater monitoring program. Following each sampling event TRC will evaluate the sample program in the context of project objectives and propose changes as appropriate.

Evaluation of Groundwater Data

Groundwater levels were collected prior to each groundwater sample event. Water levels are tabulated in Table 1. Groundwater elevations and gradients are generally consistent with those observed previously.

Concentrations of VOCs detected at one or more monitoring locations are tabulated in Table 2 and laboratory analytical data are provided in Attachment 1. Two trend charts were prepared for each performance monitoring location (Attachment 2):

- The first series of trend charts illustrates the concentration of chlorinated ethenes (tetrachloroethene [PCE], trichloroethene [TCE], cis-1,2-dichloroethene [cis-DCE] and vinyl chloride) over time at each monitoring location; and
- The second series of trend charts illustrates the concentration of chlorinated ethanes (1,1,1-trichloroethane [TCA], 1,1-dichloroethane [1,1-DCA] and chloroethane) over time at each monitoring location.

In addition to trend charts, isoconcentration maps illustrating the spatial distribution of the parent compounds TCE and TCA around the PRB were prepared (Figures 2 and 3, respectively). Similar isoconcentration maps illustrating the distribution of TCE and TCA in July 2012 and May/June 2013 were provided in previous Performance Monitoring Reports. Those figures may be referenced for comparative purposes.

In order to enable reductive dechlorination, both reducing conditions and a food source (i.e., electron donor) are needed within the groundwater system. The reactive materials added to the subsurface (the Adventus product DARAMEND® and the Redox Tech product ABC®+) included zero valent iron (ZVI), which is a strong reducing agent and a source of organic carbon (e.g., lactate and vegetable oil), as the food source. Therefore, water quality parameters may be used in conjunction with VOC concentration data to evaluate PRB effectiveness.

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Reducing conditions are best measured by the redox potential (ORP) and the dissolved oxygen (DO) concentration in groundwater. A negative ORP and a low DO concentration generally indicate that the aquifer is under reducing conditions. Field measurements, including ORP and DO, were collected during each sample event, and are provided in Table 3. Regardless of the initial organic carbon source, anaerobic breakdown (i.e., fermentation) of the carbon additions will result in the production of dissolved gases. Specifically, methane is formed during the fermentation of the carbon sources that are a component of the PRB, while the ethane and ethylene result from the complete dechlorination of TCE and TCA. Therefore, dissolved gases in groundwater are good indicators that the desired anaerobic conditions have been produced. Results of the dissolved gas analyses are presented in Table 4.

PRB Section 1

As documented in the September 2013 Second Annual Performance Monitoring Report, concentrations of CVOCs, particularly the parent compounds TCE and TCA, have decreased in areal extent and in maximum concentration downgradient of PRB Section 1. As illustrated in the trend charts provided in Attachment 2, concentrations of parent products appear to have stabilized since that time, indicating that the microbial populations which facilitate reductive dechlorination have reached a plateau.

PRB Section 1 is having a significant effect on the off-site migration of CVOCs, particularly TCE and TCA. Downgradient of PRB Section 1 the core of the plume has decreased in width and in magnitude. Geochemical parameters (Table 3) and indicators of food sources (Table 4) show that the PRB is creating conditions which enable the native bacteria to reductively dechlorinate TCE and TCA, i.e., lowering the ORP and releasing sources of food (dissolved organic carbon) into the aquifer. Although the flux of dissolved organic carbon will decline over time, the effect of the PRB is expected to be maintained for several years.

PRB Section 2

As documented in the September 2013 Second Annual Performance Monitoring Report, groundwater chemistry data collected in the vicinity of PRB Section 2 indicate that PRB Section 2 has not had the same effectiveness when compared to PRB Section 1. The DO concentration is generally lower in monitoring wells PRB-14s and PRB-15s, as compared to the up gradient and side gradient monitoring wells, indicating that PRB Section 2 has had a positive effect in developing conditions favorable to reductive dechlorination. However, VOC-data indicate that the PRB has only had a limited effect on groundwater concentrations.

Groundwater data collected in the vicinity of PRB Section 2, indicate that the injected portion of the PRB has not duplicated the robust reducing conditions and abundant food source provided by the blended portion of the PRB. This is not unexpected, given the relative quantity of reactive material delivered to the subsurface (7 to 12-percent by mass in PRB Section 1 compared to 0.18 to 0.55-percent by mass in PRB Section 2). VOC data show that there is reductive dechlorination occurring in the vicinity of PRB Section 2. However, given

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the limited effectiveness of PRB Section 2 to date, the soluble nature of injected carbon source, the limited quantity of injected material when compared to PRB Section 1, and the relatively high groundwater flow rate, there is little reason to expect a significant or sustained improvement in CVOC concentrations downgradient of the PRB Section 2. Rather it seems likely that the mass of injected material was insufficient to create and maintain an environment favorable to reductive dechlorination while a robust population of dechlorinating bacteria developed.

Data Quality Assurance

Data were collected to evaluate the effectiveness of the PRB, and are not intended to be used for long-term compliance monitoring. Therefore, field and laboratory data were evaluated in accordance with the QAPP using Level 3 data quality objectives. The data quality objectives and laboratory completeness goals for the project were met, and the data are usable.

Methane Management

As documented in the PRB Construction Documentation Report, 15 vents were installed adjacent to PRB Section 1 to help control the potential accumulation of methane in the subsurface. Vents V-01, V-02, and V-03 are vented actively, the remaining vents (V-04 through V-15) are vented passively with a wind driven turbine. Each vent is equipped with a sample port so that soil gas composition can be monitored. Vent locations are shown on Figure 4.

Between August 2013 and May 2014, the gas composition at methane vents was monitored on a quarterly basis, except during the winter months (i.e., while the ground was frozen), when sample frequency was increased to monthly.¹ Gas composition readings through May 2014 are provided in Table 5. Methane concentrations at vents V-01, V-02, V-03, V-04, V-05, V-06, V-07, V-08, V-09, V-10, V-13, V-14, and V-15 have remained below the target concentration of 5.1-percent methane through the past year. Concentrations of methane at V-11 and V-12 were slightly above the target methane concentration during one or more monitoring events. The maximum detected methane concentration was 5.9-percent. Although these vents exceed the target concentration, they are located on-site, immediately adjacent to the blended portion of the PRB. Gas composition readings were also collected at the two soil gas sample points located off-site immediately downgradient of the PRB (SG-02 and SG-03R). Methane concentrations at these locations were non-detect prior to the installation of active ventilation at V-01, V-02 and V-03, and they remain non-detect.

Methane concentrations at PRB vent locations continue to be monitored on a quarterly basis through the second quarter of 2015, except during the winter months (i.e., while the ground is frozen), when sample frequency will be increased to monthly.

¹ Effort was made to also collect readings at soil gas sample points SG-02 and SG-03R during each monitoring event. However, those monitoring points are located inside flush mount covers immediately adjacent to the Maumee Street roadway. Significant snow and ice cover from road clearing activities prevented monitoring at those locations during winter months.

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Tables

Table 1
Groundwater Elevations
PRB Performance Monitoring
Former Tecumseh Products Company Site
Tecumseh, Michigan

Well Location	Top of Well Casing (ft MSL)	Measurement Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft MSL)
PRB-01s	784.06	8/9/2011	5.60	778.46
		10/5/2011	5.91	778.15
		1/11/2012	5.29	778.77
		4/2/2012	5.10	778.96
		7/2/2012	5.81	778.25
		10/2/2012	6.84	777.22
		3/4/2013	7.45	776.61
		6/5/2013	7.19	776.87
		8/26/2013	7.29	776.77
		11/13/2013	7.57	776.49
		5/28/2014	6.69	777.37
PRB-02s	784.07	8/9/2011	5.70	778.37
		10/5/2011	5.93	778.14
		1/11/2012	5.29	778.78
		4/2/2012	5.06	779.01
		7/2/2012	5.84	778.23
		10/2/2012	6.85	777.22
		3/4/2013	7.41	776.66
		6/5/2013	7.27	776.80
		8/26/2013	7.28	776.79
		11/13/2013	7.63	776.44
		5/28/2014	6.70	777.37
PRB-03s	784.16	8/9/2011	5.52	778.64
		10/5/2011	5.83	778.33
		1/11/2012	5.17	778.99
		4/2/2012	5.02	779.14
		7/2/2012	5.62	778.54
		10/2/2012	6.68	777.48
		3/4/2013	7.15	777.01
		6/5/2013	6.96	777.20
		8/26/2013	7.03	777.13
		11/13/2013	7.44	776.72
		5/28/2014	6.51	777.65
PRB-04s	784.70	8/9/2011	6.14	778.56
		10/5/2011	6.40	778.30
		1/11/2012	5.76	778.94
		4/2/2012	5.57	779.13
		7/2/2012	6.28	778.42
		10/2/2012	7.23	777.47
		3/4/2013	7.84	776.86
		6/5/2013	7.66	777.04
		8/26/2013	7.70	777.00
		11/13/2013	8.06	776.64
		5/28/2014	7.12	777.58

Notes:

Survey conducted to feet mean sea level by Midwestern Consultants, Inc. (2011)

ft MSL - feet above mean sea level

ft BTOC - feet below top of casing

NI- Not installed at time of measurement

* Measured depth to water is anomalous. Datum was not used.

Table 1
 Groundwater Elevations
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Well Location	Top of Well Casing (ft MSL)	Measurement Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft MSL)
PRB-04d	784.70	8/9/2011	6.10	778.60
		10/5/2011	6.40	778.30
		1/11/2012	5.77	778.93
		4/2/2012	5.57	779.13
		7/2/2012	6.30	778.40
		10/2/2012	7.31	777.39
		3/4/2013	7.85	776.85
		6/5/2013	7.61	777.09
		8/26/2013	7.71	776.99
		11/13/2013	8.03	776.67
		5/28/2014	7.10	777.60
PRB-05s	784.66	8/9/2011	5.96	778.70
		10/5/2011	6.23	778.43
		1/11/2012	5.58	779.08
		4/2/2012	5.38	779.28
		7/2/2012	6.05	778.61
		10/2/2012	7.15	777.51
		3/4/2013	7.64	777.02
		6/5/2013	7.39	777.27
		8/26/2013	7.51	777.15
		1/13/2013	7.85	776.81
		5/28/2014	6.88	777.78
PRB-06s	784.52	8/9/2011	5.90	778.62
		10/5/2011	6.16	778.36
		1/11/2012	5.51	779.01
		4/2/2012	5.62	778.90
		7/2/2012	6.00	778.52
		10/2/2012	7.06	777.46
		3/4/2013	7.54	776.98
		6/5/2013	7.29	777.23
		8/26/2013	7.40	777.12
		11/13/2013	7.66*	776.86*
		5/28/2014	6.77	777.75
PRB-07s	784.08	8/9/2011	5.59	778.49
		10/5/2011	5.82	778.26
		1/11/2012	5.19	778.89
		4/2/2012	4.98	779.10
		7/2/2012	5.70	778.38
		10/2/2012	6.78	777.30
		3/4/2013	7.31	776.77
		6/5/2013	7.06	777.02
		8/26/2013	7.12	776.96
		11/13/2013	7.44	776.64
		5/28/2014	6.54	777.54

Notes:

Survey conducted to feet mean sea level by Midwestern Consultants, Inc. (2011)

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ft BTOC - feet below top of casing

NI- Not installed at time of measurement

* Measured depth to water is anomalous. Datum was not used.

Table 1
Groundwater Elevations
PRB Performance Monitoring
Former Tecumseh Products Company Site
Tecumseh, Michigan

Well Location	Top of Well Casing (ft MSL)	Measurement Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft MSL)
PRB-08s	784.69	8/9/2011	6.17	778.52
		10/5/2011	6.39	778.30
		1/11/2012	5.76	778.93
		4/2/2012	5.54	779.15
		7/2/2012	6.24	778.45
		10/2/2012	7.29	777.40
		3/4/2013	7.80	776.89
		6/5/2013	7.56	777.13
		8/26/2013	7.66	777.03
		11/13/2013	7.98	776.71
5/28/2014	7.08	777.61		
PRB-08d	784.69	8/9/2011	6.14	778.55
		10/5/2011	6.38	778.31
		1/11/2012	5.74	778.95
		4/2/2012	5.53	779.16
		7/2/2012	6.25	778.44
		10/2/2012	7.33	777.36
		3/4/2013	7.78	776.91
		6/5/2013	7.59	777.10
		8/26/2013	7.66	777.03
		11/13/2013	8.02	776.67
5/28/2014	7.08	777.61		
PRB-09s	785.08	8/9/2011	6.45	778.63
		10/5/2011	6.69	778.39
		1/11/2012	6.03	779.05
		4/2/2012	5.99	779.09
		7/2/2012	6.55	778.53
		10/2/2012	7.66	777.42
		3/4/2013	8.00	777.08
		6/5/2013	7.73	777.35
		8/26/2013	7.90	777.18
		11/13/2013	8.06	777.02
5/28/2014	7.10	777.98		
PRB-10s	785.22	8/9/2011	6.60	778.62
		10/5/2011	6.85	778.37
		1/11/2012	6.21	779.01
		4/2/2012	5.97	779.25
		7/2/2012	6.69	778.53
		10/2/2012	7.87	777.35
		3/4/2013	8.17	777.05
		6/5/2013	7.93	777.29
		8/26/2013	8.05	777.17
		11/13/2013	8.46	776.76
5/28/2014	7.39	777.83		

Notes:

Survey conducted to feet mean sea level by Midwestern Consultants, Inc. (2011)

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ft BTOC - feet below top of casing

NI- Not installed at time of measurement

* Measured depth to water is anomalous. Datum was not used.

Table 1
Groundwater Elevations
PRB Performance Monitoring
Former Tecumseh Products Company Site
Tecumseh, Michigan

Well Location	Top of Well Casing (ft MSL)	Measurement Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft MSL)
PRB-11s	795.12	8/9/2011	15.73	779.39
		10/5/2011	16.02	779.10
		1/11/2012	15.32	779.80
		4/2/2012	15.06	780.06
		7/2/2012	15.70	779.42
		10/2/2012	16.88	778.24
		3/4/2013	17.24	777.88
		6/5/2013	16.96	778.16
		8/26/2013	17.12	778.00
		11/13/2013	17.50	777.62
5/29/2014	16.54	778.58		
PRB-12s	795.46	8/9/2011	16.02	779.44
		10/5/2011	16.34	779.12
		1/11/2012	15.66	779.80
		4/2/2012	15.42	780.04
		7/2/2012	16.04	779.42
		10/2/2012	17.22	778.24
		3/4/2013	17.66	777.80
		6/5/2013	17.31	778.15
		8/26/2013	17.45	778.01
		11/13/2013	17.87	777.59
5/29/2014	17.95	777.51		
PRB-13s	797.20	8/9/2011	17.67	779.53
		10/5/2011	18.01	779.19
		1/11/2012	17.34	779.86
		4/2/2012	17.06	780.14
		7/2/2012	17.69	779.51
		10/2/2012	18.88	778.32
		3/4/2013	19.23	777.97
		6/5/2013	18.96	778.24
		8/26/2013	19.14	778.06
		11/13/2013	19.60	777.60
5/29/2014	18.60	778.60		
PRB-14s	796.70	8/9/2011	17.24	779.46
		10/5/2011	17.58	779.12
		1/3/2012	16.92	779.78
		4/2/2012	16.64	780.06
		7/2/2012	17.30	779.40
		10/2/2012	18.43	778.27
		3/4/2013	18.91	777.79
		6/5/2013	18.55	778.15
		8/26/2013	18.73	777.97
		11/13/2013	19.16	777.54
5/29/2014	18.15	778.55		

Notes:

Survey conducted to feet mean sea level by Midwestern Consultants, Inc. (2011)

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ft BTOC - feet below top of casing

NI- Not installed at time of measurement

* Measured depth to water is anomalous. Datum was not used.

Table 1
 Groundwater Elevations
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Well Location	Top of Well Casing (ft MSL)	Measurement Date	Depth to Groundwater (ft BTOC)	Groundwater Elevation (ft MSL)
PRB-15s	795.35	8/9/2011	15.95	779.40
		10/5/2011	16.26	779.09
		1/11/2012	15.59	779.76
		4/2/2012	15.33	780.02
		7/2/2012	15.95	779.40
		10/2/2012	17.16	778.19
		3/4/2013	17.60	777.75
		6/5/2013	17.21	778.14
		8/26/2013	17.37	777.98
		11/13/2013	17.80	777.55
5/29/2014	16.80	778.55		
PRB-15d	795.43	8/9/2011	16.02	779.41
		10/5/2011	16.34	779.09
		1/11/2012	15.66	779.77
		4/2/2012	15.41	780.02
		7/2/2012	16.05	779.38
		10/2/2012	17.23	778.20
		3/4/2013	17.70	777.73
		6/5/2013	17.29	778.14
		8/26/2013	17.50	777.93
		11/13/2013	17.86	777.57
5/29/2014	16.91	778.52		
PRB-16s	785.02	8/9/2011	NI	--
		10/5/2011	NI	--
		1/11/2012	NI	--
		4/2/2012	NI	--
		7/2/2012	NI	--
		10/2/2012	7.52	777.50
		3/27/2013	8.04	776.98
		6/5/2013	7.71	777.31
		8/26/2013	7.81	777.21
		11/13/2013	8.17	776.85
5/28/2014	7.19	777.83		

Notes:

Survey conducted to feet mean sea level by Midwestern Consultants, Inc. (2011)

ft MSL - feet above mean sea level

ft BTOC - feet below top of casing

NI- Not installed at time of measurement

* Measured depth to water is anomalous. Datum was not used.

Table 2
Summary of Detected Volatile Organic Compounds in Groundwater
PRB Performance Monitoring
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽²⁾	Isopropylbenzene	n-Propyl Benzene ⁽²⁾	Tetrachloroethene	Toluene ⁽²⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Tri-methylbenzene	Vinyl Chloride	Total Xylenes ⁽²⁾
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PRB-01s (6-11') Depth to Groundwater* Approx. 5.5 - 6.5'	8/10/2011	<1,000	<250	<50	<250	<50	<50	<50	170	<50	<50	<50	<50	<50	<50	3,700	<50	3,900	<50	<50	<150
	10/7/2011	<500	<120	<25	<120	<25	<25	<25	42	<25	<25	<25	<25	<25	<25	2,900	<25	3,300	<25	<25	<75
	1/11/2012	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	960	<10	2,000	<10	<10	<30
	4/10/2012	<400	<100	<20	<100	<20	<20	31	230	<20	<20	<20	<20	<20	<20	670	<20	1,800	<20	22	<30
	7/16/2012	<200	<50	<10	<50	10	41	<10	120	750	<10	<10	<10	<10	<10	600	<10	1,600	<10	20	<30
	10/10/2012	<200	<50	<10	<50	<10	29	<10	23	350	<10	<10	<10	<10	<10	570	<10	1,400	<10	<10	<30
	3/4/2013	<200	130	<10	<50	<10	90	<10	27	88	<10	<10	<10	<10	<10	730	<10	1,100	<10	140	<30
	6/7/2013	<200	<50	<10	<50	<10	380	<10	24	620	<10	<10	<10	<10	<10	970	<10	960	<10	48	<30
	8/26/2013	<200	<50	<10	<50	<10	81	<10	37	200	<10	<10	<10	<10	<10	1,500	<10	1,200	<10	<10	<30
	11/15/2013	<200	<50	<10	<50	<10	43	<10	20	43	<10	<10	<10	<10	<10	1,200	<10	1,100	<10	<10	<30
5/30/2014	<200	<50	<10	<50	<10	330	<10	45	550	<10	<10	<10	<10	<10	1,500	<10	1,700	<10	64	<30	
PRB-02s (6-11') Depth to Groundwater* Approx. 5.5 - 6.5'	8/10/2011	<500	<120	<25	<120	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	110	<25	3,100	<25	<25	<75
	10/7/2011	<500	<120	<25	<120	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	80	<25	2,300	<25	<25	<75
	1/11/2012	<400	<100	<20	<100	<20	<20	<20	<20	1,200	<20	<20	<20	<20	<20	64	<20	1,900	<20	<20	<60
	4/10/2012	<400	<100	<20	<100	<20	<20	<20	<20	1,800	23	<20	<20	<20	<20	36	<20	1,300	<20	<20	<60
	7/13/2012	<200	<50	<10	<50	<10	<10	<10	<10	1,000	19	<10	<10	<10	<10	29	<10	1,200	<10	<10	<30
	10/10/2012	<200	<50	<10	<50	<10	<10	<10	<10	410	<10	<10	<10	<10	<10	24	<10	1,100	<10	33	<30
	3/5/2013	<50	<12	<2.5	<12	<2.5	4.4	<2.5	<2.5	250	6.4	<2.5	<2.5	<2.5	<2.5	4.8	<2.5	310	<2.5	43	<7.5
	6/7/2013	<50	<12	<2.5	<12	<2.5	9.0	<2.5	<2.5	140	4.8	<2.5	<2.5	<2.5	<2.5	4.8	<2.5	280	<2.5	26	<7.5
	8/26/2013	<50	<12	<2.5	<12	<2.5	12	<2.5	<2.5	150	4.4	<2.5	<2.5	<2.5	<2.5	4.8	<2.5	260	<2.5	25	<7.5
	11/15/2013	<50	<12	<2.5	<12	<2.5	5.1	<2.5	<2.5	200	4.3	<2.5	<2.5	<2.5	<2.5	3.8	<2.5	190	<2.5	24	<7.5
6/5/2014	<50	<12	<2.5	<12	<2.5	2.8	<2.5	<2.5	350	3.0	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	230	<2.5	29	<7.5	
PRB-03s (6-11') Depth to Groundwater* Approx. 5.5 - 6.5'	8/10/2011	<200	<50	<10	<50	<10	19	<10	<10	<10	560	<10	<10	<10	<10	<10	<10	14	<10	<10	3,400
	10/6/2011	<200	<50	<10	<50	<10	17	<10	<10	<10	510	<10	<10	<10	<10	<10	<10	10	<10	<10	2,990
	1/11/2012	<100	<25	<5.0	<25	<5.0	13	<5.0	<5.0	<5.0	320	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	24	<5.0	<5.0	1,920
	4/10/2012	<40	<10	<2.0	<10	<2.0	11	<2.0	<2.0	<2.0	170	2.3	2.2	<2.0	<2.0	3.6	<2.0	25	<2.0	<2.0	890
	7/16/2012	<100	<25	<5.0	34	<5.0	26	<5.0	<5.0	<5.0	410	17	<5.0	<5.0	<5.0	<5.0	<5.0	11	14	<5.0	2,090
	10/9/2012	<100	<25	<5.0	<25	<5.0	29	<5.0	<5.0	<5.0	370	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	21	5.0	10	2,100
	3/4/2013	<100	<25	<5.0	<25	<5.0	56	<5.0	<5.0	<5.0	260	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	20	<5.0	7.8	1,410
	6/6/2013	<50	<12	<2.5	<12	<2.5	62	<2.5	<2.5	7.4	<2.5	220	<2.5	<2.5	<2.5	<2.5	<2.5	14	2.8	7.2	1,010
	8/26/2013	<100	<25	<5.0	<25	<5.0	54	<5.0	<5.0	<5.0	260	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	32	<5.0	<5.0	1,090
	11/15/2013	<50	<12	<2.5	52	<2.5	36	<2.5	<2.5	<2.5	170	<2.5	<2.5	<2.5	<2.5	4.0	<2.5	71	<2.5	<2.5	640
5/28/2014	<40	<10	<2.0	120	<2.0	41	<2.0	<2.0	<2.0	110	<2.0	<2.0	<2.0	<2.0	3.8	<2.0	18	<2.0	<2.0	360	

Notes:
Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter

NC = No criteria

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 3.5 feet below ground surface (ft bgs) at PRB-09s; 4.0 ft bgs at PRB-06s; 5.0 ft bgs at PRB-08s, PRB-08d, and PRB-10s; 6.5 ft bgs at PRB-01s, PRB-02s, PRB-04s, and PRB-04d; 7.0 ft bgs at PRB-05s and PRB-07s; and 8.0 ft bgs at PRB-03s.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which were published by USEPA on September 28, 2011.

Table 2
 Summary of Detected Volatile Organic Compounds in Groundwater
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽²⁾	Isopropylbenzene	n-Propyl Benzene ⁽²⁾	Tetrachloroethene	Toluene ⁽²⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	Vinyl Chloride	Total Xylenes ⁽²⁾	
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000	
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000	
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41	
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000	
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000	
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
PRB-04s (6-11') Depth to Groundwater* Approx. 6.0 - 7.0'	8/10/2011	<200	110	<10	<50	<10	<10	<10	590	<10	<10	<10	<10	<10	<10	100	<10	1,100	<10	<10	<30	
	10/7/2011	<500	900	<25	<120	<25	<25	<25	3,400	<25	<25	<25	<25	<25	<25	62	<25	<25	<25	<25	<75	
	1/11/2012	<500	440	<25	<120	<25	110	<25	<25	3,600	36	<25	<25	<25	<25	34	<25	<25	<25	67	<75	
	4/10/2012	<500	360	<25	130	<25	200	<25	<25	2,400	37	<25	<25	<25	<25	<25	<25	26	<25	190	<75	
	7/16/2012	<500	660	<25	120	<25	490	29	<25	2,500	67	<25	<25	<25	<25	<25	<25	<25	<25	610	108	
	10/4/2012	<200	<50	<10	74	<10	180	<10	<10	1,400	36	<10	<10	<10	<10	<10	<10	<10	<10	430	<30	
	3/4/2013	<100	<25	<5.0	46	<5.0	42	<5.0	<5.0	560	7.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	190	<15	
	6/6/2013	28	36	<1.0	58	<1.0	50	<1.0	1.0	200	2.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	73	<3.0	
	8/26/2013	<20	7.0	<1.0	60	<1.0	33	<1.0	<1.0	33	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	18	<3.0
11/15/2013	<20	<5.0	<1.0	22	<1.0	22	<1.0	<1.0	29	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	3.6	<1.0	15	<3.0	
5/28/2014	<20	<5.0	<1.0	15	<1.0	21	<1.0	<1.0	28	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	1.5	<3.0	
PRB-04d (25-30') Depth to Groundwater* Approx. 6.0 - 7.0'	8/10/2011	<20	10	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.8	<1.0	12	<3.0	
	10/7/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	11	<3.0
	1/11/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	<1.0	9.4	<3.0
	4/10/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	9.4	<3.0
	7/16/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.2	<3.0	
	10/4/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13	<3.0	
	3/4/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17	<3.0	
	6/6/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	14	<3.0	
	8/26/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13	<3.0	
11/15/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<3.0		
5/28/2014	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.8	<3.0		
PRB-05s (6-11') Depth to Groundwater* Approx. 6.0 - 7.0'	8/11/2011	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	270	<10	57	<10	990	<10	<10	<30	
	10/6/2011	<200	<50	<10	<50	<10	<10	<10	21	<10	<10	<10	<10	270	<10	53	<10	1,000	<10	<10	<30	
	1/12/2012	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	230	<10	35	<10	780	<10	<10	<30	
	4/9/2012	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	200	<5.0	28	<5.0	630	<5.0	<5.0	<15	
	7/12/2012	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	280	<5.0	36	<5.0	810	<5.0	<5.0	<15	
	10/9/2012	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	290	<5.0	37	<5.0	760	<5.0	<5.0	<15	
	3/5/2013	<100	27	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	310	<5.0	35	<5.0	720	<5.0	<5.0	<15	
	6/7/2013	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	260	<5.0	31	<5.0	620	<5.0	<5.0	<15	
	8/27/2013	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	300	<5.0	43	<5.0	760	<5.0	<5.0	<15	
11/14/2013	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	320	<5.0	52	<5.0	720	<5.0	<5.0	<15		
5/29/2014	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	320	<5.0	50	<5.0	760	<5.0	<5.0	<15		

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter

NC = No criteria

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 3.5 feet below ground surface (ft bgs) at PRB-09s; 4.0 ft bgs at PRB-06s; 5.0 ft bgs at PRB-08s, PRB-08d, and PRB-10s; 6.5 ft bgs at PRB-01s, PRB-02s, PRB-04s, and PRB-04d; 7.0 ft bgs at PRB-05s and PRB-07s; and 8.0 ft bgs at PRB-03s.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which were published by USEPA on September 28, 2011.

Table 2
 Summary of Detected Volatile Organic Compounds in Groundwater
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽²⁾	Isopropylbenzene	n-Propyl Benzene ⁽²⁾	Tetrachloroethene	Toluene ⁽²⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	Vinyl Chloride	Total Xylenes ⁽²⁾
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PRB-06s (6-11') Depth to Groundwater* Approx. 6.0 - 6.5'	8/11/2011	<1,000	3,600	<50	<250	<50	360	<50	<50	4,200	<50	<50	<50	<50	<50	<50	<50	310	<50	<50	<150
	10/6/2011	<1,000	5,800	<50	<250	<50	260	<50	<50	6,000	<50	<50	<50	<50	<50	<50	<50	<50	<50	71	<150
	1/12/2012	<200	940	<10	81	<10	<10	<10	<10	300	<10	<10	<10	<10	<10	<10	<10	<10	<10	35	<30
	4/10/2012	24	130	1.0	71	<1.0	<1.0	<1.0	<1.0	35	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	18
	7/12/2012	<100	480	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15
	10/9/2012	<100	170	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	450	<5.0	<5.0	<5.0	<5.0	<15
	3/5/2013	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	340	<5.0	<5.0	<5.0	<5.0	<15
	6/7/2013	<100	38	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6.4	<5.0	<5.0	<5.0	440	<5.0	<5.0	<5.0	<5.0	<15
	8/27/2013	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8.0	<5.0	<5.0	<5.0	450	<5.0	<5.0	<5.0	<5.0	<15
11/14/2013	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	370	<5.0	<5.0	7.4	<5.0	<15	
5/29/2014	<50	42	<2.5	<12	<2.5	<2.5	<2.5	<2.5	<2.5	3.7	<2.5	<2.5	<2.5	<2.5	310	<2.5	<2.5	3.5	<2.5	<7.5	
PRB-07s (7-12') Depth to Groundwater* Approx. 5.5 - 6.5'	8/10/2011	<200	120	<10	<50	<10	<10	<10	880	<10	<10	<10	<10	<10	<10	100	<10	1,200	<10	<10	<30
	10/7/2011	<200	<50	<10	<50	<10	16	<10	10	790	18	<10	<10	<10	<10	130	<10	1,400	<10	<10	<30
	1/11/2012	<200	<50	<10	<50	<10	<10	<10	510	<10	<10	<10	<10	<10	<10	92	<10	1,300	<10	<10	<30
	4/10/2012	<200	<50	<10	<50	<10	<10	<10	260	28	<10	<10	<10	<10	<10	56	<10	1,100	<10	<10	<30
	7/16/2012	<200	<50	<10	<50	<10	<10	<10	200	50	<10	<10	<10	<10	<10	45	<10	1,300	<10	<10	<30
	10/4/2012	<200	<50	<10	<50	<10	<10	<10	150	41	<10	<10	<10	<10	<10	17	<10	750	<10	<10	<30
	3/4/2013	<100	<25	<5.0	<25	<5.0	7.9	<5.0	<5.0	100	11	<5.0	<5.0	<5.0	<5.0	7.6	<5.0	480	<5.0	<5.0	<15
	6/6/2013	<100	50	<5.0	<25	<5.0	5.6	<5.0	<5.0	570	<5.0	<5.0	<5.0	<5.0	<5.0	16	<5.0	370	<5.0	38	<15
	8/26/2013	<100	<25	<5.0	<25	<5.0	7.0	<5.0	<5.0	240	<5.0	<5.0	<5.0	<5.0	<5.0	16	<5.0	450	<5.0	17	<15
11/15/2013	<100	<25	<5.0	<25	<5.0	6.6	<5.0	<5.0	74	<5.0	<5.0	<5.0	<5.0	<5.0	37	<5.0	550	<5.0	8.4	<15	
5/28/2014	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	45	<5.0	<5.0	<5.0	<5.0	<5.0	38	<5.0	730	<5.0	6.4	<15	
PRB-08s (6-11') Depth to Groundwater* Approx. 6.0 - 7.0'	8/10/2011	83	39	<1.0	<5.0	<1.0	11	<1.0	1.0	84	9.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.3	<1.0	31	<3.0
	10/7/2011	240	300	<2.5	<12	<2.5	7.3	<2.5	<2.5	77	9.2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	24	<7.5
	1/11/2012	<20	<5.0	<1.0	<5.0	<1.0	2.0	<1.0	<1.0	35	4.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	<3.0
	4/10/2012	<20	<5.0	<1.0	<5.0	<1.0	1.3	<1.0	<1.0	18	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.5	<3.0
	7/13/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	11	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	<3.0
	10/4/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	11	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<3.0
	3/5/2013	<20	<5.0	<1.0	<5.0	<1.0	3.6	<1.0	<1.0	27	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<3.0
	6/6/2013	<20	<5.0	<1.0	<5.0	<1.0	6.9	<1.0	<1.0	50	6.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	<3.0
	8/26/2013	<20	<5.0	<1.0	<5.0	<1.0	6.9	<1.0	<1.0	65	7.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.5	<3.0
11/15/2013	<20	<5.0	<1.0	<5.0	<1.0	5.3	<1.0	<1.0	62	7.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<3.0	
5/28/2014	<20	<5.0	<1.0	<5.0	<1.0	4.0	<1.0	<1.0	13	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<3.0	

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter

NC = No criteria

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 3.5 feet below ground surface (ft bgs) at PRB-09s; 4.0 ft bgs at PRB-06s; 5.0 ft bgs at PRB-08s, PRB-08d, and PRB-10s; 6.5 ft bgs at PRB-01s, PRB-02s, PRB-04s, and PRB-04d; 7.0 ft bgs at PRB-05s and PRB-07s; and 8.0 ft bgs at PRB-03s.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which were published by USEPA on September 28, 2011.

Table 2
 Summary of Detected Volatile Organic Compounds in Groundwater
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽²⁾	Isopropylbenzene	n-Propyl Benzene ⁽²⁾	Tetrachloroethene	Toluene ⁽²⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	Vinyl Chloride	Total Xylenes ⁽²⁾			
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000			
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000			
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41			
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000			
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000			
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05			
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L			
PRB-08d (18.5-23.5') Depth to Groundwater* Approx. 6.0 - 7.0'	8/10/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	14	<3.0	
	10/7/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.6	<3.0	
	1/11/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	<3.0	
	4/10/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.1	<3.0	
	7/13/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<3.0	
	10/4/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23	<3.0	
	3/5/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	37	<3.0	
	6/6/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	37	<3.0	
	8/26/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	46	<3.0	
	11/15/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	44	<3.0	
5/28/2014	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	49	<3.0		
PRB-09s (5-10') Depth to Groundwater* Approx. 6.5 - 7.5'	8/11/2011	4,200	8,200	<100	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<300	
	10/6/2011	13,000	17,000	<100	<500	<100	<100	<100	<100	<100	<100	<100	<100	<100	110	<100	<100	<100	<100	<100	<100	<100	<300	
	1/12/2012	<200	68	<10	<50	<10	<10	<10	<10	14	<10	<10	<10	<10	1,400	<10	<10	<10	<10	<10	<10	<10	<30	
	2/9/2012	<200	200	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	1,600	<10	<10	<10	<10	<10	<10	<10	<30	
	4/9/2012	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	<10	2,000	<10	<10	<10	<10	<10	<10	<10	<30	
	7/13/2012	<400	<100	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	2,000	<20	<20	<20	<20	<20	<20	<20	<60	
	10/9/2012	<100	<25	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	610	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<15	
	3/5/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	54	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	6/7/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	<1.0	<1.0	160	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	8/27/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2	<1.0	<1.0	32	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
11/14/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	<1.0	<1.0	8.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0		
5/30/2014	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0	<1.0	<1.0	18	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0		
PRB-10s (6-11') Depth to Groundwater* Approx. 7.0 - 8.0'	8/11/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	11	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	10/6/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	16	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	1/12/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	42	4.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	4/9/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	26	3.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	7/13/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	17	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	10/9/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.9	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	3/5/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	15	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	
	6/6/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	31	4.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	8/27/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	57	7.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	11/14/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	40	5.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
5/30/2014	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	31	4.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0	

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

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Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 3.5 feet below ground surface (ft bgs) at PRB-09s; 4.0 ft bgs at PRB-06s; 5.0 ft bgs at PRB-08s, PRB-08d, and PRB-10s; 6.5 ft bgs at PRB-01s, PRB-02s, PRB-04s, and PRB-04d; 7.0 ft bgs at PRB-05s and PRB-07s; and 8.0 ft bgs at PRB-03s.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which were published by USEPA on September 28, 2011.

Table 2
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 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloro-ethane	1,2-Dichloro-ethane	1,1-Dichloro-ethene ⁽²⁾	cis-1,2-Dichloro-ethene	trans-1,2-Dichloro-ethene	Ethyl-benzene ⁽²⁾	Isopropyl-benzene	n-Propyl Benzene ⁽²⁾	Tetrachloro-ethene	Toluene ⁽²⁾	1,1,1-Tri-chloroethane	1,1,2-Tri-chloroethane	Trichloro-ethene	1,2,4-Tri-methyl-benzene	Vinyl Chloride	Total Xylenes ⁽²⁾	
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000	
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000	
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41	
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000	
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000	
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
PRB-11s (15-20') Depth to Groundwater Approx. 15.5 - 16.5'	8/10/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	<3.0
	10/6/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<3.0
	1/11/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<3.0
	4/9/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<3.0
	7/16/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<3.0
	10/11/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
	3/4/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<3.0
	6/7/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<3.0
	8/26/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<3.0
	11/15/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	<1.0	<3.0
5/29/2014	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<3.0	
PRB-12s (15-20') Depth to Groundwater Approx. 15.5 - 16.5'	8/11/2011	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	17	<10	33	<10	1,100	<10	<10	<30	
	10/7/2011	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	17	<10	35	<10	1,300	<10	<10	<30	
	1/12/2012	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	14	<10	26	<10	950	<10	<10	<30	
	4/9/2012	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	25	<10	850	<10	<10	<30	
	7/12/2012	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	14	<10	27	10	1,200	<10	<10	<30	
	10/11/2012	<200	84	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	16	<10	30	<10	1,600	<10	<10	<30	
	3/5/2013	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	21	<10	840	<10	<10	<30	
	6/5/2013	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	12	<10	19	<10	950	<10	<10	<30	
	8/27/2013	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	24	<10	1,200	<10	<10	<30	
	11/13/2013	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	16	<10	25	<10	1,200	<10	<10	<30	
5/29/2014	<200	<50	<10	<50	<10	<10	<10	<10	<10	<10	<10	<10	11	<10	26	<10	870	<10	<10	<30		
PRB-13s (19-24') Depth to Groundwater Approx. 18.0 - 19.0'	8/11/2011	<200	<50	<10	<50	<10	<10	<10	12	<10	<10	<10	<10	<10	<10	380	<10	550	<10	14	<30	
	10/6/2011	<500	<120	<25	<120	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	1,100	<25	2,700	<25	<25	<75	
	1/12/2012	<500	<120	<25	<120	<25	<25	<25	25	<25	<25	<25	<25	<25	<25	1,200	<25	2,800	<25	<25	<75	
	4/3/2012	<500	<120	<25	<120	<25	<25	<25	25	<25	<25	<25	<25	<25	<25	1,100	<25	2,500	<25	<25	<75	
	7/12/2012	<400	<100	<20	<100	<20	<20	<20	23	<20	<20	<20	<20	<20	<20	1,200	<20	2,900	<20	20	<60	
	10/11/2012	<400	110	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,200	<20	3,100	<20	<20	<60	
	3/5/2013	<400	110	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,300	<20	3,200	<20	<20	<60	
	6/5/2013	<400	<100	<20	<100	<20	<20	<20	20	<20	<20	<20	<20	<20	<20	1,200	<20	2,700	<20	<20	<60	
	8/27/2013	<400	<100	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,100	<20	2,800	<20	<20	<60	
	11/13/2013	<400	<100	<20	<100	<20	<20	<20	20	<20	<20	<20	<20	<20	<20	1,200	<20	2,500	<20	<20	<60	
5/29/2014	<400	<100	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,200	<20	2,400	<20	<20	<60		

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter

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Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 3.5 feet below ground surface (ft bgs) at PRB-09s; 4.0 ft bgs at PRB-06s; 5.0 ft bgs at PRB-08s, PRB-08d, and PRB-10s; 6.5 ft bgs at PRB-01s, PRB-02s, PRB-04s, and PRB-04d; 7.0 ft bgs at PRB-05s and PRB-07s; and 8.0 ft bgs at PRB-03s.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which were published by USEPA on September 28, 2011.

Table 2
 Summary of Detected Volatile Organic Compounds in Groundwater
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽²⁾	Isopropylbenzene	n-Propyl Benzene ⁽²⁾	Tetrachloroethene	Toluene ⁽²⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Tri-methylbenzene	Vinyl Chloride	Total Xylenes ⁽²⁾
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
PRB-14s (19.5-24.5') Depth to Groundwater 17.0 - 18.0'	8/11/2011	<400	<100	<20	<100	<20	<20	<20	<20	65	<20	<20	<20	<20	<20	910	<20	3,000	<20	62	<60
	10/6/2011	<400	<100	<20	<100	<20	<20	<20	<20	48	<20	<20	<20	<20	<20	1,100	<20	3,300	<20	65	<60
	1/12/2012	<400	<100	<20	<100	<20	<20	<20	<20	53	<20	<20	<20	<20	<20	1,000	<20	3,200	<20	57	<60
	4/3/2012	<400	<100	<20	<100	<20	<20	<20	<20	29	<20	<20	<20	<20	<20	990	<20	2,700	<20	32	<60
	7/12/2012	<400	<100	<20	<100	<20	<20	<20	<20	33	<20	<20	<20	<20	<20	1,200	<20	3,100	<20	43	<60
	10/11/2012	<400	120	<20	<100	<20	<20	<20	<20	35	<20	<20	<20	<20	<20	1,300	<20	3,500	<20	45	<60
	3/5/2013	<400	120	<20	<100	<20	<20	<20	<20	29	<20	<20	<20	<20	<20	1,100	<20	3,200	<20	41	<60
	6/5/2013	<400	<100	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,200	<20	2,700	<20	<20	<60
	8/27/2013	<400	<100	<20	<100	<20	<20	<20	<20	29	<20	<20	<20	<20	<20	1,100	<20	3,100	<20	31	<60
11/13/2013	<400	<100	<20	<100	<20	<20	<20	<20	25	<20	<20	<20	<20	<20	1,100	<20	2,600	<20	25	<60	
5/29/2014	<400	<100	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,000	<20	2,800	<20	42	<60	
PRB-15s (15-20') Depth to Groundwater 16.0 - 17.0'	8/11/2011	<400	<100	<20	<100	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	1,200	<20	2,500	<20	<20	<60
	10/6/2011	<400	<100	<20	<100	<20	<20	<20	<20	20	<20	<20	<20	<20	<20	1,200	<20	2,700	<20	<20	<60
	1/12/2012	<400	<100	<20	<100	<20	<20	<20	<20	21	<20	<20	<20	<20	<20	850	<20	1,900	<20	<20	<60
	4/9/2012	<400	<100	<20	<100	<20	<20	<20	<20	1,700	<20	<20	<20	<20	<20	730	<20	1,800	<20	<20	<60
	7/12/2012	<400	<100	<20	<100	<20	<20	<20	<20	460	<20	<20	<20	<20	<20	580	<20	2,300	<20	<20	<60
	10/11/2012	<400	120	<20	<100	<20	<20	<20	<20	880	<20	<20	<20	<20	<20	750	<20	2,700	<20	<20	<60
	3/5/2013	<400	110	<20	<100	<20	<20	<20	<20	120	<20	<20	<20	<20	<20	570	<20	1,800	<20	<20	<60
	6/5/2013	<400	<100	<20	<100	<20	<20	<20	<20	130	<20	<20	<20	<20	<20	260	<20	1,600	<20	<20	<60
	8/27/2013	<400	<100	<20	<100	<20	<20	<20	<20	100	<20	<20	<20	<20	<20	280	<20	1,800	<20	<20	<60
11/14/2013	<400	<100	<20	<100	<20	<20	<20	<20	46	<20	<20	<20	<20	<20	720	<20	1,500	<20	<20	<60	
5/29/2014	<200	<50	<10	<50	<10	<10	<10	<10	41	<10	<10	<10	<10	<10	350	<10	1,500	<10	<10	<30	
PRB-15d (29-34') Depth to Groundwater 16.0 - 17.0'	8/11/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<3.0
	10/6/2011	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.8	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	<1.0	13	<1.0	1.9	<3.0
	1/12/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.9	<1.0	<1.0	<1.0	<1.0	<1.0	5.4	<1.0	28	<1.0	1.2	<3.0
	4/9/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	6.9	<1.0	<1.0	<1.0	<1.0	<1.0	5.0	<1.0	24	<1.0	2.0	<3.0
	7/12/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	2.7	<1.0	<1.0	<1.0	<1.0	<1.0	3.7	<1.0	19	<1.0	<1.0	<3.0
	10/11/2012	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	5.2	<1.0	26	<1.0	<1.0	<3.0
	3/5/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.0	<1.0	<1.0	<1.0	<1.0	<1.0	5.0	<1.0	32	<1.0	<1.0	<3.0
	6/5/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	3.7	<1.0	19	<1.0	<1.0	<3.0
	8/27/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	4.0	<1.0	21	<1.0	<1.0	<3.0
11/14/2013	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0	6.6	<1.0	26	<1.0	<1.0	<3.0	
5/29/2014	<20	<5.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.5	<1.0	<1.0	<3.0	

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

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Table 2
 Summary of Detected Volatile Organic Compounds in Groundwater
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
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Analyte	Acetone ⁽²⁾	2-Butanone	Benzene ⁽²⁾	Chloroethane	Chloroform	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽²⁾	Isopropylbenzene	n-Propyl Benzene ⁽²⁾	Tetrachloroethene	Toluene ⁽²⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	Vinyl Chloride	Total Xylenes ⁽²⁾
Residential Health-Based DW Criteria	730	13,000	5.0	430	80	880	5.0	7.0	70	100	700	800	80	5.0	1,000	200	5.0	5.0	1,000	2.0	10,000
Non-Residential Health-Based DW Criteria	2,100	38,000	5.0	1,700	80	2,500	5.0	7.0	70	100	700	2,300	230	5.0	1,000	200	5.0	5.0	2,900	2.0	10,000
GSI Criteria	1,700	2,200	200 ⁽¹⁾	1,100 ⁽¹⁾	350	740	360 ⁽¹⁾	130	620	1,500 ⁽¹⁾	18	28	NC	60 ⁽¹⁾	270	89	330 ⁽¹⁾	200 ⁽¹⁾	17	13 ⁽¹⁾	41
Residential GWSLs for Vapor Intrusion	8.2E+06	4.3E+06	27	44,000	140	4,300	41	370	83	360	700	10	92	94	36,000	17,000	96	10	1,700	2.8	10,000
Non-Residential GWSLs for Vapor Intrusion	3.4E+07	1.8E+07	140	1.8E+05	720	18,000	210	1,600	350	1,500	2,600	53	390	460	1.5E+05	71,000	480	41	7,300	52	10,000
Groundwater Contact Criteria	3.1E+07	2.4E+08	11,000	4.4E+05	1.5E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	56,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽³⁾	56,000	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

PRB-16s (5-10') Depth to Groundwater 6.5 - 7.5'	8/6/2012	<20	<5.0	<1.0	<5.0	<1.0	5.3	<1.0	1.4	51	4.8	<1.0	<1.0	<1.0	<1.0	<1.0	5.5	3.5	<1.0	<1.0	<3.0
	10/9/2012	<20	<5.0	<1.0	<5.0	<1.0	3.8	<1.0	1.1	31	2.8	<1.0	<1.0	<1.0	<1.0	<1.0	5.5	4.6	<1.0	<1.0	<3.0
	3/27/2013	<20	<5.0	<1.0	<5.0	<1.0	3.6	<1.0	1.1	29	3.2	<1.0	<1.0	<1.0	<1.0	<1.0	2.8	12	<1.0	<1.0	<3.0
	6/6/2013	<20	<5.0	<1.0	<5.0	<1.0	4.4	<1.0	1.3	32	2.9	<1.0	<1.0	<1.0	<1.0	<1.0	3.1	11	<1.0	<1.0	<3.0
	8/27/2013	<20	<5.0	<1.0	<5.0	<1.0	7.9	<1.0	1.9	28	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	5.2	21	<1.0	<1.0	<3.0
	11/14/2013	<20	<5.0	<1.0	<5.0	<1.0	12	<1.0	2.9	28	2.4	<1.0	<1.0	<1.0	<1.0	<1.0	5.0	21	<1.0	<1.0	<3.0
	5/30/2014	<20	<5.0	<1.0	<5.0	<1.0	8.2	<1.0	3.0	19	1.6	<1.0	<1.0	<1.0	<1.0	<1.0	4.5	25	<1.0	<1.0	<3.0

Notes:
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* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 3.5 feet below ground surface (ft bgs) at PRB-09s; 4.0 ft bgs at PRB-06s; 5.0 ft bgs at PRB-08s, PRB-08d, and PRB-10s; 6.5 ft bgs at PRB-01s, PRB-02s, PRB-04s, and PRB-04d; 7.0 ft bgs at PRB-05s and PRB-07s; and 8.0 ft bgs at PRB-03s.

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Table 3
 Field Data
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
PRB-01s	8/10/2011	7.56	1,010	-74	0.33	20.8	18.23
	10/7/2011	7.54	858	-9	0.23	1.1	18.61
	1/11/2012	7.20	1,180	24	0.43	0.0	10.42
	4/10/2012	7.71	626	-7	0.32	1.7	9.70
	7/16/2012	6.99	810	-94	0.60	10.5	17.75
	10/10/2012	NM	NM	-35	0.31	10.8	17.93
	3/4/2013	7.38	813	-51	0.93	0.2	7.91
	6/7/2013	7.48	925	-69	0.35	0.6	12.75
	8/26/2013	7.21	950	-82	0.60	13.0	19.60
	11/15/2013	6.81	679	-50	1.41	27.3	14.79
5/30/2014	7.42	659	-67	0.80	0.87	11.76	
PRB-02s	8/10/2011	7.70	1,051	-55	0.31	22.9	18.05
	10/7/2011	7.62	1,117	-58.4	0.20	3.6	18.72
	1/11/2012	7.24	708	-7	0.41	2.0	10.65
	4/10/2012	7.62	728	-47	0.42	1.2	9.75
	7/13/2012	7.39	747	-91	0.37	15.7	18.34
	10/10/2012	NM	NM	-56	0.28	11.7	17.91
	3/5/2013	6.98	625	107	1.12	0.6	6.20
	6/7/2013	7.63	679	20	0.27	0.5	12.42
	8/26/2013	7.38	527	-61	0.59	13.9	19.63
	11/15/2013	6.71	840	-39	0.93	28.0	14.43
6/5/2014	7.26	762	-0.3	0.56	0.81	12.66	
PRB-03s	8/10/2011	7.46	392	-199	0.40	22.1	17.41
	10/6/2011	7.07	497	-164.1	0.38	2.1	16.95
	1/11/2012	7.15	641	-146	0.49	0.5	9.56
	4/10/2012	7.61	465	-107	0.37	4.4	9.63
	7/16/2012	7.27	719	-178	0.43	32.1	19.33
	10/9/2012	NM	529	-134	0.36	11.7	17.69
	3/4/2013	7.10	927	-85	1.82	3.9	7.07
	6/6/2013	7.30	575	-199	0.76	2.4	12.54
	8/26/2013	7.20	522	-147	0.62	17.9	21.09
	11/15/2013	6.92	488	-121	1.45	39.0	15.17
5/28/2014	7.28	686	-128	0.70	4.18	11.53	
PRB-04s	8/10/2011	7.43	737	-152	0.36	23.9	17.60
	10/7/2011	7.70	964	-137	0.21	4.9	16.78
	1/11/2012	7.29	825	-172	0.31	8.0	10.27
	4/10/2012	7.53	894	-161	0.25	1.9	9.86
	7/16/2012	7.04	988	-172	0.43	19.8	18.09
	10/4/2012	NM	592	-173	0.26	5.0	17.88
	3/4/2013	6.98	659	-86	0.69	1.7	8.58
	6/6/2013	7.27	739	-130	0.35	1.5	11.39
	8/26/2013	6.95	692	-136	0.59	16.1	18.14
	11/15/2013	6.68	507	-129	0.91	45.8	13.98
5/28/2014	7.24	673	-137	0.47	9.52	11.02	

Notes:

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Table 3
 Field Data
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
PRB-04d	8/10/2011	7.27	1,160	-192	0.25	22.0	13.20
	10/7/2011	7.49	1,127	-110.4	0.23	3.5	13.94
	1/1/2012	7.05	1,177	-169	0.34	0.0	12.00
	4/10/2012	7.53	959	-91	0.39	3.3	11.25
	7/16/2012	7.25	1,113	-138	0.38	27.3	15.21
	10/4/2012	NM	1,009	-176	0.27	1.8	14.58
	3/4/2013	7.28	947	-80	1.46	1.8	10.65
	6/6/2013	7.67	897	-210	0.32	8.1	11.79
	8/26/2013	7.22	1,155	-122	0.58	17.0	15.78
11/15/2013	6.95	1,047	-116	1.12	29.6	13.45	
5/28/2014	7.40	1,061	-139	0.32	9.72	11.95	
PRB-05s	8/11/2011	7.52	556	37	5.56	26.6	17.05
	10/6/2011	7.47	500	5.7	5.08	2.5	17.45
	1/12/2012	7.20	607	48	4.74	1.2	9.09
	4/9/2012	7.60	490	64	5.31	2.5	10.38
	7/12/2012	7.38	618	31	4.77	14.2	17.05
	10/9/2012	NM	NM	54	6.09	11.0	16.74
	3/5/2013	7.53	423	59	8.34	3.4	6.50
	6/7/2013	7.35	426	120	4.25	0.5	11.36
	8/27/2013	7.20	659	29	2.17	19.8	17.73
11/14/2013	7.04	488	32	4.03	28.5	13.78	
5/29/2014	7.53	523	32	5.94	1.02	10.18	
PRB-06s	8/11/2011	6.49	13,900	-177	0.14	62.8	20.08
	10/6/2011	6.28	8,656	-114.8	0.09	77.7	19.11
	1/12/2012	6.77	2,480	-153	1.60	29.8	9.04
	4/10/2012	7.42	1,146	-123	1.46	54.9	7.98
	7/12/2012	7.19	1,780	-192	1.36	207	20.31
	10/9/2012	NM	NM	-75	6.85	88.0	21.28
	3/5/2013	7.12	243	-59	1.29	25.5	5.34
	6/7/2013	7.51	795	-147	0.76	42.0	11.01
	8/27/2013	7.37	1,185	-165	0.60	70.3	18.12
11/14/2013	7.81	1,081	-188	1.06	68.2	14.31	
5/29/2014	7.45	998	-160	2.10	86.1	12.94	
PRB-07s	8/10/2011	7.59	667	-188	0.29	23.0	17.81
	10/7/2011	7.64	577	-97.1	0.25	1.7	17.12
	1/11/2012	7.14	591	-88	0.35	1.1	9.88
	4/10/2012	7.65	443	-42	0.58	2.1	9.09
	7/16/2012	7.10	675	-118	0.44	32.5	16.99
	10/4/2012	NM	560	-109	0.34	3.5	17.66
	3/4/2013	7.28	538	-71	1.78	1.7	8.00
	6/6/2013	7.66	703	-212	0.33	0.7	12.25
	8/26/2013	7.27	832	-139	0.52	16.9	18.90
11/15/2013	6.80	725	-98	0.89	29.3	13.99	
5/28/2014	7.49	658	-154	0.32	2.32	11.26	

Notes:

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- mg/L = milligrams per liter
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Table 3
 Field Data
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
PRB-08s	8/10/2011	7.44	1,119	-122	0.28	22.7	18.39
	10/6/2011	7.35	1,148	-143.5	0.37	2.3	17.02
	1/11/2012	7.06	1,233	-129	0.41	1.0	9.97
	4/10/2012	7.29	965	-105	0.31	1.1	10.28
	7/13/2012	6.91	1,157	-105	0.37	14.7	17.80
	10/4/2012	NM	796	-111	0.30	5.9	18.72
	3/5/2013	7.01	832	-49	1.92	9.8	7.08
	6/6/2013	7.51	856	-164	0.30	4.3	13.12
	8/26/2013	7.11	982	-115	0.59	17.0	19.56
	11/15/2013	6.67	703	-93	1.75	31.0	14.00
5/28/2014	7.36	716	-111	0.39	6.54	11.29	
PRB-08d	8/10/2011	7.59	1,044	-162	0.20	21.0	14.30
	10/6/2011	7.40	996	-93	0.27	9.6	14.05
	1/11/2012	7.05	972	-90	0.41	0.0	11.91
	4/10/2012	7.40	836	-63	0.23	1.5	11.92
	7/13/2012	7.23	1,163	-105	0.33	14.2	16.05
	10/4/2012	NM	874	-126	0.25	4.4	15.18
	3/5/2013	7.29	812	-30	0.94	3.3	10.34
	6/6/2013	7.55	819	-119	0.29	8.6	13.42
	8/26/2013	7.22	989	-94	0.55	32.5	17.30
	11/15/2013	6.76	829	-70	2.22	33.8	12.70
5/28/2014	7.41	942	-99	0.27	8.90	12.54	
PRB-09s	8/11/2011	6.70	8,440	-202	0.15	41.8	19.38
	10/6/2011	7.04	2,984	-130.8	2.45	91.0	20.65
	1/12/2012	7.02	2,370	-140	0.88	25.0	9.80
	4/9/2012	7.50	1,840	-143	0.86	37.8	12.68
	7/13/2012	7.27	3,470	-198	0.36	57.7	18.97
	10/9/2012	NM	1,910	-109	5.69	74.7	21.55
	3/5/2013	7.35	468	-42	1.69	35.7	6.23
	6/7/2013	7.51	1,156	-106	4.03	52.1	13.29
	8/27/2013	7.14	1,800	-150	0.70	33.0	19.75
	11/14/2013	6.92	1,590	-140	1.97	41.7	14.72
5/30/2014	6.96	990	-96	3.74	18.3	11.50	
PRB-10s	8/11/2011	7.37	1,054	-66	2.95	21.1	18.54
	10/6/2011	6.95	992	27.5	2.90	1.7	18.81
	1/12/2012	6.97	1,158	37	1.57	24.0	10.15
	4/9/2012	7.33	827	96	3.20	3.3	11.58
	7/13/2012	6.79	1,392	68	2.28	12.2	17.92
	10/9/2012	NM	921	40	1.42	9.7	18.79
	3/5/2013	7.25	672	93	5.41	0.5	7.37
	6/6/2013	7.57	591	62	6.56	1.2	13.73
	8/27/2013	6.78	966	136	4.99	16.8	19.01
	11/14/2013	6.74	875	49	3.30	29.9	14.20
5/30/2014	7.21	636	39	6.39	1.84	12.35	

Notes:

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Table 3
 Field Data
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
PRB-11s	8/10/2011	7.39	530	133	6.63	19.1	14.12
	10/6/2011	6.97	454	-6.3	8.12	3.1	13.80
	1/11/2012	7.24	454	188	5.30	1.0	10.80
	4/9/2012	7.67	394	46	6.95	11.8	12.27
	7/16/2012	7.52	503	0	6.50	21.8	15.50
	10/11/2012	7.63	NM	56	7.48	12.2	13.71
	3/4/2013	7.28	389	180	6.31	0.3	10.55
	6/7/2013	7.78	338	112	6.38	2.2	11.69
	8/26/2013	7.30	424	163	7.58	14.9	15.14
	11/15/2013	7.19	350	20	7.20	27.9	12.81
5/29/2014	7.39	535	161	7.18	1.62	11.52	
PRB-12s	8/11/2011	7.65	890	-48	4.75	21.8	13.28
	10/6/2011	6.94	988	59.2	4.59	3.1	13.72
	1/12/2012	7.00	1,001	143	3.72	2.1	11.26
	4/9/2012	7.56	674	90	6.07	4.1	11.67
	7/12/2012	7.10	1,143	191	2.96	7.9	13.13
	10/11/2012	7.29	NM	202	3.64	12.0	13.54
	3/5/2013	8.19	196	70	6.81	2.6	7.09
	6/5/2013	7.73	523	218	8.65	0.6	12.22
	8/27/2013	7.41	731	21	6.14	18.0	16.40
	11/13/2013	7.28	838	1.83	4.36	25.9	12.30
5/29/2014	7.59	815	84	5.59	0.94	11.56	
PRB-13s	8/11/2011	7.66	686	-77	1.44	24.0	14.70
	10/6/2011	6.81	721	46.1	2.36	1.1	14.77
	1/12/2012	7.18	626	115	1.32	0.0	12.96
	4/3/2012	7.23	570	62	1.00	1.0	14.65
	7/12/2012	7.31	684	25	1.92	13.9	15.53
	10/11/2012	7.39	NM	169	2.72	13.3	14.56
	3/5/2013	7.47	615	43	2.59	7.0	11.96
	6/5/2013	7.82	593	146	1.43	4.5	15.14
	8/27/2013	7.32	631	-15	1.70	16.8	17.13
	11/13/2013	7.23	547	64	2.36	26.9	12.16
5/29/2014	7.45	715	47	1.39	0.00	13.64	
PRB-14s	8/11/2011	7.56	952	-111	0.33	32.0	14.93
	10/6/2011	7.38	698	6.2	0.32	3.3	15.58
	1/12/2012	6.75	704	8	0.39	9.9	13.05
	4/3/2012	7.47	651	25	0.55	6.3	14.10
	7/12/2012	7.33	835	4	0.42	16.3	16.12
	10/11/2012	7.44	NM	86	0.91	14.3	15.29
	3/5/2013	7.45	628	36	2.39	3.0	10.40
	6/5/2013	7.74	681	153	0.66	0.8	14.64
	8/27/2013	7.32	770	-9	0.65	17.2	17.57
	11/13/2013	7.24	592	20	1.29	26.5	12.60
5/29/2014	7.51	730	29	0.55	0.95	13.92	

Notes:

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Table 3
 Field Data
 PRB Performance Monitoring
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
PRB-15s	8/11/2011	7.43	924	-103	0.91	28.0	14.63
	10/6/2011	7.05	914	25	1.82	2.5	16.01
	1/12/2012	7.53	467	95	3.75	32.0	12.67
	4/9/2012	7.35	729	119	1.55	7.8	11.74
	7/12/2012	7.17	1,154	48	1.63	14.6	15.52
	10/11/2012	7.40	NM	-68	0.74	11.3	16.17
	3/5/2013	7.39	538	5	1.07	2.0	10.20
	6/5/2013	7.52	1,058	169	3.79	2.9	13.92
	8/27/2013	7.02	969	58	2.10	17.1	17.60
PRB-15d	11/14/2013	6.77	608	243	1.40	28.0	14.03
	5/29/2014	7.35	750	46	3.28	1.09	13.01
	8/11/2011	7.52	1,009	-172	0.41	26.9	14.85
	10/6/2011	7.20	876	-82.5	0.28	4.2	14.86
	1/12/2012	7.10	957	-162	0.42	0.5	13.09
	4/9/2012	7.39	877	41	0.56	5.1	12.76
	7/12/2012	7.35	1,195	-88	0.32	14.3	16.03
	10/11/2012	7.46	NM	-110	0.38	12.8	14.76
	3/5/2013	7.43	850	-74	1.28	5.9	10.21
PRB-16s	6/5/2013	7.80	919	-218	0.38	3.1	14.67
	8/27/2013	7.19	1,097	-90	0.60	22.0	17.26
	11/14/2013	6.98	916	-98	1.15	32.0	13.43
	5/29/2014	7.38	1,091	-116	0.46	0.96	14.28
	7/12/2012	7.01	778	68	2.81	4.8	21.05
	10/9/2012	NM	641	58	3.12	12.6	19.01
	3/27/2013	8.70	883	93	4.37	0.0	8.56
	6/6/2013	7.46	834	68	3.70	0.9	14.25
	8/27/2013	7.00	833	45	3.25	17.1	19.14
11/14/2013	6.89	649	28	2.90	26.9	14.17	
5/30/2014	7.29	605	-66	2.94	2.83	12.99	

Notes:

S.U. = standard pH units
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 mV = millivolts
 mg/L = milligrams per liter
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Table 4
 Summary of Dissolved Gases Near PRB Section 1
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	Units	Methane	Ethane	Ethylene
		ug/L	ug/L	ug/L
PRB-01s	10/7/2011	7.0	9.1	<1.0
	1/11/2012	1,800	3.7	2.2
	4/10/2012	9,700 ⁽¹⁾	9.6	1.0
	7/16/2012	470	1.7	1.2
	10/10/2012	340	<1.0	<1.0
	3/4/2013	4,500	3.2	58
	6/7/2013	1,300	3.1	9.4
	8/26/2013	180	<1.0	1.4
	11/15/2013	480	<1.0	<1.0
5/30/2014	930	<1.0	7.4	
PRB-02s	10/7/2011	730	4.5	<1.0
	1/11/2012	2,400	1.9	<1.0
	4/10/2012	9,200	5.0	<1.0
	7/13/2012	8,800	1.2	1.7
	10/10/2012	1,800	2.0	12
	3/5/2013	1,600	<1.0	20
	6/7/2013	4,100	1.1	61
	8/26/2013	3,100	<1.0	4.9
	11/15/2013	7,500	3.6	7.0
6/5/2014	2,700	1.2	4.2	
PRB-04s	10/7/2011	20	3.1	<1.0
	1/11/2012	2,300	6.5	20
	4/10/2012	9,000	13	180
	7/16/2012	7,300	7.6	250
	10/4/2012	3,400	2.6	100
	3/4/2013	12,000	1.6	84
	6/6/2013	14,000	1.2	160
	8/26/2013	8,800	1.7	76
	11/15/2013	4,500	7.0	87
5/28/2014	4,600	36	59	
PRB-06s	10/6/2011	--	--	--
	1/12/2012	1,700	21	74
	4/10/2012	14,000	27	78
	7/12/2012	9,100	17	54
	10/9/2012	3,000	11	30
	3/5/2013	6,800	24	40
	6/7/2013	10,000	26	<1.0
	8/27/2013	12,000	6.9	39
	11/14/2013	14,000	33	32
5/29/2014	6,200	29	13	

Notes:

ug/L = micrograms per liter

-- = Not analyzed

1) Reported concentration is greater than the calibrated range of the instrument. Result is approximate.

Table 4
 Summary of Dissolved Gases Near PRB Section 1
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte		Methane	Ethane	Ethylene
Units		ug/L	ug/L	ug/L
PRB-07s	10/7/2011	1,500	1.9	<1.0
	1/11/2012	1,600	2.0	1.3
	4/10/2012	11,000	<1.0	<1.0
	7/16/2012	8,700	1.4	1.1
	10/4/2012	3,200	1.4	<1.0
	3/4/2013	5,000	2.2	<1.0
	6/6/2013	7,800	2.1	16
	8/26/2013	2,200	1.4	4.4
	11/15/2013	2,100	1.1	4.9
	5/28/2014	1,100	1.0	3.6
PRB-08s	10/7/2011	2,200	2.6	1.1
	1/11/2012	1,700	<1.0	<1.0
	4/10/2012	9,700	1.2	<1.0
	7/13/2012	8,200	1.0	<1.0
	10/4/2012	3,000	<1.0	<1.0
	3/5/2013	1,600	<1.0	1.3
	6/6/2013	1,100	<1.0	1.3
	8/26/2013	780	<1.0	1.5
	11/15/2013	94	<1.0	<1.0
	5/28/2014	100	<1.0	<1.0
PRB-09s	10/6/2011	--	--	--
	1/12/2012	1,500	4.0	4.1
	4/9/2012	15,000	6.2	7.2
	7/13/2012	10,000	6.9	2.8
	10/9/2012	1,600	<1.0	<1.0
	3/5/2013	3,700	3.7	<1.0
	6/7/2013	6,300	6.9	<1.0
	8/27/2013	7,800	1.8	<1.0
	11/14/2013	8,800	5.6	<1.0
	5/30/2014	8,400	6.4	<1.0

Notes:

ug/L = micrograms per liter

-- = Not analyzed

1) Reported concentration is greater than the calibrated range of the instrument. Result is approximate.

Table 5
 Summary of Gas Composition at Methane Vent Locations
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	Methane	Carbon Dioxide	Oxygen	Balance Gas	
Units	%	%	%	%	
V-01 ^(1,2)	11/4/2011	10.8	2.7	15.0	71.3
	11/14/2011	16.0	4.5	12.2	67.7
	12/14/2011	24.0	4.0	10.0	62.6
	1/24/2012	0.0	0.0	21.5	78.5
	2/15/2012	8.1	3.9	13.8	74.2
	2/22/2012	0.9	1.8	18.5	78.7
	2/28/2012	0.5	1.7	19.3	78.5
	3/7/2012	0.7	1.4	19.2	78.7
	3/21/2012	0.7	2.6	18.6	78.0
	5/2/2012	0.5	1.1	18.8	79.5
	6/14/2012	0.1	1.1	20.6	78.2
	8/23/2012	0.2	1.2	19.3	79.3
	11/29/2012	0.0	0.8	20.4	78.6
	1/24/2013	0.0	0.4	20.3	79.2
	2/28/2013	0.0	0.7	19.8	79.5
	3/25/2013	0.0	0.5	20.1	79.2
	5/23/2013	0.0	0.6	21.4	78.0
	8/16/2013	0.0	1.6	19.4	79.0
	11/5/2013	0.0	0.6	20.0	79.3
	1/28/2014 ⁽⁴⁾	--	--	--	--
2/26/2014	0.0	0.9	19.0	80.1	
3/21/2014	0.0	0.5	19.9	79.5	
5/21/2014	0.0	0.6	20.1	79.3	
V-02 ^(1,2)	11/4/2011	39.5	3.9	10.1	46.7
	11/14/2011	32.0	4.3	8.8	53.5
	12/14/2011	33.0	3.2	11.8	52.8
	1/24/2012	26.4	4.6	3.7	65.4
	2/15/2012	12.6	4.2	11.9	71.3
	2/22/2012	1.8	2.4	15.5	80.2
	2/28/2012	0.9	2.7	17.3	79.0
	3/7/2012	1.2	2.2	17.5	78.9
	3/21/2012	1.0	3.4	17.3	78.3
	5/2/2012	1.0	3.1	16.6	79.3
	6/14/2012	0.5	2.4	19.2	77.9
	8/23/2012	0.2	1.8	18.6	79.4
	11/29/2012	0.0	1.0	20.2	78.7
	1/24/2013	0.0	0.5	20.3	79.1
	2/28/2013	0.0	0.7	19.6	79.7
	3/25/2013	0.0	0.4	20.6	78.8
	5/23/2013	0.0	0.6	21.4	78.0
	8/16/2013	0.0	1.6	19.3	79.1
	11/5/2013	0.0	0.8	19.9	79.3
	1/28/2014 ⁽⁴⁾	--	--	--	--
2/26/2014	0.0	0.9	20.2	78.9	
3/21/2014	0.0	0.4	20.6	79.0	
5/19/2014	0.0	0.4	20.2	79.4	

Notes:

Passive vents were installed at all locations (V-01 through V-15) on October 27-28, 2011 in order to reduce methane concentrations in the subsurface soil gas to less than 5.1-percent.

- 1) Concentrations of methane at vent locations V-01, V-02, V-03 and V-04 triggered a pilot study for active soil gas removal which was conducted on December 22, 2011.
- 2) Based on pilot study results, an active soil gas removal system was designed and installed at vents V-01, V-02 and V-03. The permanent power-supply was installed, and the active system became fully functional on February 15, 2012.
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- 5) Heavy snow and ice cover prevented sample collection.

Table 5
 Summary of Gas Composition at Methane Vent Locations
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	Methane	Carbon Dioxide	Oxygen	Balance Gas	
Units	%	%	%	%	
V-03 ^(1,2)	11/4/2011	18.9	2.0	15.7	63.4
	11/14/2011	29.0	3.1	13.2	54.3
	12/14/2011	33.0	2.8	14.0	50.3
	1/24/2012	0.0	0.0	21.5	78.4
	2/15/2012	32.6	4.1	5.9	57.4
	2/22/2012	12.0	3.3	11.7	73.3
	2/28/2012	6.8	3.5	13.2	76.6
	3/7/2012	6.5	3.5	12.9	77.0
	3/21/2012	5.4	4.7	12.5	77.3
	5/2/2012	6.1	5.3	12.3	76.3
	6/14/2012	1.4	4.4	16.1	78.2
	8/23/2012	0.7	4.6	14.3	80.4
	11/29/2012	0.1	2.7	18.3	79.0
	1/24/2013	0.0	1.2	18.7	80.0
	2/28/2013	0.0	1.4	17.8	80.8
	3/25/2013	0.0	1.0	19.0	78.9
	5/23/2013	0.0	1.8	19.7	78.4
	8/16/2013	0.0	3.5	16.6	80.0
	11/5/2013	0.0	2.0	18.0	79.9
	1/28/2014	0.0	1.6	18.9	79.3
2/26/2014	0.0	1.4	19.4	79.2	
3/21/2014	0.0	0.1	21.1	78.8	
5/21/2014	0.0	1.0	19.2	79.8	
V-04 ⁽¹⁾	11/4/2011	10.2	0.6	17.9	72.7
	11/14/2011	25.6	1.5	14.3	58.4
	12/14/2011	5.8	0.4	20.5	72.8
	1/24/2012	0.9	0.1	21.1	77.9
	2/15/2012	0.1	0.0	20.5	79.3
	2/22/2012	NM	NM	NM	NM
	2/28/2012	0.0	0.0	21.0	78.9
	3/7/2012	1.5	0.0	20.2	78.1
	3/21/2012	0.0	0.0	20.8	79.1
	5/2/2012	0.0	0.0	20.2	79.7
	6/14/2012	0.0	0.1	21.5	78.4
	8/23/2012	0.1	0.0	20.6	79.2
	11/29/2012	0.0	0.1	21.1	78.7
	1/24/2013	0.0	0.1	20.7	79.0
	2/28/2013	0.0	0.0	21.4	78.6
	3/25/2013	0.0	0.1	20.7	79.1
	5/23/2013	0.0	0.0	22.2	77.8
	8/16/2013	0.0	0.0	20.4	79.6
	11/5/2013	0.0	0.1	20.8	79.0
	1/28/2014	0.0	0.3	21.0	78.6
2/26/2014	0.0	0.1	22.1	77.8	
3/21/2014	0.0	0.1	21.3	78.6	
5/19/2014	0.0	0.0	20.8	79.2	

Notes:

Passive vents were installed at all locations (V-01 through V-15) on October 27-28, 2011 in order to reduce methane concentrations in the subsurface soil gas to less than 5.1-percent.

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Table 5
 Summary of Gas Composition at Methane Vent Locations
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	Methane	Carbon Dioxide	Oxygen	Balance Gas	
Units	%	%	%	%	
V-05	11/4/2011	0.3	0.3	20.0	79.5
	11/14/2011	0.2	0.2	21.2	78.3
	12/14/2011	0.7	0.3	21.4	77.7
	1/24/2012	0.2	0.1	21.3	78.4
	2/15/2012	0.2	0.3	20.4	79.1
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.2	0.1	20.2	79.6
	6/14/2012	0.1	0.3	21.1	78.2
	8/23/2012	0.7	6.2	11.2	81.8
	11/29/2012	0.7	2.3	18.0	78.9
	1/24/2013	0.5	0.4	19.8	79.1
	2/28/2013	0.0	0.0	21.5	78.5
	3/25/2013	1.0	0.6	18.9	79.4
	5/23/2013	4.6	4.0	13.9	77.3
	8/16/2013	0.0	0.0	20.4	79.6
	11/5/2013	0.0	0.1	20.9	78.8
	1/28/2014	0.6	2.0	17.1	80.3
2/26/2014	0.0	0.2	22.2	77.6	
3/21/2014	0.0	0.1	21.3	78.6	
5/19/2014	1.1	0.7	18.6	79.7	
V-06	11/4/2011	0.2	0.2	20.3	79.1
	11/14/2011	0.7	0.3	21.1	77.9
	12/14/2011	0.7	0.2	21.8	77.3
	1/24/2012	0.9	0.2	21.2	77.7
	2/15/2012	0.7	0.1	20.5	78.8
	3/21/2012	0.5	0.0	20.7	78.7
	5/2/2012	0.5	0.1	20.0	79.3
	6/14/2012	0.3	0.2	21.2	78.0
	8/23/2012	1.4	5.6	12.7	80.1
	11/29/2012	1.0	2.5	17.3	78.7
	1/24/2013	2.0	0.6	19.3	78.1
	2/28/2013	6.6	1.3	16.9	75.1
	3/25/2013	6.4	1.2	16.8	75.6
	5/23/2013	7.0	2.5	16.4	73.8
	8/16/2013	0.9	0.3	19.9	78.8
	11/5/2013	3.5	0.8	18.4	77.3
	1/28/2014	2.7	1.9	17.5	77.5
2/26/2014	4.3	0.6	18.9	76.2	
3/21/2014	0.0	0.3	21.4	78.3	
5/19/2014	3.1	0.6	18.6	77.6	

Notes:

Passive vents were installed at all locations (V-01 through V-15) on October 27-28, 2011 in order to reduce methane concentrations in the subsurface soil gas to less than 5.1-percent.

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Table 5
 Summary of Gas Composition at Methane Vent Locations
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte		Methane	Carbon Dioxide	Oxygen	Balance Gas
Units		%	%	%	%
V-07	11/4/2011	0.0	0.1	20.4	79.3
	11/14/2011	0.4	0.2	21.1	78.1
	12/14/2011	1.0	0.2	21.7	77.1
	1/24/2012	0.2	0.1	21.3	78.4
	2/15/2012	0.3	0.1	20.8	78.9
	3/21/2012	0.1	0.0	20.8	79.0
	5/2/2012	0.0	0.0	20.3	79.7
	6/14/2012	0.0	0.1	21.4	78.5
	8/23/2012	0.1	0.3	20.4	79.2
	11/29/2012	0.4	1.2	19.7	78.6
	1/24/2013	1.5	0.5	19.5	78.3
	2/28/2013	6.5	0.8	17.6	75.0
	3/25/2013	5.0	0.9	16.8	76.9
	5/23/2013	2.9	1.6	17.8	77.7
	8/16/2013	0.3	0.1	20.3	79.3
	11/5/2013	1.6	0.5	19.8	78.1
	1/28/2014	2.3	0.9	18.7	78.3
2/26/2014	2.9	0.6	20.6	75.9	
3/21/2014	0.0	0.2	21.4	78.4	
5/19/2014	0.7	0.2	19.9	79.3	
V-08	11/4/2011	0.9	0.1	20.1	78.7
	11/14/2011	2.4	0.3	20.3	76.9
	12/14/2011	1.5	0.2	21.6	77.0
	1/24/2012	1.7	0.1	20.8	77.5
	2/15/2012	1.8	0.2	20.3	77.5
	3/21/2012	1.3	0.0	20.4	78.3
	5/2/2012	0.6	0.1	19.6	79.6
	6/14/2012	0.5	0.4	20.9	78.2
	8/23/2012	1.4	3.5	15.3	79.7
	11/29/2012	0.2	0.6	20.7	78.5
	1/24/2013	0.4	0.3	20.6	78.5
	2/28/2013	0.0	0.0	21.7	78.3
	3/25/2013	0.9	0.3	20.0	78.7
	5/23/2013	2.8	1.4	18.9	76.8
	8/16/2013	0.0	0.1	20.4	79.5
	11/5/2013	1.2	3.2	13.7	81.8
	1/28/2014	1.5	1.0	19.2	78.5
2/26/2014	1.5	0.6	21.2	76.7	
3/21/2014	0.0	0.1	21.6	78.3	
5/19/2014	0.3	0.3	19.7	79.8	

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Table 5
 Summary of Gas Composition at Methane Vent Locations
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte		Methane	Carbon Dioxide	Oxygen	Balance Gas
Units		%	%	%	%
V-09	11/4/2011	0.1	0.0	20.4	79.4
	11/14/2011	0.3	0.1	21.0	78.3
	12/14/2011	0.0	0.0	22.2	77.8
	1/24/2012	0.4	0.1	21.0	78.3
	2/15/2012	0.2	0.1	20.8	78.8
	3/21/2012	0.0	0.1	20.6	79.2
	5/2/2012	0.0	0.1	19.8	80.1
	6/14/2012	0.0	0.4	20.9	78.6
	8/23/2012	0.5	0.6	19.8	79.0
	11/29/2012	0.6	0.7	20.2	78.4
	1/24/2013	0.8	0.2	20.6	78.3
	2/28/2013	0.0	0.1	21.7	78.2
	3/25/2013	3.2	0.4	19.5	76.6
	5/23/2013	2.8	1.2	19.6	76.6
	8/16/2013	0.0	0.0	20.5	79.5
	11/5/2013	0.6	0.6	19.4	79.2
	1/28/2014	0.8	0.5	20.3	78.3
2/26/2014	1.0	0.3	21.9	76.8	
3/21/2014	0.0	0.1	21.7	78.2	
5/19/2014	0.3	0.1	19.9	79.7	
V-10	11/4/2011	0.0	0.1	20.5	79.3
	11/14/2011	0.0	0.1	21.3	78.7
	12/14/2011	0.0	0.1	21.7	78.2
	1/24/2012	0.0	0.1	21.2	78.6
	2/15/2012	0.1	0.1	20.8	78.9
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.0	0.2	19.7	80.1
	6/14/2012	0.0	0.4	21.0	78.5
	8/23/2012	0.1	1.3	18.5	80.0
	11/29/2012	0.0	3.3	15.9	80.6
	1/24/2013	0.0	0.3	20.6	79.0
	2/28/2013	0.6	1.0	16.6	81.7
	3/25/2013	1.2	2.1	15.7	80.8
	5/23/2013	0.2	6.4	11.7	82.7
	8/16/2013	0.0	4.1	14.2	81.7
	11/5/2013	0.0	5.8	10.9	83.2
	1/28/2014	0.9	4.4	14.4	80.2
2/26/2014	1.3	3.2	16.6	78.9	
3/21/2014	0.0	0.2	21.5	78.3	
5/19/2014	0.2	0.7	18.5	80.6	

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Units	%	%	%	%	
V-11	11/4/2011	0.3	0.2	20.1	79.2
	11/14/2011	0.9	0.3	20.7	78.1
	12/14/2011	0.0	0.0	22.2	77.8
	1/24/2012	0.7	0.1	21.0	78.1
	2/15/2012	0.6	0.1	20.8	78.5
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.2	0.1	19.8	79.9
	6/14/2012	0.3	0.4	20.9	78.3
	8/23/2012	3.0	1.9	17.8	77.2
	11/29/2012	3.5	3.5	15.1	77.9
	1/24/2013	1.3	1.2	18.5	79.0
	2/28/2013	3.8	2.0	14.8	79.4
	3/25/2013	5.6	3.8	11.0	79.7
	5/23/2013	6.2	4.1	12.1	76.6
	8/16/2013	2.5	1.9	17.6	78.3
	11/5/2013	5.4	7.6	6.2	80.9
	1/28/2014	3.4	7.4	7.8	81.2
2/26/2014	3.4	7.1	7.9	81.6	
3/21/2014	0.0	0.2	21.4	78.4	
5/19/2014	1.6	1.2	17.2	80.0	
V-12	11/4/2011	0.4	0.5	19.7	79.5
	11/14/2011	0.1	0.4	20.5	78.8
	12/14/2011	0.0	0.1	22.2	77.7
	1/24/2012	0.0	0.1	21.1	78.7
	2/15/2012	0.0	0.0	21.0	78.8
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.0	0.1	19.9	80.0
	6/14/2012	0.0	0.3	21.1	78.5
	8/23/2012	2.3	1.4	18.0	78.4
	11/29/2012	1.8	3.3	16.3	78.6
	1/24/2013	1.6	1.7	17.5	79.1
	2/28/2013	4.9	3.7	12.1	79.2
	3/25/2013	5.3	4.6	10.6	80.0
	5/23/2013	7.4	7.2	5.2	80.3
	8/16/2013	1.5	1.7	18.2	78.5
	11/5/2013	5.9	9.7	3.8	80.4
	1/28/2014	2.9	5.3	13.1	79.0
2/26/2014	5.4	6.5	9.5	78.6	
3/21/2014	0.6	0.6	20.2	78.6	
5/19/2014	3.8	2.4	13.2	80.7	

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 Tecumseh, Michigan

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Units		%	%	%	%
V-13	11/4/2011	0.2	0.5	19.8	79.7
	11/14/2011	0.1	0.6	20.4	78.8
	12/14/2011	0.4	0.5	20.9	78.1
	1/24/2012	0.6	0.2	20.7	78.5
	2/15/2012	0.4	0.2	20.8	78.6
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.1	0.2	19.7	79.9
	6/14/2012	0.1	3.0	16.6	80.3
	8/23/2012	0.2	0.4	20.0	79.1
	11/29/2012	0.1	0.8	20.3	78.7
	1/24/2013	0.0	1.0	19.0	79.9
	2/28/2013	1.3	0.7	18.4	79.5
	3/25/2013	0.7	0.6	18.6	80.1
	5/23/2013	1.4	2.4	17.0	79.1
	8/16/2013	0.0	0.1	20.3	79.6
	11/5/2013	3.5	6.2	9.3	81.0
	1/28/2014	1.1	1.8	17.5	79.6
2/26/2014	2.9	1.0	17.8	78.3	
3/21/2014	0.0	0.1	21.5	78.4	
5/19/2014	1.5	1.3	16.8	80.4	
V-14	11/4/2011	0.3	3.1	15.5	81.0
	11/14/2011	0.0	0.3	20.9	78.7
	12/14/2011	1.0	1.4	19.4	78.2
	1/24/2012	0.3	0.2	20.8	78.7
	2/15/2012	0.7	0.3	20.4	78.8
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.7	1.7	16.3	81.4
	6/14/2012	0.1	6.6	11.2	82.0
	8/23/2012	0.5	7.9	8.7	82.7
	11/29/2012	0.8	4.6	12.5	82.2
	1/24/2013	0.6	1.0	18.7	79.5
	2/28/2013	7.6	1.3	15.5	75.3
	3/25/2013	4.7	1.8	15.6	77.2
	5/23/2013	5.2	4.4	13.2	77.1
	8/16/2013	2.7	6.1	11.3	79.9
	11/5/2013	0.3	9.9	4.4	85.1
	1/28/2014	1.8	3.7	14.8	79.3
2/26/2014	4.2	2.8	14.5	78.5	
3/21/2014	1.1	0.2	20.5	78.3	
5/19/2014	3.8	2.0	16.5	77.7	

Notes:

Passive vents were installed at all locations (V-01 through V-15) on October 27-28, 2011 in order to reduce methane concentrations in the subsurface soil gas to less than 5.1-percent.

- 1) Concentrations of methane at vent locations V-01, V-02, V-03 and V-04 triggered a pilot study for active soil gas removal which was conducted on December 22, 2011.
- 2) Based on pilot study results, an active soil gas removal system was designed and installed at vents V-01, V-02 and V-03. The permanent power-supply was installed, and the active system became fully functional on February 15, 2012.
- 3) Water in sample port. Gas reading terminated prior to stabilization.
- 4) Sample port frozen.
- 5) Heavy snow and ice cover prevented sample collection.

Table 5
 Summary of Gas Composition at Methane Vent Locations
 PRB Performance Monitoring
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte		Methane	Carbon Dioxide	Oxygen	Balance Gas
Units		%	%	%	%
V-15	11/4/2011	0.0	0.3	20.0	79.4
	11/14/2011	0.0	0.3	20.9	78.6
	12/14/2011	0.0	0.0	22.3	77.7
	1/24/2012	0.0	0.1	21.1	78.8
	2/15/2012	0.0	0.0	21.1	78.7
	3/21/2012	0.0	0.0	20.9	79.1
	5/2/2012	0.0	0.0	19.9	80.0
	6/14/2012	0.0	0.0	21.4	78.5
	8/23/2012	0.0	0.9	20.1	78.8
	11/29/2012	0.0	0.8	20.6	78.5
	1/24/2013	0.0	0.5	20.6	78.8
	2/28/2013	0.0	1.2	18.5	80.3
	3/25/2013	0.0	1.3	18.5	80.1
	5/23/2013	0.0	2.5	18.4	79.1
	8/16/2013	0.0	3.0	17.9	79.1
	11/5/2013	0.0	2.3	17.9	79.7
1/28/2014	0.0	2.2	18.0	79.8	
2/26/2014	0.0	2.4	16.9	80.7	
3/21/2014	0.0	0.3	21.5	78.2	
5/19/2014	0.0	1.6	17.0	81.4	
SG-02	11/4/2011	0.0	1.2	18.3	80.4
	12/14/2011	0.0	1.0	13.5	85.5
	2/15/2012	0.0	0.6	18.0	81.5
	3/21/2012 ⁽³⁾	0.0	0.5	18.9	79.3
	8/16/2013	0.0	4.5	12.8	82.5
	11/5/2013	0.0	1.6	18.1	80.2
	1/28/2014 ⁽⁵⁾	--	--	--	--
	2/26/2014 ⁽⁵⁾	--	--	--	--
3/21/2014	0.0	0.1	21.7	78.2	
5/21/2014 ⁽³⁾	--	--	--	--	
SG-03	11/4/2011	0.0	4.9	8.1	86.9
	12/14/2011	0.0	1.5	19.5	79.0
	2/15/2012	0.0	0.0	20.9	79.0
	3/21/2012	0.0	0.1	20.6	79.3
SG-03R	8/16/2013	0.0	2.6	18.7	78.7
	11/5/2013	0.0	0.5	20.6	78.8
	1/28/2014 ⁽⁵⁾	--	--	--	--
	2/26/2014 ⁽⁵⁾	--	--	--	--
	3/21/2014	0.0	0.1	21.6	78.3
5/21/2014 ⁽³⁾	--	--	--	--	

Notes:

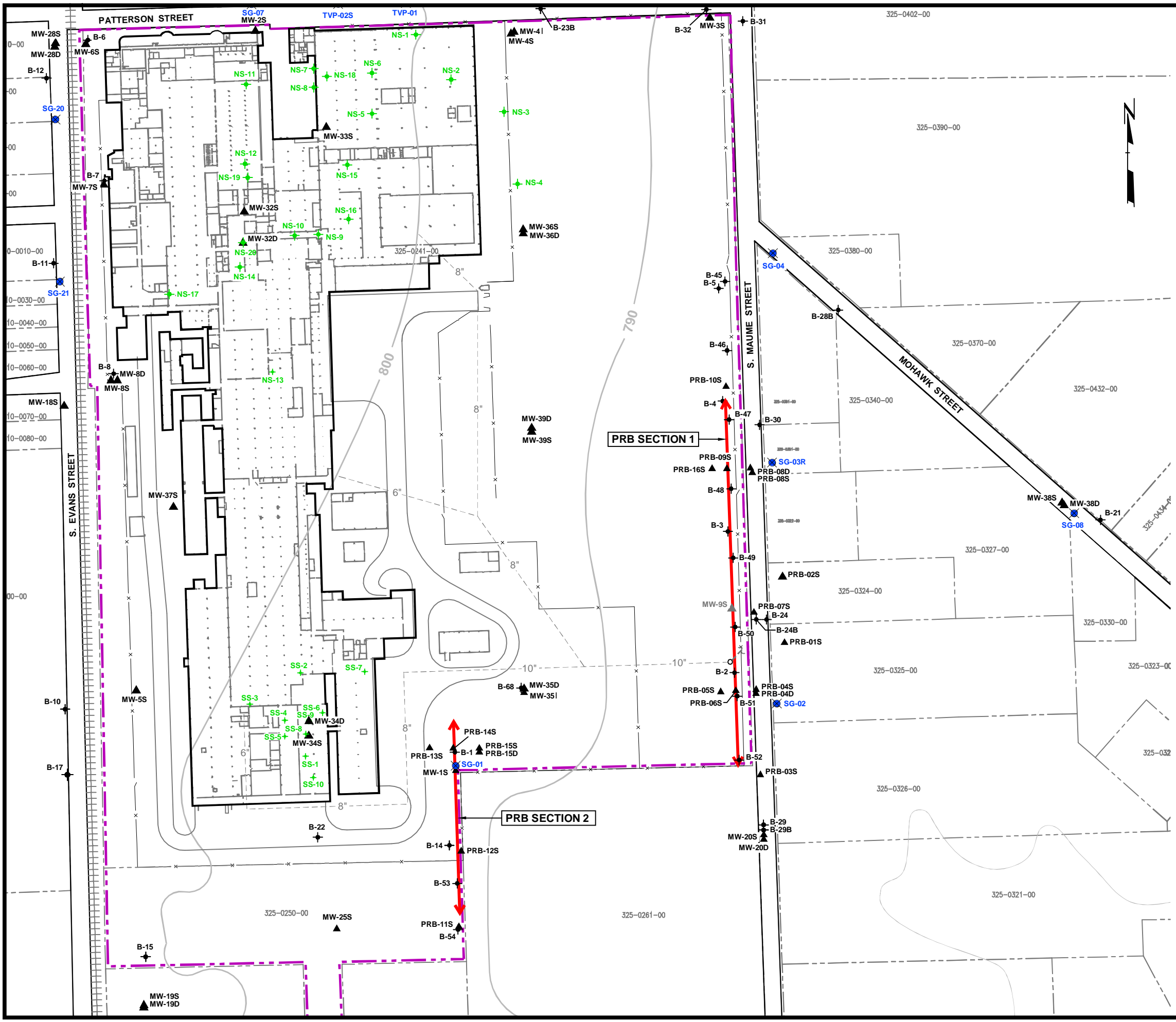
Passive vents were installed at all locations (V-01 through V-15) on October 27-28, 2011 in order to reduce methane concentrations in the subsurface soil gas to less than 5.1-percent.

- 1) Concentrations of methane at vent locations V-01, V-02, V-03 and V-04 triggered a pilot study for active soil gas removal which was conducted on December 22, 2011.
- 2) Based on pilot study results, an active soil gas removal system was designed and installed at vents V-01, V-02 and V-03. The permanent power-supply was installed, and the active system became fully functional on February 15, 2012.
- 3) Water in sample port. Gas reading terminated prior to stabilization.
- 4) Sample port frozen.
- 5) Heavy snow and ice cover prevented sample collection.

Technical Memorandum

Figures

bmd033109
 FIG01 Site Plan & PRBs
 Attached Xrefs:
 Attached Images:
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 Operator Name: 0.386863
 PLOT DATA
 Drawing Name:
 Operator Name:
 Drawing Plot Scale:



LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MONITORING WELL LOCATION AND NUMBER
- DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- SOIL GAS SAMPLE LOCATION AND NUMBER
- PIPE DIAMETER AND APPROXIMATE LOCATION OF ON-SITE SANITARY SEWER
- PRB LOCATION
- FENCE LINE

- NOTES**
1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
 2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.



PROJECT: FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN			
SHEET TITLE: SITE PLAN AND PRB MONITORING LOCATIONS			
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CHECKED BY: SEM		FILE NO. 186299.0001.01.01.dwg	
APPROVED BY: GC	DATE PRINTED:	FIGURE 1	
DATE: OCTOBER 2014			

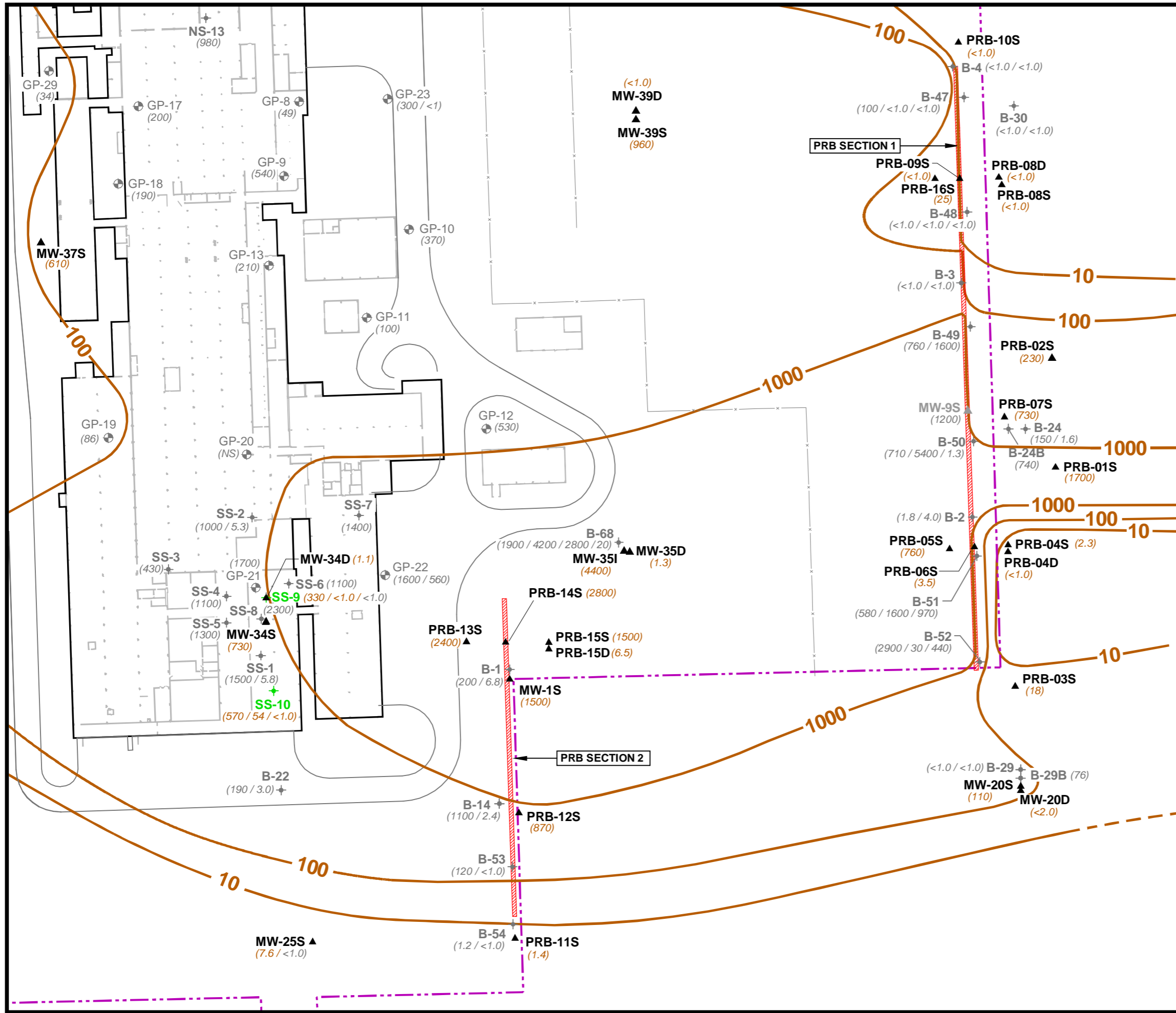


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 Plot Time: 2:47 PM
 Attached Xrefs:
 Attached Images:
 Layout: FIG02 GW Iso TCE

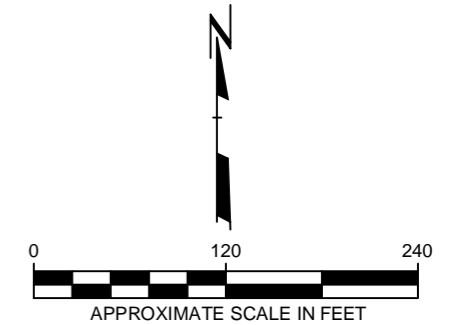
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 Drawing Plot Scale: 0.386863

PLOT DATA
 Drawing Name:
 Operator Name:
 Drawing Plot Scale:



LEGEND	
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	PARCEL BOUNDARY
	PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER (MARCH 2009-AUGUST 2012) (SEE NOTE 4)
	MONITORING WELL LOCATION AND NUMBER (SEE NOTE 5)
	DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER (SEE NOTE 5)
	SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER (MARCH 2009-AUGUST 2012) (SEE NOTE 4)
	ATC GEOPROBE BORING LOCATION AND NUMBER (DECEMBER 2008-JANUARY 2009) (SEE NOTE 4)
	PRB LOCATION
	FENCE LINE
	APPROXIMATE TRICHLOROETHENE ISOCONCENTRATION LINE
	TRICHLOROETHENE CONCENTRATION IN ug/L (SEE NOTES 3 AND 4)
	TRICHLOROETHENE CONCENTRATION IN ug/L WHERE SAMPLES WERE COLLECTED AT MULTIPLE DEPTHS. CONCENTRATIONS ARE LISTED IN ORDER OF INCREASING DEPTH (SEE NOTES 3 AND 4)
	NO SAMPLE COLLECTED FOR TRICHLOROETHENE ANALYSIS

- NOTES**
1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
 2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
 3. SEE TABLES IN ATTACHMENT 3 FOR FURTHER SAMPLE INFORMATION (SAMPLE COLLECTION DATE, SAMPLE DEPTH, ETC.).
 4. SCREENED (GRAY) SAMPLE LOCATIONS WERE INSTALLED AND SAMPLED PRIOR TO MAY 2014. TRICHLOROETHENE CONCENTRATION DATA FOR THESE LOCATIONS (ALSO SCREENED) WERE USED FOR UP GRADIENT PLUME DELINEATION.
 5. CONCENTRATION DATA FROM THE MOST RECENT SAMPLE EVENT IS DISPLAYED.



PROJECT: FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN			
TITLE: GROUNDWATER ISOCONCENTRATION MAP TRICHLOROETHENE MAY 2014			
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APPROVED BY: GC		FIGURE 2	
DATE: OCTOBER 2014			

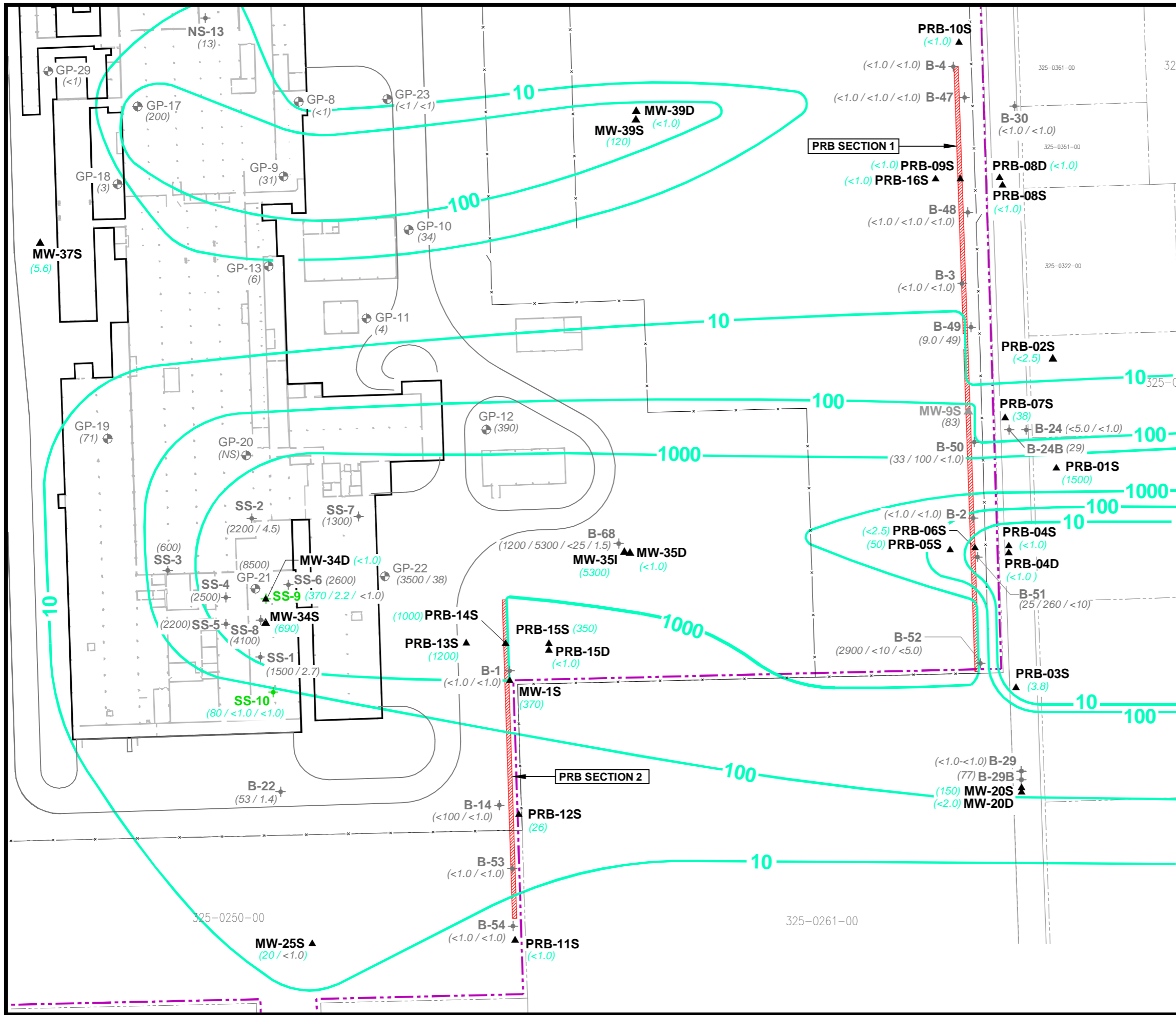


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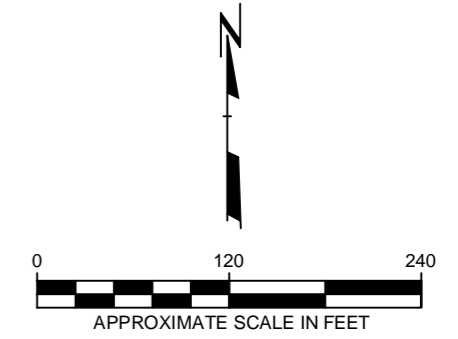
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 Drawing Plot Scale: 0.386863

PLOT DATA
 Drawing Name:
 Operator Name:
 Drawing Plot Scale:



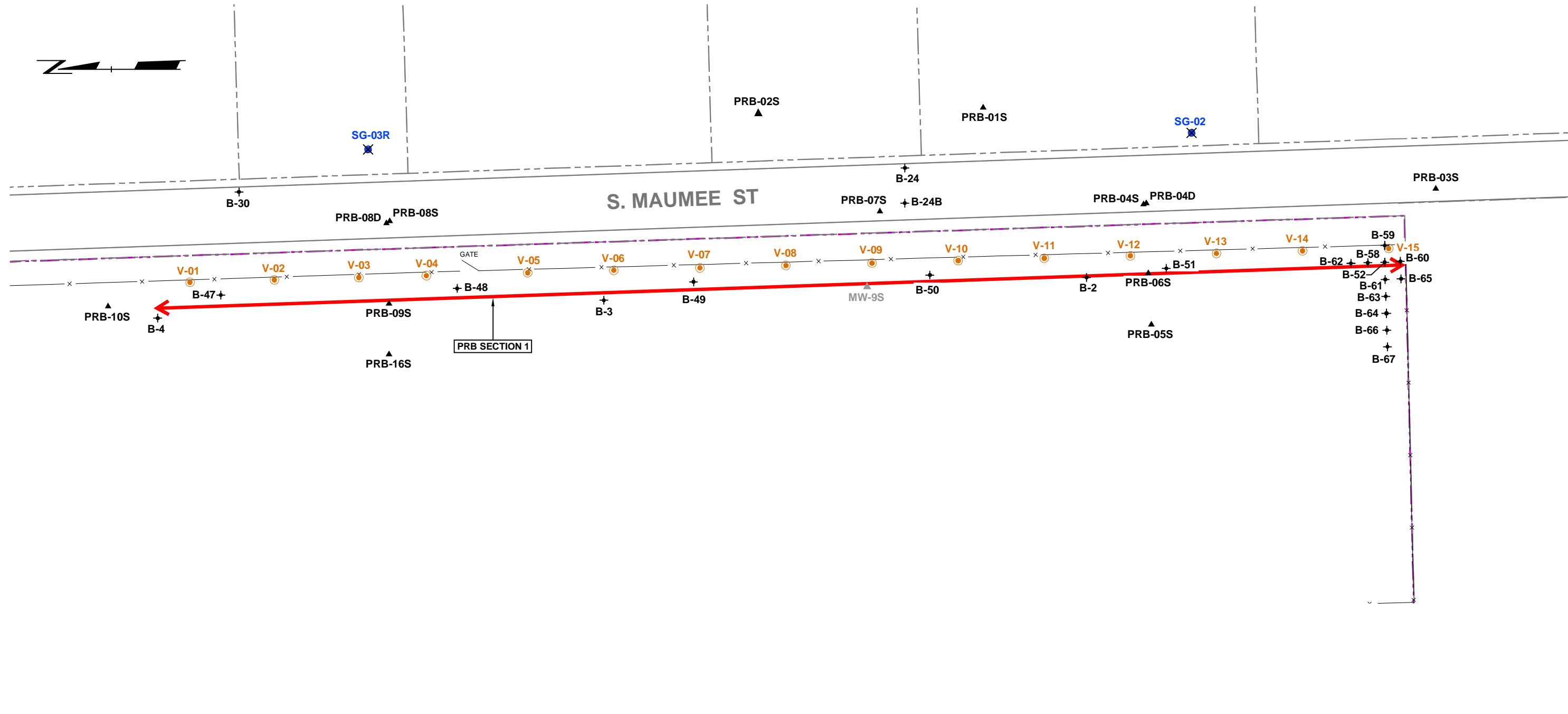
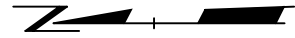
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	FORMER TECUMSEH PRODUCTS SITE BOUNDARY
	PARCEL BOUNDARY
	PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER (MARCH 2009-AUGUST 2012) (SEE NOTE 4)
	MONITORING WELL LOCATION AND NUMBER (SEE NOTE 5)
	DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER (SEE NOTE 5)
	SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER (MARCH 2009-AUGUST 2012) (SEE NOTE 4)
	TEMPORARY ATC GEOPROBE BORING LOCATION AND NUMBER (DECEMBER 2008-JANUARY 2009) (SEE NOTE 4)
	PRB LOCATION
	FENCE LINE
	APPROXIMATE 1,1,1-TRICHLOROETHANE ISOCONCENTRATION LINE
	1,1,1-TRICHLOROETHANE CONCENTRATION IN ug/L (SEE NOTES 3 AND 4)
	1,1,1-TRICHLOROETHANE CONCENTRATION IN ug/L WHERE SAMPLES WERE COLLECTED AT MULTIPLE DEPTHS. CONCENTRATIONS ARE LISTED IN ORDER OF INCREASING DEPTH (SEE NOTES 3 AND 4)
	NO SAMPLE COLLECTED FOR 1,1,1-TRICHLOROETHANE ANALYSIS

- NOTES**
1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
 2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.
 3. SEE TABLES IN ATTACHMENT 3 FOR FURTHER SAMPLE INFORMATION (SAMPLE COLLECTION DATE, SAMPLE DEPTH, ETC.).
 4. SCREENED (GRAY) SAMPLE LOCATIONS WERE INSTALLED AND SAMPLED PRIOR TO MAY 2014. 1,1,1-TRICHLOROETHANE CONCENTRATION DATA FOR THESE LOCATIONS (ALSO SCREENED) WERE USED FOR UP GRADIENT PLUME DELINEATION.
 5. CONCENTRATION DATA FROM THE MOST RECENT SAMPLE EVENT IS DISPLAYED.



PROJECT: FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN			
TITLE: GROUNDWATER ISOCONCENTRATION MAP 1,1,1-TRICHLOROETHANE MAY 2014			
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CHECKED BY: SEM	DATE PRINTED:		
APPROVED BY: GC		FIGURE 3	
DATE: OCTOBER 2014			

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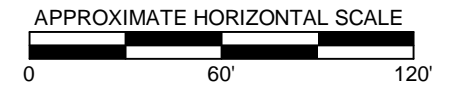
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 Attached Xrefs: bm033109
 Attached Images: FIG04 Methane Vents
 Layout:

LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MONITORING WELL LOCATION AND NUMBER
- DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SOIL GAS SAMPLE LOCATION AND NUMBER
- METHANE VENT LOCATION AND NUMBER
- PRB LOCATION
- FENCE LINE

NOTES

1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.



PROJECT: FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN			
SHEET TITLE: METHANE VENT LOCATIONS			
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CHECKED BY:	SEM	AS INDICATED	FILE NO. 186299.0001.01.04.dwg
APPROVED BY:	GC	DATE PRINTED:	FIGURE 4
DATE:	OCTOBER 2014		



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Technical Memorandum

Attachment 1 Laboratory Data

September 11, 2013

TRC Companies. - Ann Arbor Office
Attn: Ms. Stacy Metz
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TPC - PRB Performance Monitoring

Dear Ms. Stacy Metz,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1308522	08/28/2013	Laboratory Services

This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/12-056-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003059); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#83658); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-13-3); Virginia DCLS (#460153/1622); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications section of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Jennifer L. Rice
Project Chemist

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-11s**
 Lab Sample ID: **1308522-01**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 10:05
 Sampled By: J.Jasse
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-11s**
 Lab Sample ID: **1308522-01**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 10:05
 Sampled By: J.Jasse
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
*91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
*79-01-6	Trichloroethene	1.5	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-11s**
 Lab Sample ID: **1308522-01**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 10:05
 Sampled By: J.Jasse
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	101	85-118
	<i>1,2-Dichloroethane-d4</i>	108	87-122
	<i>Toluene-d8</i>	102	85-113
	<i>4-Bromofluorobenzene</i>	98	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	08/26/13 00:00
Lab Sample ID:	1308522-02	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10
Unit:	ug/L	Prepared:	09/05/13 By: LEW
Dilution Factor:	1	Analyzed:	09/06/13 By: LEW
QC Batch:	1309433	Analytical Batch:	3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **TB-01**
 Lab Sample ID: **1308522-02**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 00:00
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
*91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
*79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **TB-01**
 Lab Sample ID: **1308522-02**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 00:00
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	102	85-118
	<i>1,2-Dichloroethane-d4</i>	111	87-122
	<i>Toluene-d8</i>	104	85-113
	<i>4-Bromofluorobenzene</i>	96	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-03s**
 Lab Sample ID: **1308522-03**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 10:52
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	54	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-03s**
 Lab Sample ID: **1308522-03**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 10:52
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	260	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
*91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
*79-01-6	Trichloroethene	32	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-03s**
 Lab Sample ID: **1308522-03**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 10:52
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	650	10
95-47-6	Xylene, Ortho	440	5.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>111</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>102</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **Dup-01**
 Lab Sample ID: **1308522-04**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 00:00
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	54	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **Dup-01**
 Lab Sample ID: **1308522-04**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 00:00
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	260	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
*91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
*79-01-6	Trichloroethene	30	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **Dup-01**
 Lab Sample ID: **1308522-04**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 00:00
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	650	10
95-47-6	Xylene, Ortho	430	5.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>103</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	08/26/13 11:55
Lab Sample ID:	1308522-05	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.7	1.0	ug/L	1	RSK-175	09/05/13 09:16	JMF	1309245
Methane	8800	100	ug/L	200	RSK-175	09/05/13 09:27	JMF	1309245
Ethylene	76	1.0	ug/L	1	RSK-175	09/05/13 09:16	JMF	1309245

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	08/26/13 11:55
Lab Sample ID:	1308522-05	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10
Unit:	ug/L	Prepared:	09/07/13 By: LEW
Dilution Factor:	1	Analyzed:	09/08/13 By: LEW
QC Batch:	1309434	Analytical Batch:	3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	60	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	33	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-04s**
 Lab Sample ID: **1308522-05**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 11:55
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	33	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	7.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	1.5	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-04s**
 Lab Sample ID: **1308522-05**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 11:55
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	18	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

Surrogates:

	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	99	85-118
<i>1,2-Dichloroethane-d4</i>	97	87-122
<i>Toluene-d8</i>	99	85-113
<i>4-Bromofluorobenzene</i>	97	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-04d**
 Lab Sample ID: **1308522-06**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 12:39
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-04d**
 Lab Sample ID: **1308522-06**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 12:39
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
*91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
*79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-04d**
 Lab Sample ID: **1308522-06**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 12:39
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	13	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>111</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>103</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	08/26/13 13:21
Lab Sample ID:	1308522-07	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	09/05/13 09:31	JMF	1309245
Methane	180	2.0	ug/L	4	RSK-175	09/05/13 09:36	JMF	1309245
Ethylene	1.4	1.0	ug/L	1	RSK-175	09/05/13 09:31	JMF	1309245

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-01s**
 Lab Sample ID: **1308522-07**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 10
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 13:21
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	81	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	37	10

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-01s**
 Lab Sample ID: **1308522-07**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 10
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 13:21
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	200	10
156-60-5	trans-1,2-Dichloroethene	<10	10
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
*91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	1500	10
79-00-5	1,1,2-Trichloroethane	<10	10
*79-01-6	Trichloroethene	1200	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-01s**
 Lab Sample ID: **1308522-07**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 10
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 13:21
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>110</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>103</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	08/26/13 14:00
Lab Sample ID:	1308522-08	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	09/05/13 09:45	JMF	1309245
Methane	3100	50	ug/L	100	RSK-175	09/05/13 10:00	JMF	1309245
Ethylene	4.9	1.0	ug/L	1	RSK-175	09/05/13 09:45	JMF	1309245

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	08/26/13 14:00
Lab Sample ID:	1308522-08	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10
Unit:	ug/L	Prepared:	09/05/13 By: LEW
Dilution Factor:	2.5	Analyzed:	09/06/13 By: LEW
QC Batch:	1309433	Analytical Batch:	3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<50	50
107-13-1	Acrylonitrile	<5.0	5.0
71-43-2	Benzene	<2.5	2.5
108-86-1	Bromobenzene	<2.5	2.5
74-97-5	Bromochloromethane	<2.5	2.5
75-27-4	Bromodichloromethane	<2.5	2.5
75-25-2	Bromoform	<2.5	2.5
74-83-9	Bromomethane	<12	12
104-51-8	n-Butylbenzene	<2.5	2.5
135-98-8	sec-Butylbenzene	<2.5	2.5
98-06-6	tert-Butylbenzene	<2.5	2.5
75-15-0	Carbon Disulfide	<2.5	2.5
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
75-00-3	Chloroethane	<12	12
67-66-3	Chloroform	<2.5	2.5
74-87-3	Chloromethane	<12	12
96-12-8	1,2-Dibromo-3-chloropropane	<12	12
124-48-1	Dibromochloromethane	<2.5	2.5
106-93-4	1,2-Dibromoethane	<2.5	2.5
74-95-3	Dibromomethane	<2.5	2.5
110-57-6	trans-1,4-Dichloro-2-butene	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
541-73-1	1,3-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-71-8	Dichlorodifluoromethane	<12	12
75-34-3	1,1-Dichloroethane	12	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	08/26/13 14:00
Lab Sample ID:	1308522-08	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10
Unit:	ug/L	Prepared:	09/05/13 By: LEW
Dilution Factor:	2.5	Analyzed:	09/06/13 By: LEW
QC Batch:	1309433	Analytical Batch:	3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	150	2.5
156-60-5	trans-1,2-Dichloroethene	4.4	2.5
78-87-5	1,2-Dichloropropane	<2.5	2.5
10061-01-5	cis-1,3-Dichloropropene	<2.5	2.5
10061-02-6	trans-1,3-Dichloropropene	<2.5	2.5
100-41-4	Ethylbenzene	<2.5	2.5
60-29-7	Ethyl Ether	<12	12
591-78-6	2-Hexanone	<12	12
74-88-4	Iodomethane	<2.5	2.5
98-82-8	Isopropylbenzene	<2.5	2.5
99-87-6	4-Isopropyltoluene	<12	12
1634-04-4	Methyl tert-Butyl Ether	<12	12
75-09-2	Methylene Chloride	<12	12
78-93-3	2-Butanone (MEK)	<12	12
*91-57-6	2-Methylnaphthalene	<12	12
108-10-1	4-Methyl-2-pentanone (MIBK)	<12	12
91-20-3	Naphthalene	<12	12
103-65-1	n-Propylbenzene	<2.5	2.5
100-42-5	Styrene	<2.5	2.5
630-20-6	1,1,1,2-Tetrachloroethane	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<2.5	2.5
109-99-9	Tetrahydrofuran	<12	12
108-88-3	Toluene	<2.5	2.5
87-61-6	1,2,3-Trichlorobenzene	<12	12
120-82-1	1,2,4-Trichlorobenzene	<12	12
71-55-6	1,1,1-Trichloroethane	4.8	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
*79-01-6	Trichloroethene	260	2.5
75-69-4	Trichlorofluoromethane	<2.5	2.5
96-18-4	1,2,3-Trichloropropane	<2.5	2.5

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-02s**
 Lab Sample ID: **1308522-08**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 2.5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 14:00
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<2.5	2.5
108-67-8	1,3,5-Trimethylbenzene	<2.5	2.5
75-01-4	Vinyl Chloride	25	2.5
179601-23-1	Xylene, Meta + Para	<5.0	5.0
95-47-6	Xylene, Ortho	<2.5	2.5

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	103	85-118
<i>1,2-Dichloroethane-d4</i>	111	87-122
<i>Toluene-d8</i>	102	85-113
<i>4-Bromofluorobenzene</i>	97	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-07s	Sampled:	08/26/13 14:48
Lab Sample ID:	1308522-09	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.4	1.0	ug/L	1	RSK-175	09/05/13 10:31	JMF	1309245
Methane	2200	50	ug/L	100	RSK-175	09/05/13 10:38	JMF	1309245
Ethylene	4.4	1.0	ug/L	1	RSK-175	09/05/13 10:31	JMF	1309245

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-07s**
 Lab Sample ID: **1308522-09**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 14:48
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	7.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-07s**
 Lab Sample ID: **1308522-09**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 14:48
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	240	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
*91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	16	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
*79-01-6	Trichloroethene	450	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-07s**
 Lab Sample ID: **1308522-09**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309433

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 14:48
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/05/13 By: LEW
 Analyzed: 09/06/13 By: LEW
 Analytical Batch: 3109040

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0
75-01-4	Vinyl Chloride	17	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0

Surrogates:

Dibromofluoromethane
1,2-Dichloroethane-d4
Toluene-d8
4-Bromofluorobenzene

% Recovery

101
 111
 103
 97

Control Limits

85-118
 87-122
 85-113
 82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08s	Sampled:	08/26/13 15:45
Lab Sample ID:	1308522-10	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	09/05/13 10:43	JMF	1309245
Methane	780	10	ug/L	20	RSK-175	09/05/13 10:49	JMF	1309245
Ethylene	1.5	1.0	ug/L	1	RSK-175	09/05/13 10:43	JMF	1309245

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-08s**
 Lab Sample ID: **1308522-10**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 15:45
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	6.9	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-08s**
 Lab Sample ID: **1308522-10**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 15:45
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	65	1.0
156-60-5	trans-1,2-Dichloroethene	7.8	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-08s**
 Lab Sample ID: **1308522-10**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 15:45
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	2.5	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	98	85-118
<i>1,2-Dichloroethane-d4</i>	101	87-122
<i>Toluene-d8</i>	98	85-113
<i>4-Bromofluorobenzene</i>	97	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-08d**
 Lab Sample ID: **1308522-11**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 16:25
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-08d**
 Lab Sample ID: **1308522-11**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 16:25
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-08d**
 Lab Sample ID: **1308522-11**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/26/13 16:25
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	46	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-10s**
 Lab Sample ID: **1308522-12**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 07:02
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	57	1.0
156-60-5	trans-1,2-Dichloroethene	7.5	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-10s**
 Lab Sample ID: **1308522-12**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 07:02
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-10s**
 Lab Sample ID: **1308522-12**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 07:02
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	99	85-118
	<i>1,2-Dichloroethane-d4</i>	101	87-122
	<i>Toluene-d8</i>	98	85-113
	<i>4-Bromofluorobenzene</i>	96	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-09s	Sampled:	08/27/13 07:30
Lab Sample ID:	1308522-13	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.8	1.0	ug/L	1	RSK-175	09/05/13 10:53	JMF	1309245
Methane	7800	100	ug/L	200	RSK-175	09/05/13 11:01	JMF	1309245
Ethylene	<1.0	1.0	ug/L	1	RSK-175	09/05/13 10:53	JMF	1309245

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-09s**
 Lab Sample ID: **1308522-13**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 07:30
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-09s**
 Lab Sample ID: **1308522-13**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 07:30
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	3.2	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	32	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-09s**
 Lab Sample ID: **1308522-13**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 07:30
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

Surrogates:

Dibromofluoromethane
1,2-Dichloroethane-d4
Toluene-d8
4-Bromofluorobenzene

% Recovery

98
99
98
98

Control Limits

85-118
87-122
85-113
82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-16s**
 Lab Sample ID: **1308522-14**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 08:54
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	7.9	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	1.9	1.0
156-59-2	cis-1,2-Dichloroethene	28	1.0
156-60-5	trans-1,2-Dichloroethene	2.5	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-16s**
 Lab Sample ID: **1308522-14**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 08:54
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	5.2	1.0
79-01-6	Trichloroethene	21	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-16s**
 Lab Sample ID: **1308522-14**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 08:54
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1308522
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-06s	Sampled:	08/27/13 09:26
Lab Sample ID:	1308522-15	Sampled By:	J. Jasso
Matrix:	Water	Received:	08/28/13 17:10

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	6.9	1.0	ug/L	1	RSK-175	09/05/13 11:05	JMF	1309245
Methane	12000	200	ug/L	400	RSK-175	09/05/13 11:24	JMF	1309245
Ethylene	39	1.0	ug/L	1	RSK-175	09/05/13 11:05	JMF	1309245

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-06s**
 Lab Sample ID: **1308522-15**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 09:26
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-06s**
 Lab Sample ID: **1308522-15**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 09:26
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	8.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	450	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	<5.0	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-06s**
 Lab Sample ID: **1308522-15**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 09:26
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0

Surrogates:

Dibromofluoromethane
1,2-Dichloroethane-d4
Toluene-d8
4-Bromofluorobenzene

% Recovery

99
 100
 101
 97

Control Limits

85-118
 87-122
 85-113
 82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-05s**
 Lab Sample ID: **1308522-16**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 10:08
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-05s**
 Lab Sample ID: **1308522-16**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 10:08
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	300	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	43	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	760	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-05s**
 Lab Sample ID: **1308522-16**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 5
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 10:08
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	100	85-118
	<i>1,2-Dichloroethane-d4</i>	98	87-122
	<i>Toluene-d8</i>	99	85-113
	<i>4-Bromofluorobenzene</i>	97	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-15s**
 Lab Sample ID: **1308522-17**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 11:09
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	100	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-15s**
 Lab Sample ID: **1308522-17**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 11:09
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	280	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	1800	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-15s**
 Lab Sample ID: **1308522-17**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 11:09
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<20	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	101	85-118
	<i>1,2-Dichloroethane-d4</i>	101	87-122
	<i>Toluene-d8</i>	99	85-113
	<i>4-Bromofluorobenzene</i>	96	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-15d**
 Lab Sample ID: **1308522-18**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 11:52
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1.7	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-15d**
 Lab Sample ID: **1308522-18**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 11:52
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	4.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	21	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-15d**
 Lab Sample ID: **1308522-18**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 1
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 11:52
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	100	85-118
	<i>1,2-Dichloroethane-d4</i>	101	87-122
	<i>Toluene-d8</i>	99	85-113
	<i>4-Bromofluorobenzene</i>	95	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-14s**
 Lab Sample ID: **1308522-19**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 12:31
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	29	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-14s**
 Lab Sample ID: **1308522-19**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 12:31
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	1100	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	3100	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-14s**
 Lab Sample ID: **1308522-19**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 12:31
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	31	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-13s**
 Lab Sample ID: **1308522-20**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 13:07
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	<20	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-13s**
 Lab Sample ID: **1308522-20**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 13:07
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	1100	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	2800	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-13s**
 Lab Sample ID: **1308522-20**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 20
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 13:07
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<20	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	103	85-118
	<i>1,2-Dichloroethane-d4</i>	104	87-122
	<i>Toluene-d8</i>	102	85-113
	<i>4-Bromofluorobenzene</i>	96	82-110

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-12s**
 Lab Sample ID: **1308522-21**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 10
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 13:49
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	<10	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	<10	10
156-60-5	trans-1,2-Dichloroethene	<10	10

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-12s**
 Lab Sample ID: **1308522-21**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 10
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 13:49
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	13	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	24	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1200	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

Continued on next page

ANALYTICAL REPORT

Client: **TRC Companies. - Ann Arbor Office**
 Project: TPC - PRB Performance Monitoring
 Client Sample ID: **PRB-12s**
 Lab Sample ID: **1308522-21**
 Matrix: Water
 Unit: ug/L
 Dilution Factor: 10
 QC Batch: 1309434

Work Order: **1308522**
 Description: Laboratory Services
 Sampled: 08/27/13 13:49
 Sampled By: J. Jasso
 Received: 08/28/13 17:10
 Prepared: 09/07/13 By: LEW
 Analyzed: 09/08/13 By: LEW
 Analytical Batch: 3109042

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	102	85-118
	<i>1,2-Dichloroethane-d4</i>	100	87-122
	<i>Toluene-d8</i>	100	85-113
	<i>4-Bromofluorobenzene</i>	97	82-110

QUALITY CONTROL REPORT

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309245 Method-Specific Extraction/RSK-175

Method Blank

Unit: ug/L

Analyzed: 09/05/2013 By: JMF
 Analytical Batch: 3I05047

Ethane			<1.0			--	1.0	
Methane			<0.50			--	0.50	
Ethylene			<1.0			--	1.0	

Laboratory Control Sample

Unit: ug/L

Analyzed: 09/05/2013 By: JMF
 Analytical Batch: 3I05047

Ethane		62.1	44.7	72	67-122	--	1.0	
Methane		33.0	27.1	82	70-116	--	0.50	
Ethylene		57.8	44.1	76	67-121	--	1.0	

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309433 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

 Analyzed: 09/06/2013 By: LEW
 Analytical Batch: 3I09040

Unit: ug/L

Acetone			<20			--		20
Acrylonitrile			<2.0					2.0
Benzene			<1.0					1.0
Bromobenzene			<1.0			--		1.0
Bromochloromethane			<1.0					1.0
Bromodichloromethane			<1.0					1.0
Bromoform			<1.0					1.0
Bromomethane			<5.0					5.0
n-Butylbenzene			<1.0					1.0
sec-Butylbenzene			<1.0					1.0
tert-Butylbenzene			<1.0					1.0
Carbon Disulfide			<1.0			--		1.0
Carbon Tetrachloride			<1.0					1.0
Chlorobenzene			<1.0					1.0
Chloroethane			<5.0					5.0
Chloroform			<1.0					1.0
Chloromethane			<5.0					5.0
1,2-Dibromo-3-chloropropane			<5.0					5.0
Dibromochloromethane			<1.0					1.0
1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0			--		1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0					1.0
Ethyl Ether			<5.0					5.0

Continued on next page

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309433 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

 Analyzed: 09/06/2013 By: LEW
 Analytical Batch: 3I09040

Unit: ug/L

2-Hexanone	<5.0	5.0
Iodomethane	<1.0	1.0
Isopropylbenzene	<1.0	1.0
4-Isopropyltoluene	<5.0	5.0
Methyl tert-Butyl Ether	<5.0	5.0
Methylene Chloride	<5.0	5.0
2-Butanone (MEK)	<5.0	5.0
2-Methylnaphthalene	<5.0	5.0
4-Methyl-2-pentanone (MIBK)	<5.0	-- 5.0
Naphthalene	<5.0	-- 5.0
n-Propylbenzene	<1.0	1.0
Styrene	<1.0	1.0
1,1,1,2-Tetrachloroethane	<1.0	1.0
1,1,2,2-Tetrachloroethane	<1.0	1.0
Tetrachloroethene	<1.0	1.0
Tetrahydrofuran	<5.0	5.0
Toluene	<1.0	-- 1.0
1,2,3-Trichlorobenzene	<5.0	5.0
1,2,4-Trichlorobenzene	<5.0	5.0
1,1,1-Trichloroethane	<1.0	1.0
1,1,2-Trichloroethane	<1.0	1.0
Trichloroethene	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0
1,2,3-Trichloropropane	<1.0	1.0
1,2,4-Trimethylbenzene	<1.0	1.0
1,3,5-Trimethylbenzene	<1.0	1.0
Vinyl Chloride	<1.0	1.0
Xylene, Meta + Para	<2.0	2.0
Xylene, Ortho	<1.0	1.0

Surrogates:

<i>Dibromofluoromethane</i>	101	85-118
<i>1,2-Dichloroethane-d4</i>	104	87-122
<i>Toluene-d8</i>	100	85-113

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309433 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 09/06/2013 By: LEW
Analytical Batch: 3I09040

Surrogates (Continued):

4-Bromofluorobenzene 97 82-110

Laboratory Control Sample

Unit: ug/L

Analyzed: 09/06/2013 By: LEW
Analytical Batch: 3I09040

Benzene	40.0	40.4	101	84-119	--	1.0
Chlorobenzene	40.0	40.5	101	84-118	--	1.0
1,1-Dichloroethene	40.0	40.9	102	77-123	--	1.0
Toluene	40.0	41.1	103	85-118	--	1.0
Trichloroethene	40.0	48.0	120	82-119	--	1.0

Surrogates:

Dibromofluoromethane 99 85-118
1,2-Dichloroethane-d4 104 87-122
Toluene-d8 100 85-113
4-Bromofluorobenzene 100 82-110

QC Batch: 1309434 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Unit: ug/L

Analyzed: 09/07/2013 By: LEW
Analytical Batch: 3I09042

Acetone	<20				--	20
Acrylonitrile	<2.0					2.0
Benzene	<1.0					1.0
Bromobenzene	<1.0				--	1.0
Bromochloromethane	<1.0					1.0
Bromodichloromethane	<1.0					1.0
Bromoform	<1.0					1.0
Bromomethane	<5.0					5.0
n-Butylbenzene	<1.0				--	1.0
sec-Butylbenzene	<1.0				--	1.0
tert-Butylbenzene	<1.0					1.0
Carbon Disulfide	<1.0				--	1.0
Carbon Tetrachloride	<1.0					1.0
Chlorobenzene	<1.0				--	1.0

Continued on next page

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309434 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

 Analyzed: 09/07/2013 By: LEW
 Analytical Batch: 3I09042

Unit: ug/L

Chloroethane			<5.0					5.0
Chloroform			<1.0			--		1.0
Chloromethane			<5.0					5.0
1,2-Dibromo-3-chloropropane			<5.0					5.0
Dibromochloromethane			<1.0					1.0
1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0			--		1.0
1,3-Dichlorobenzene			<1.0			--		1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0			--		1.0
Ethylbenzene			<1.0			--		1.0
Ethyl Ether			<5.0					5.0
2-Hexanone			<5.0					5.0
Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0			--		5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0					5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			<5.0			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0			--		5.0
Naphthalene			<5.0			--		5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309434 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 09/07/2013 By: LEW
 Analytical Batch: 3I09042

Unit: ug/L

Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0			--		1.0
1,2,3-Trichlorobenzene			<5.0			--		5.0
1,2,4-Trichlorobenzene			<5.0			--		5.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0			--		1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>				100	85-118			
<i>1,2-Dichloroethane-d4</i>				98	87-122			
<i>Toluene-d8</i>				100	85-113			
<i>4-Bromofluorobenzene</i>				97	82-110			

Laboratory Control Sample

Analyzed: 09/07/2013 By: LEW
 Analytical Batch: 3I09042

Unit: ug/L

Benzene	40.0	40.8		102	84-119	--		1.0
Chlorobenzene	40.0	40.7		102	84-118	--		1.0
1,1-Dichloroethene	40.0	38.9		97	77-123	--		1.0
Toluene	40.0	40.1		100	85-118	--		1.0
Trichloroethene	40.0	41.0		102	82-119	--		1.0

Surrogates:

<i>Dibromofluoromethane</i>				99	85-118			
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Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1309434 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued)

Analyzed: 09/07/2013 By: LEW
 Analytical Batch: 3I09042

Unit: ug/L

Surrogates (Continued):

<i>1,2-Dichloroethane-d4</i>				99	87-122		
<i>Toluene-d8</i>				100	85-113		
<i>4-Bromofluorobenzene</i>				99	82-110		

Matrix Spike 1308522-17 PRB-15s

Analyzed: 09/08/2013 By: LEW
 Analytical Batch: 3I09042

Unit: ug/L

Benzene	<20	800	814	102	80-129	--	20
Chlorobenzene	<20	800	808	101	80-121	--	20
1,1-Dichloroethene	<20	800	818	102	74-134	--	20
Toluene	<20	800	804	100	79-129	--	20
Trichloroethene	1790	800	2620	103	75-127	--	20

Surrogates:

<i>Dibromofluoromethane</i>				100	85-118		
<i>1,2-Dichloroethane-d4</i>				99	87-122		
<i>Toluene-d8</i>				99	85-113		
<i>4-Bromofluorobenzene</i>				101	82-110		

Matrix Spike Duplicate 1308522-17 PRB-15s

Analyzed: 09/08/2013 By: LEW
 Analytical Batch: 3I09042

Unit: ug/L

Benzene	<20	800	791	99	80-129	3	9	20
Chlorobenzene	<20	800	782	98	80-121	3	8	20
1,1-Dichloroethene	<20	800	775	97	74-134	5	11	20
Toluene	<20	800	780	97	79-129	3	9	20
Trichloroethene	1790	800	2550	94	75-127	3	10	20

Surrogates:

<i>Dibromofluoromethane</i>				99	85-118		
<i>1,2-Dichloroethane-d4</i>				96	87-122		
<i>Toluene-d8</i>				98	85-113		
<i>4-Bromofluorobenzene</i>				99	82-110		

STATEMENT OF DATA QUALIFICATIONS
Volatile Organic Compounds by EPA Method 8260B

Qualification: The LCS recovery exceeded the upper control limit. Positive results for this analyte in all samples in the associated QC batch are considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8260B

Sample/Analyte:	1308522-01	PRB-11s	Trichloroethene
	1308522-02	TB-01	Trichloroethene
	1308522-03	PRB-03s	Trichloroethene
	1308522-04	Dup-01	Trichloroethene
	1308522-06	PRB-04d	Trichloroethene
	1308522-07	PRB-01s	Trichloroethene
	1308522-08	PRB-02s	Trichloroethene
	1308522-09	PRB-07s	Trichloroethene

Qualification: The corresponding CCV for this analytical batch had a recovery exceeding the upper control limit of the method. A positive result for this analyte in any associated samples are considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8260B

Sample/Analyte:	1308522-01	PRB-11s	2-Methylnaphthalene
	1308522-02	TB-01	2-Methylnaphthalene
	1308522-03	PRB-03s	2-Methylnaphthalene
	1308522-04	Dup-01	2-Methylnaphthalene
	1308522-06	PRB-04d	2-Methylnaphthalene
	1308522-07	PRB-01s	2-Methylnaphthalene
	1308522-08	PRB-02s	2-Methylnaphthalene
	1308522-09	PRB-07s	2-Methylnaphthalene

For Lab Use Only

Cart #173-B (METHANE)

YOA Rack/Tray #50, 187, 112-B

Receipt Log No. 38-22

Project Chemist JLR

Work Order No. 1308522

Client Name TRC

Address 1514 Eisenhower Place

City, State, Zip Ann Arbor MI 48106

Phone/Fax 734-971-2080 734-971-9003

Project Name TRC RRB

Client Project No./P.O. No. 180299.0001.0000

Invoice to Client

Contact/Report to Stacy Mett

Container Type (corresponds to Container Packing List)

D	D	D	D							

PRESERVATIVES

A NONE pH=7

B HNO₃ pH=2

C H₂SO₄ pH=2

D 1+1 HCl pH=2

E NaOH pH=12

F ZnAc/NaOH pH=9

G MeOH

H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	total	Sample Comments
02		01	PRB A3	3185	8/28/13	1500	+ Cu +	2	2	
01		02	TRC Blank #01 TB-01				DI +	1	1	
02		03	PRB B3				+ Cu +	2	2	
02		04	Dup # 01				+ Cu +	2	2	
04		05	PRB-04s				+ Cu +	4	4	
02		06	PRB-04D				+ Cu +	2	2	
04		07	PRB-01s				+ Cu +	4	4	
		08	PRB-02s				+ Cu +	4	4	
		09	PRB-07s				+ Cu +	4	4	
		10	PRB-08s				+ Cu +	4	4	

Sampled By (print) JAVIER JASSO

Sampler's Signature

Company TRC

How Shipped? Hand Carried

Tracking No.

1. Requisitioned By

Date 8-28-13

Time 1330

2. Received By

Date 8-28-13

Time 1710

3. Requisitioned By

Date 8-28-13

Time 1710

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

For Lab Use Only

Client: 173-B (MEYKAW) / 100-50, 187, 112-B-Tra

Client Name: Tra

Address: 1546 Eisenhower Place
Ann Arbor MI 48106
Phone/Fax: 7349717080 / 7349719205

Project Name: Tra PRB

Client Project No./P.O. No.: 186039.0001.000

Invoice to: Client Other (comments)

Contact/Report to: Stacy Mott

Project Name: Tra PRB

Client Project No./P.O. No.: 186039.0001.000

Invoice to: Client Other (comments)

Contact/Report to: Stacy Mott

Container Type (corresponds to Container Picking List): VOC, methanol, ethene

PRESERVATIVES:
A NONE pH-7
B HNO₃ pH<2
C H₂SO₄ pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc₂/NaOH pH<9
G MeOH
H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Sample Comments
03		11	PRB-08D	3/05-4/06/13	16:35		TR	2	
03		12	PRB-10S	4/01/13	07:02		TR	2	
04		13	PRB-09S	4/01/13	07:32		TR	4	
02		14	PRB-110,	4/07/13	08:54		TR	2	
04		15	PRB-06S	4/07/13	09:20		TR	4	
02		16	PRB-05,	4/07/13	10:08		TR	2	
03		17	PRB-15S	4/01/13	11:04		TR	2	
03		18	PRB 15S msdmsd	4/01/13	11:09		TR	5	
02		19	PRB 15D	4/07/13	11:52		TR	2	
02		20	PRB 14,	4/07/13	12:31		TR	2	

Sampled By (print): SAURUS JASS

Sampler's Signature: [Signature]

Company: Tra

How Shipped? Hand Carried

Tracking No.

1. Requisitioned By: [Signature] Date: 4/10/13 Time: 15:00

2. Requisitioned By: [Signature] Date: 4/28/13 Time: 17:10

3. Requisitioned By: [Signature] Date: 8/28/13 Time: 17:10

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

For Lab Use Only

Client: 173-B (York Ave)

VOA Rack/Tray: 50, 187, 112-B

Receipt Log No.: 3826

Project Chemical: JTR

Work Order No.: 1308522

Client Name: TRC

Address: 1546 Eishower Place
Ann Arbor MI 48106

City, State Zip: Ann Arbor MI 48106

Phone/Fax: 734971 2060 734971 8000

Project Name: T.P.C.

Client Project No./P.O. No.: 180229.0001000

Invoice to: Client Other (Comments)

Contact/Report to: Stacy Metz

Container Type (corresponds to Container Packing List)	Number of Containers Submitted	Sample Comments
VOC	2	
	2	
	2	

Schedule	Master Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Sample Comments
02		20	PRB 13,	3185-6b1/3	1307	6:00	F	2	
1		21	PRB 12,	6b1/3	1349	8:00	F	2	

Sampled By (print): JAW & JASS

Sampler's Signature: *JAW*

Company: TRC

How Shipped? Hand Carried

Tracking No.:

1. Requisitioned By: *Stacy Metz* Date: 8-28-13 Time: 13:00

2. Received By: *Stacy Metz* Date: 8-28-13 Time: 17:10

3. Received Field By: *Stacy Metz* Date: 8-28-13 Time: 17:10

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

SAMPLE RECEIVING / LOG-IN CHECKLIST



Client: <u>TRC</u>	Work Order #: <u>1308522</u>
Receipt Record Page/Line #: <u>38-26</u>	New / Add To: _____
	Project Chemist: <u>JLR</u> Sample #: _____

Recorded by (initials/date): <u>JN 8-28-13</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other: _____	Qty Received: <u>1</u>	<input checked="" type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Thermometer Used <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> Other (# _____)	<input type="checkbox"/> See Additional Cooler Information Form
--	---	------------------------	--	---

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time	
<u>TM3185</u>	<u>8:18</u>							
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		
Coolant Location: <u>Dispersed / Top / Middle / Bottom</u>		Coolant Location: _____		Coolant Location: _____		Coolant Location: _____		
Coolant/Temperature Taken Via: <input checked="" type="checkbox"/> Loose ice / Avg 2-3 containers <input type="checkbox"/> Bagged ice / Avg 2-3 containers <input type="checkbox"/> Blue ice / Avg 2-3 containers <input type="checkbox"/> None / Avg 2-3 containers		Coolant/Temperature Taken Via: <input type="checkbox"/> Loose ice / Avg 2-3 containers <input type="checkbox"/> Bagged ice / Avg 2-3 containers <input type="checkbox"/> Blue ice / Avg 2-3 containers <input type="checkbox"/> None / Avg 2-3 containers		Coolant/Temperature Taken Via: <input type="checkbox"/> Loose ice / Avg 2-3 containers <input type="checkbox"/> Bagged ice / Avg 2-3 containers <input type="checkbox"/> Blue ice / Avg 2-3 containers <input type="checkbox"/> None / Avg 2-3 containers		Coolant/Temperature Taken Via: <input type="checkbox"/> Loose ice / Avg 2-3 containers <input type="checkbox"/> Bagged ice / Avg 2-3 containers <input type="checkbox"/> Blue ice / Avg 2-3 containers <input type="checkbox"/> None / Avg 2-3 containers		
Alternate Temperature Taken Via: <input checked="" type="checkbox"/> Temperature Blank (TB) <input type="checkbox"/> 1 Container		Alternate Temperature Taken Via: <input type="checkbox"/> Temperature Blank (TB) <input type="checkbox"/> 1 Container		Alternate Temperature Taken Via: <input type="checkbox"/> Temperature Blank (TB) <input type="checkbox"/> 1 Container		Alternate Temperature Taken Via: <input type="checkbox"/> Temperature Blank (TB) <input type="checkbox"/> 1 Container		
Recorded °C	Correction Factor °C	Actual °C	Recorded °C	Correction Factor °C	Actual °C	Recorded °C	Correction Factor °C	Actual °C
Temp Blank: <u>0</u>		<u>3.2</u>	Temp Blank: _____		_____	Temp Blank: _____		_____
TB location: Representative / Not Representative			TB location: Representative / Not Representative			TB location: Representative / Not Representative		
1 <u>3.9</u>	<u>0</u>	<u>3.9</u>	1 _____		_____	1 _____		_____
2 <u>3.7</u>	<u>0</u>	<u>3.7</u>	2 _____		_____	2 _____		_____
3 <u>3.5</u>	<u>0</u>	<u>3.5</u>	3 _____		_____	3 _____		_____
Average °C: <u>3.7</u>			Average °C: _____			Average °C: _____		
<input checked="" type="checkbox"/> Cooler ID on COC?			<input type="checkbox"/> Cooler ID on COC?			<input type="checkbox"/> Cooler ID on COC?		
<input checked="" type="checkbox"/> VOC Trip Blank received?			<input type="checkbox"/> VOC Trip Blank received?			<input type="checkbox"/> VOC Trip Blank received?		

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Chain of Custody record(s)? If No, Initiated By: _____ <input checked="" type="checkbox"/> Received for Lab Signed/Date/Time? <input type="checkbox"/> Shipping document? <input type="checkbox"/> Other: _____ COC Information <input checked="" type="checkbox"/> TriMatrix COC <input type="checkbox"/> Other: _____ COC ID Numbers: <u>145500, 145501, 145502</u>	Check Sample Preservation N/A Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Average sample temperature ≤6° C? <input checked="" type="checkbox"/> <input type="checkbox"/> Was thermal preservation required? If "No", Project Chemist Approval Initials: _____ If "Yes" Completed Non Con Cooler - Cont Inventory Form? <input type="checkbox"/> Completed Sample Preservation Verification Form? <input checked="" type="checkbox"/> <input type="checkbox"/> Samples chemically preserved correctly? If "No", added orange tag? <input checked="" type="checkbox"/> Received pre-preserved VOC soils? <input type="checkbox"/> MeOH <input type="checkbox"/> Na ₂ SO ₄			
Check COC for Accuracy Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Analysis Requested? <input checked="" type="checkbox"/> <input type="checkbox"/> Sample ID matches COC? <input checked="" type="checkbox"/> <input type="checkbox"/> Sample Date and Time matches COC? <input checked="" type="checkbox"/> <input type="checkbox"/> Container type completed on COC? <input checked="" type="checkbox"/> <input type="checkbox"/> All container types indicated are received?	Check for Short Hold-Time Prep/Analyses <input type="checkbox"/> Bacteriological <input type="checkbox"/> Air Bags <input type="checkbox"/> EnCores / Methanol Pre-Preserved <input type="checkbox"/> Formaldehyde/Aldehyde <input type="checkbox"/> Green-tagged containers <input type="checkbox"/> Yellow/White-tagged 1L ambers (SV Prep-Lab)			
Sample Condition Summary N/A Yes No <input type="checkbox"/> <input checked="" type="checkbox"/> Broken containers/lids? <input type="checkbox"/> <input checked="" type="checkbox"/> Missing or incomplete labels? <input type="checkbox"/> <input checked="" type="checkbox"/> Illegible information on labels? <input type="checkbox"/> <input checked="" type="checkbox"/> Low volume received? <input type="checkbox"/> <input checked="" type="checkbox"/> Inappropriate or non-TriMatrix containers received? <input type="checkbox"/> <input type="checkbox"/> VOC vials / TOX containers have headspace? <input type="checkbox"/> <input type="checkbox"/> Extra sample locations / containers not listed on COC?	Notes <input checked="" type="checkbox"/> Trip Blank received <input type="checkbox"/> Trip Blank not listed on COC <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Cooler Received (Date/Time): <u>JN 8-28-13</u></td> <td style="width: 33%;">Paperwork Delivered (Date/Time): <u>8-28-13</u></td> <td style="width: 33%;">≤1 Hour Goal Met? <u>Yes / No</u></td> </tr> </table>	Cooler Received (Date/Time): <u>JN 8-28-13</u>	Paperwork Delivered (Date/Time): <u>8-28-13</u>	≤1 Hour Goal Met? <u>Yes / No</u>
Cooler Received (Date/Time): <u>JN 8-28-13</u>	Paperwork Delivered (Date/Time): <u>8-28-13</u>	≤1 Hour Goal Met? <u>Yes / No</u>		

December 03, 2013

TRC Companies. - Ann Arbor Office
Attn: Ms. Stacy Metz
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TPC - PRB Performance Monitoring

Dear Ms. Stacy Metz,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1311335	11/15/2013	Laboratory Services

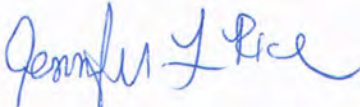
This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/12-056-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003059); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#83658); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-13-3); Virginia DCLS (#460153/1622); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Jennifer L. Rice
Project Chemist

PROJECT TECHNICAL NARRATIVE(s)**Dissolved Gases in Water by RSK-175 Headspace Analysis**

Narrative: The MS or MSD recovery, but not both, was outside the control limit. The RPD is within the control limit.

Analysis: RSK-175

Sample/Analyte: 1311335-14 PRB-08s

Methane

STATEMENT OF DATA QUALIFICATIONS
Volatile Organic Compounds by EPA Method 8260B

Qualification: The corresponding CCV for this analytical batch had a recovery exceeding the upper control limit of the method. A positive result for this analyte in any associated samples are considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8260B

Sample/Analyte:	1311335-01	PRB-12s	Carbon Disulfide
	1311335-03	PRB-13s	Carbon Disulfide
	1311335-04	PRB-14s	Carbon Disulfide
	1311335-05	PRB-15s	Carbon Disulfide
	1311335-06	PRB-15d	Carbon Disulfide
	1311335-07	PRB-05s	Carbon Disulfide
	1311335-08	PRB-06s	Carbon Disulfide
	1311335-09	PRB-09s	Carbon Disulfide
	1311335-10	TB-02	Carbon Disulfide
	1311335-11	PRB-16s	Carbon Disulfide
	1311335-12	PRB-10s	Carbon Disulfide
	1311335-13	TB-01	Carbon Disulfide
	1311335-14	PRB-08s	Carbon Disulfide
	1311335-15	PRB-08d	Carbon Disulfide
	1311335-16	PRB-02s	Carbon Disulfide
	1311335-17	PRB-07s	Carbon Disulfide
	1311335-18	PRB-01s	Carbon Disulfide
	1311335-22	PRB-03s	1,2-Dichloroethane
	1311335-22	PRB-03s	Dichlorodifluoromethane

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-12s	Sampled:	11/13/13 14:07
Lab Sample ID:	1311335-01	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	10	Analyzed:	11/22/13 23:56 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
*75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	<10	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	<10	10
156-60-5	trans-1,2-Dichloroethene	<10	10

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-12s	Sampled:	11/13/13 14:07
Lab Sample ID:	1311335-01	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	10	Analyzed:	11/22/13 23:56 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	16	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	25	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1200	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-12s	Sampled:	11/13/13 14:07
Lab Sample ID:	1311335-01	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	10	Analyzed:	11/22/13 23:56 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	99	85-118
	<i>1,2-Dichloroethane-d4</i>	107	87-122
	<i>Toluene-d8</i>	100	85-113
	<i>4-Bromofluorobenzene</i>	95	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	Dup-01	Sampled:	11/13/13 0:00	
Lab Sample ID:	1311335-02	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/25/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/25/13 22:57	By: COR
QC Batch:	1312808	Analytical Batch:	3K27045	

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	17	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	20	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	24	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	Dup-01	Sampled:	11/13/13 0:00	
Lab Sample ID:	1311335-02	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/25/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/25/13 22:57	By: COR
QC Batch:	1312808	Analytical Batch:	3K27045	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	3.1	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	Dup-01	Sampled:	11/13/13 0:00
Lab Sample ID:	1311335-02	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/25/13 15:00 By: LEW
Dilution Factor:	1	Analyzed:	11/25/13 22:57 By: COR
QC Batch:	1312808	Analytical Batch:	3K27045

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	16	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>96</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-13s	Sampled:	11/13/13 15:00	
Lab Sample ID:	1311335-03	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 0:49	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
*75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	20	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-13s	Sampled:	11/13/13 15:00	
Lab Sample ID:	1311335-03	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 0:49	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	1200	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	2500	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-13s	Sampled:	11/13/13 15:00	
Lab Sample ID:	1311335-03	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 0:49	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<20	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>111</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>95</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-14s	Sampled:	11/13/13 15:55
Lab Sample ID:	1311335-04	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 1:15 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
*75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	25	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-14s	Sampled:	11/13/13 15:55	
Lab Sample ID:	1311335-04	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 1:15	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	1100	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	2600	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-14s	Sampled:	11/13/13 15:55	
Lab Sample ID:	1311335-04	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 1:15	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	25	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>110</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>96</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15s	Sampled:	11/14/13 12:57
Lab Sample ID:	1311335-05	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 1:42 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
*75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	46	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-15s	Sampled:	11/14/13 12:57	
Lab Sample ID:	1311335-05	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 1:42	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	720	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	1500	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-15s	Sampled:	11/14/13 12:57	
Lab Sample ID:	1311335-05	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	20	Analyzed:	11/23/13 1:42	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<20	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>106</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15d	Sampled:	11/14/13 13:30
Lab Sample ID:	1311335-06	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 2:09 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	1.9	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15d	Sampled:	11/14/13 13:30
Lab Sample ID:	1311335-06	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 2:09 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	6.6	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	26	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15d	Sampled:	11/14/13 13:30
Lab Sample ID:	1311335-06	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 2:09 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-05s	Sampled:	11/14/13 14:35	
Lab Sample ID:	1311335-07	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 2:35	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
*75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-05s	Sampled:	11/14/13 14:35	
Lab Sample ID:	1311335-07	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 2:35	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	320	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	52	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	720	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-05s	Sampled:	11/14/13 14:35	
Lab Sample ID:	1311335-07	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 2:35	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>112</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>94</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-06s	Sampled:	11/14/13 15:05
Lab Sample ID:	1311335-08	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	33	1.0	ug/L	1	RSK-175	11/25/13 12:59	JMF	1312707
Methane	14000	200	ug/L	400	RSK-175	11/25/13 13:13	JMF	1312707
Ethylene	32	1.0	ug/L	1	RSK-175	11/25/13 12:59	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-06s	Sampled:	11/14/13 15:05
Lab Sample ID:	1311335-08	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 3:02 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
*75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-06s	Sampled:	11/14/13 15:05	
Lab Sample ID:	1311335-08	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 3:02	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	370	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	7.4	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-06s	Sampled:	11/14/13 15:05
Lab Sample ID:	1311335-08	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 3:02 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	103	85-118
<i>1,2-Dichloroethane-d4</i>	109	87-122
<i>Toluene-d8</i>	100	85-113
<i>4-Bromofluorobenzene</i>	99	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-09s	Sampled:	11/14/13 15:30
Lab Sample ID:	1311335-09	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	5.6	1.0	ug/L	1	RSK-175	11/25/13 13:17	JMF	1312707
Methane	8800	100	ug/L	200	RSK-175	11/25/13 13:22	JMF	1312707
Ethylene	<1.0	1.0	ug/L	1	RSK-175	11/25/13 13:17	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-09s	Sampled:	11/14/13 15:30	
Lab Sample ID:	1311335-09	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 3:29	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-09s	Sampled:	11/14/13 15:30	
Lab Sample ID:	1311335-09	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 3:29	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	2.4	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	8.8	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-09s	Sampled:	11/14/13 15:30
Lab Sample ID:	1311335-09	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 3:29 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	102	85-118
	<i>1,2-Dichloroethane-d4</i>	111	87-122
	<i>Toluene-d8</i>	100	85-113
	<i>4-Bromofluorobenzene</i>	97	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-02	Sampled:	11/14/13 0:00
Lab Sample ID:	1311335-10	Sampled By:	TML
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 3:55 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	TB-02	Sampled:	11/14/13 0:00	
Lab Sample ID:	1311335-10	Sampled By:	TML	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 3:55	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-02	Sampled:	11/14/13 0:00
Lab Sample ID:	1311335-10	Sampled By:	TML
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 3:55 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-16s	Sampled:	11/14/13 16:07
Lab Sample ID:	1311335-11	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 4:22 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	12	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	2.9	1.0
156-59-2	cis-1,2-Dichloroethene	28	1.0
156-60-5	trans-1,2-Dichloroethene	2.4	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-16s	Sampled:	11/14/13 16:07	
Lab Sample ID:	1311335-11	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 4:22	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	5.0	1.0
79-01-6	Trichloroethene	21	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-16s	Sampled:	11/14/13 16:07
Lab Sample ID:	1311335-11	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 4:22 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>111</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-10s	Sampled:	11/14/13 16:37
Lab Sample ID:	1311335-12	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 4:49 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	40	1.0
156-60-5	trans-1,2-Dichloroethene	5.3	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-10s	Sampled:	11/14/13 16:37	
Lab Sample ID:	1311335-12	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 4:49	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-10s	Sampled:	11/14/13 16:37
Lab Sample ID:	1311335-12	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 4:49 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>97</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	11/15/13 0:00
Lab Sample ID:	1311335-13	Sampled By:	TML
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 5:15 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	TB-01	Sampled:	11/15/13 0:00	
Lab Sample ID:	1311335-13	Sampled By:	TML	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 5:15	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	11/15/13 0:00
Lab Sample ID:	1311335-13	Sampled By:	TML
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 5:15 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>111</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>96</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08s	Sampled:	11/15/13 6:24
Lab Sample ID:	1311335-14	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	11/25/13 13:26	JMF	1312707
Methane	94	1.0	ug/L	2	RSK-175	11/25/13 13:34	JMF	1312707
Ethylene	<1.0	1.0	ug/L	1	RSK-175	11/25/13 13:26	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08s	Sampled:	11/15/13 6:24
Lab Sample ID:	1311335-14	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 5:42 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	5.3	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-08s	Sampled:	11/15/13 6:24	
Lab Sample ID:	1311335-14	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 5:42	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	62	1.0
156-60-5	trans-1,2-Dichloroethene	7.8	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08s	Sampled:	11/15/13 6:24
Lab Sample ID:	1311335-14	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 5:42 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	1.3	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	102	85-118
	<i>1,2-Dichloroethane-d4</i>	104	87-122
	<i>Toluene-d8</i>	96	85-113
	<i>4-Bromofluorobenzene</i>	98	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08d	Sampled:	11/15/13 7:19
Lab Sample ID:	1311335-15	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 6:09 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
*75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08d	Sampled:	11/15/13 7:19
Lab Sample ID:	1311335-15	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 6:09 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08d	Sampled:	11/15/13 7:19
Lab Sample ID:	1311335-15	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	1	Analyzed:	11/23/13 6:09 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	44	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>106</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>96</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	11/15/13 8:04
Lab Sample ID:	1311335-16	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	3.6	1.0	ug/L	1	RSK-175	11/25/13 13:38	JMF	1312707
Methane	7500	100	ug/L	200	RSK-175	11/25/13 13:44	JMF	1312707
Ethylene	7.0	1.0	ug/L	1	RSK-175	11/25/13 13:38	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	11/15/13 8:04
Lab Sample ID:	1311335-16	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	2.5	Analyzed:	11/23/13 6:35 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<50	50
107-13-1	Acrylonitrile	<5.0	5.0
71-43-2	Benzene	<2.5	2.5
108-86-1	Bromobenzene	<2.5	2.5
74-97-5	Bromochloromethane	<2.5	2.5
75-27-4	Bromodichloromethane	<2.5	2.5
75-25-2	Bromoform	<2.5	2.5
74-83-9	Bromomethane	<12	12
104-51-8	n-Butylbenzene	<2.5	2.5
135-98-8	sec-Butylbenzene	<2.5	2.5
98-06-6	tert-Butylbenzene	<2.5	2.5
*75-15-0	Carbon Disulfide	<2.5	2.5
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
75-00-3	Chloroethane	<12	12
67-66-3	Chloroform	<2.5	2.5
74-87-3	Chloromethane	<12	12
96-12-8	1,2-Dibromo-3-chloropropane	<12	12
124-48-1	Dibromochloromethane	<2.5	2.5
106-93-4	1,2-Dibromoethane	<2.5	2.5
74-95-3	Dibromomethane	<2.5	2.5
110-57-6	trans-1,4-Dichloro-2-butene	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
541-73-1	1,3-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-71-8	Dichlorodifluoromethane	<12	12
75-34-3	1,1-Dichloroethane	5.1	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	<2.5	2.5

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-02s	Sampled:	11/15/13 8:04	
Lab Sample ID:	1311335-16	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	2.5	Analyzed:	11/23/13 6:35	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	200	2.5
156-60-5	trans-1,2-Dichloroethene	4.3	2.5
78-87-5	1,2-Dichloropropane	<2.5	2.5
10061-01-5	cis-1,3-Dichloropropene	<2.5	2.5
10061-02-6	trans-1,3-Dichloropropene	<2.5	2.5
100-41-4	Ethylbenzene	<2.5	2.5
60-29-7	Ethyl Ether	<12	12
591-78-6	2-Hexanone	<12	12
74-88-4	Iodomethane	<2.5	2.5
98-82-8	Isopropylbenzene	<2.5	2.5
99-87-6	4-Isopropyltoluene	<12	12
1634-04-4	Methyl tert-Butyl Ether	<12	12
75-09-2	Methylene Chloride	<12	12
78-93-3	2-Butanone (MEK)	<12	12
91-57-6	2-Methylnaphthalene	<12	12
108-10-1	4-Methyl-2-pentanone (MIBK)	<12	12
91-20-3	Naphthalene	<12	12
103-65-1	n-Propylbenzene	<2.5	2.5
100-42-5	Styrene	<2.5	2.5
630-20-6	1,1,1,2-Tetrachloroethane	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<2.5	2.5
109-99-9	Tetrahydrofuran	<12	12
108-88-3	Toluene	<2.5	2.5
87-61-6	1,2,3-Trichlorobenzene	<12	12
120-82-1	1,2,4-Trichlorobenzene	<12	12
71-55-6	1,1,1-Trichloroethane	3.8	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	190	2.5
75-69-4	Trichlorofluoromethane	<2.5	2.5
96-18-4	1,2,3-Trichloropropane	<2.5	2.5

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	11/15/13 8:04
Lab Sample ID:	1311335-16	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	2.5	Analyzed:	11/23/13 6:35 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<2.5	2.5
108-67-8	1,3,5-Trimethylbenzene	<2.5	2.5
75-01-4	Vinyl Chloride	24	2.5
179601-23-1	Xylene, Meta + Para	<5.0	5.0
95-47-6	Xylene, Ortho	<2.5	2.5

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	103	85-118
<i>1,2-Dichloroethane-d4</i>	107	87-122
<i>Toluene-d8</i>	98	85-113
<i>4-Bromofluorobenzene</i>	99	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-07s	Sampled:	11/15/13 8:58
Lab Sample ID:	1311335-17	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.1	1.0	ug/L	1	RSK-175	11/25/13 13:47	JMF	1312707
Methane	2100	50	ug/L	100	RSK-175	11/25/13 13:55	JMF	1312707
Ethylene	4.9	1.0	ug/L	1	RSK-175	11/25/13 13:47	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-07s	Sampled:	11/15/13 8:58
Lab Sample ID:	1311335-17	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 7:02 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
*75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	6.6	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-07s	Sampled:	11/15/13 8:58	
Lab Sample ID:	1311335-17	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/22/13 14:00	By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 7:02	By: COR
QC Batch:	1312711	Analytical Batch:	3K25018	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	74	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	37	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	550	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-07s	Sampled:	11/15/13 8:58
Lab Sample ID:	1311335-17	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	5	Analyzed:	11/23/13 7:02 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0
75-01-4	Vinyl Chloride	8.4	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	103	85-118
<i>1,2-Dichloroethane-d4</i>	110	87-122
<i>Toluene-d8</i>	97	85-113
<i>4-Bromofluorobenzene</i>	97	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	11/15/13 9:32
Lab Sample ID:	1311335-18	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	11/25/13 13:59	JMF	1312707
Methane	480	10	ug/L	20	RSK-175	11/25/13 14:03	JMF	1312707
Ethylene	<1.0	1.0	ug/L	1	RSK-175	11/25/13 13:59	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	11/15/13 9:32
Lab Sample ID:	1311335-18	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	10	Analyzed:	11/23/13 7:29 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
*75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	43	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	20	10

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	11/15/13 9:32
Lab Sample ID:	1311335-18	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	10	Analyzed:	11/23/13 7:29 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	43	10
156-60-5	trans-1,2-Dichloroethene	<10	10
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	1200	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1100	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	11/15/13 9:32
Lab Sample ID:	1311335-18	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/22/13 14:00 By: LEW
Dilution Factor:	10	Analyzed:	11/23/13 7:29 By: COR
QC Batch:	1312711	Analytical Batch:	3K25018

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	107	85-118
<i>1,2-Dichloroethane-d4</i>	111	87-122
<i>Toluene-d8</i>	99	85-113
<i>4-Bromofluorobenzene</i>	94	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	Dup-01	Sampled:	11/15/13 0:00
Lab Sample ID:	1311335-19	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	6.6	1.0	ug/L	1	RSK-175	11/25/13 14:31	JMF	1312707
Methane	4400	100	ug/L	200	RSK-175	11/25/13 14:36	JMF	1312707
Ethylene	77	1.0	ug/L	1	RSK-175	11/25/13 14:31	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	11/15/13 10:17
Lab Sample ID:	1311335-20	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	7.0	1.0	ug/L	1	RSK-175	11/25/13 14:40	JMF	1312707
Methane	4500	100	ug/L	200	RSK-175	11/25/13 14:51	JMF	1312707
Ethylene	87	1.0	ug/L	1	RSK-175	11/25/13 14:40	JMF	1312707

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	11/15/13 10:17
Lab Sample ID:	1311335-20	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/27/13 15:00 By: LEW
Dilution Factor:	1	Analyzed:	11/27/13 21:27 By: COR
QC Batch:	1312917	Analytical Batch:	3L02020

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	22	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	22	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-04s	Sampled:	11/15/13 10:17	
Lab Sample ID:	1311335-20	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/27/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/27/13 21:27	By: COR
QC Batch:	1312917	Analytical Batch:	3L02020	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	29	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	1.1	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	3.6	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	11/15/13 10:17
Lab Sample ID:	1311335-20	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/27/13 15:00 By: LEW
Dilution Factor:	1	Analyzed:	11/27/13 21:27 By: COR
QC Batch:	1312917	Analytical Batch:	3L02020

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	15	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	100	85-118
<i>1,2-Dichloroethane-d4</i>	102	87-122
<i>Toluene-d8</i>	97	85-113
<i>4-Bromofluorobenzene</i>	96	82-110

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-04d	Sampled:	11/15/13 10:43	
Lab Sample ID:	1311335-21	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/25/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/25/13 23:23	By: COR
QC Batch:	1312808	Analytical Batch:	3K27045	

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-04d	Sampled:	11/15/13 10:43	
Lab Sample ID:	1311335-21	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/25/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/25/13 23:23	By: COR
QC Batch:	1312808	Analytical Batch:	3K27045	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04d	Sampled:	11/15/13 10:43
Lab Sample ID:	1311335-21	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/25/13 15:00 By: LEW
Dilution Factor:	1	Analyzed:	11/25/13 23:23 By: COR
QC Batch:	1312808	Analytical Batch:	3K27045

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	11	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>109</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-03s	Sampled:	11/15/13 11:11
Lab Sample ID:	1311335-22	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/26/13 13:00 By: LEW
Dilution Factor:	2.5	Analyzed:	11/26/13 16:30 By: COR
QC Batch:	1312927	Analytical Batch:	3L02025

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<50	50
107-13-1	Acrylonitrile	<5.0	5.0
71-43-2	Benzene	<2.5	2.5
108-86-1	Bromobenzene	<2.5	2.5
74-97-5	Bromochloromethane	<2.5	2.5
75-27-4	Bromodichloromethane	<2.5	2.5
75-25-2	Bromoform	<2.5	2.5
74-83-9	Bromomethane	<12	12
104-51-8	n-Butylbenzene	<2.5	2.5
135-98-8	sec-Butylbenzene	<2.5	2.5
98-06-6	tert-Butylbenzene	<2.5	2.5
75-15-0	Carbon Disulfide	<2.5	2.5
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
75-00-3	Chloroethane	52	12
67-66-3	Chloroform	<2.5	2.5
74-87-3	Chloromethane	<12	12
96-12-8	1,2-Dibromo-3-chloropropane	<12	12
124-48-1	Dibromochloromethane	<2.5	2.5
106-93-4	1,2-Dibromoethane	<2.5	2.5
74-95-3	Dibromomethane	<2.5	2.5
110-57-6	trans-1,4-Dichloro-2-butene	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
541-73-1	1,3-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
*75-71-8	Dichlorodifluoromethane	<12	12
75-34-3	1,1-Dichloroethane	36	2.5
*107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	<2.5	2.5
156-59-2	cis-1,2-Dichloroethene	<2.5	2.5
156-60-5	trans-1,2-Dichloroethene	<2.5	2.5

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-03s	Sampled:	11/15/13 11:11	
Lab Sample ID:	1311335-22	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/26/13 13:00	By: LEW
Dilution Factor:	2.5	Analyzed:	11/26/13 16:30	By: COR
QC Batch:	1312927	Analytical Batch:	3L02025	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.5	2.5
10061-01-5	cis-1,3-Dichloropropene	<2.5	2.5
10061-02-6	trans-1,3-Dichloropropene	<2.5	2.5
100-41-4	Ethylbenzene	170	2.5
60-29-7	Ethyl Ether	<12	12
591-78-6	2-Hexanone	<12	12
74-88-4	Iodomethane	<2.5	2.5
98-82-8	Isopropylbenzene	<2.5	2.5
99-87-6	4-Isopropyltoluene	<12	12
1634-04-4	Methyl tert-Butyl Ether	<12	12
75-09-2	Methylene Chloride	<12	12
78-93-3	2-Butanone (MEK)	<12	12
91-57-6	2-Methylnaphthalene	<12	12
108-10-1	4-Methyl-2-pentanone (MIBK)	<12	12
91-20-3	Naphthalene	<12	12
103-65-1	n-Propylbenzene	<2.5	2.5
100-42-5	Styrene	<2.5	2.5
630-20-6	1,1,1,2-Tetrachloroethane	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<2.5	2.5
109-99-9	Tetrahydrofuran	<12	12
108-88-3	Toluene	<2.5	2.5
87-61-6	1,2,3-Trichlorobenzene	<12	12
120-82-1	1,2,4-Trichlorobenzene	<12	12
71-55-6	1,1,1-Trichloroethane	4.0	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	71	2.5
75-69-4	Trichlorofluoromethane	<2.5	2.5
96-18-4	1,2,3-Trichloropropane	<2.5	2.5
95-63-6	1,2,4-Trimethylbenzene	<2.5	2.5
108-67-8	1,3,5-Trimethylbenzene	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-03s	Sampled:	11/15/13 11:11
Lab Sample ID:	1311335-22	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/26/13 13:00 By: LEW
Dilution Factor:	2.5	Analyzed:	11/26/13 16:30 By: COR
QC Batch:	1312927	Analytical Batch:	3L02025

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<2.5	2.5
179601-23-1	Xylene, Meta + Para	360	5.0
95-47-6	Xylene, Ortho	280	2.5
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>115</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-11s	Sampled:	11/15/13 11:56
Lab Sample ID:	1311335-23	Sampled By:	Javier Jasso
Matrix:	Water	Received:	11/15/13 17:00
Unit:	ug/L	Prepared:	11/25/13 15:00 By: LEW
Dilution Factor:	1	Analyzed:	11/26/13 0:16 By: COR
QC Batch:	1312808	Analytical Batch:	3K27045

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-11s	Sampled:	11/15/13 11:56	
Lab Sample ID:	1311335-23	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/25/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/26/13 0:16	By: COR
QC Batch:	1312808	Analytical Batch:	3K27045	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	1.5	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1311335	
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services	
Client Sample ID:	PRB-11s	Sampled:	11/15/13 11:56	
Lab Sample ID:	1311335-23	Sampled By:	Javier Jasso	
Matrix:	Water	Received:	11/15/13 17:00	
Unit:	ug/L	Prepared:	11/25/13 15:00	By: LEW
Dilution Factor:	1	Analyzed:	11/26/13 0:16	By: COR
QC Batch:	1312808	Analytical Batch:	3K27045	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>109</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>82-110</i>

QUALITY CONTROL REPORT

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312707 Method-Specific Extraction/RSK-175

Method Blank

Unit: ug/L

Analyzed: 11/25/2013 By: JMF
 Analytical Batch: 3K25054

Ethane			<1.0				1.0	
Methane			<0.50				0.50	
Ethylene			<1.0			--	1.0	

Laboratory Control Sample

Unit: ug/L

Analyzed: 11/25/2013 By: JMF
 Analytical Batch: 3K25054

Ethane		58.7	51.4	88	67-122	--	1.0	
Methane		35.8	30.3	85	70-116	--	0.50	
Ethylene		58.1	49.2	85	67-121	--	1.0	

Matrix Spike 1311335-14 PRB-08s

Unit: ug/L

Analyzed: 11/25/2013 By: JMF
 Analytical Batch: 3K25054

Ethane	0.440	58.7	44.6	75	51-108	--	1.0	
Methane	93.6	35.8	108	39	42-112	--	2.0	
Ethylene	0.840	58.1	48.7	82	52-107	--	1.0	

Matrix Spike Duplicate 1311335-14 PRB-08s

Unit: ug/L

Analyzed: 11/25/2013 By: JMF
 Analytical Batch: 3K25054

Ethane	0.440	58.7	47.2	80	51-108	6	20	1.0
Methane	93.6	35.8	117	66	42-112	8	20	2.0
Ethylene	0.840	58.1	48.4	82	52-107	0.6	20	1.0

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312711 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Analyzed: 11/22/2013 By: COR
 Analytical Batch: 3K25018

Unit: ug/L

Acetone			<20			--		20
Acrylonitrile			<2.0					2.0
Benzene			<1.0					1.0
Bromobenzene			<1.0					1.0
Bromochloromethane			<1.0					1.0
Bromodichloromethane			<1.0					1.0
Bromoform			<1.0					1.0
Bromomethane			<5.0					5.0
n-Butylbenzene			<1.0			--		1.0
sec-Butylbenzene			<1.0			--		1.0
tert-Butylbenzene			<1.0					1.0
Carbon Disulfide			<1.0			--		1.0
Carbon Tetrachloride			<1.0					1.0
Chlorobenzene			<1.0					1.0
Chloroethane			<5.0					5.0
Chloroform			<1.0					1.0
Chloromethane			<5.0					5.0
1,2-Dibromo-3-chloropropane			<5.0					5.0
Dibromochloromethane			<1.0					1.0
1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0					1.0
1,4-Dichlorobenzene			<1.0					1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0					1.0
Ethyl Ether			<5.0					5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312711 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 11/22/2013 By: COR
 Analytical Batch: 3K25018

Unit: ug/L

2-Hexanone			<5.0					5.0
Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0			--		5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0					5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			<5.0			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0					5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0
Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0					1.0
1,2,3-Trichlorobenzene			<5.0					5.0
1,2,4-Trichlorobenzene			<5.0					5.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0			--		1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>109</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>

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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312711 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 11/22/2013 By: COR
Analytical Batch: 3K25018

Surrogates (Continued):

4-Bromofluorobenzene 99 82-110

Laboratory Control Sample

Unit: ug/L

Analyzed: 11/22/2013 By: COR
Analytical Batch: 3K25018

Benzene		40.0	39.6	99	84-119	--	1.0
Chlorobenzene		40.0	40.3	101	84-118	--	1.0
1,1-Dichloroethene		40.0	36.8	92	77-123	--	1.0
Toluene		40.0	40.0	100	85-118	--	1.0
Trichloroethene		40.0	38.0	95	82-119	--	1.0

Surrogates:

Dibromofluoromethane 104 85-118
1,2-Dichloroethane-d4 108 87-122
Toluene-d8 103 85-113
4-Bromofluorobenzene 105 82-110

Matrix Spike 1311335-05 PRB-15s

Unit: ug/L

Analyzed: 11/23/2013 By: COR
Analytical Batch: 3K25018

Benzene	<20	800	814	102	80-129	--	20
Chlorobenzene	<20	800	824	103	80-121	--	20
1,1-Dichloroethene	14.0	800	778	95	74-134	--	20
Toluene	<20	800	811	101	79-129	--	20
Trichloroethene	1470	800	2280	101	75-127	--	20

Surrogates:

Dibromofluoromethane 102 85-118
1,2-Dichloroethane-d4 106 87-122
Toluene-d8 99 85-113
4-Bromofluorobenzene 102 82-110

Matrix Spike Duplicate 1311335-05 PRB-15s

Unit: ug/L

Analyzed: 11/23/2013 By: COR
Analytical Batch: 3K25018

Benzene	<20	800	776	97	80-129	5	9	20
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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312711 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1311335-05 PRB-15s

Analyzed: 11/23/2013 By: COR

Unit: ug/L

Analytical Batch: 3K25018

Chlorobenzene	<20	800	798	100	80-121	3	8	20
1,1-Dichloroethene	14.0	800	725	89	74-134	7	11	20
Toluene	<20	800	798	100	79-129	2	9	20
Trichloroethene	1470	800	2190	91	75-127	4	10	20

Surrogates:

<i>Dibromofluoromethane</i>				104	85-118			
<i>1,2-Dichloroethane-d4</i>				102	87-122			
<i>Toluene-d8</i>				100	85-113			
<i>4-Bromofluorobenzene</i>				104	82-110			

QC Batch: 1312808 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Analyzed: 11/25/2013 By: COR

Unit: ug/L

Analytical Batch: 3K27045

Acetone	<20					--		20
Acrylonitrile	<2.0							2.0
Benzene	<1.0							1.0
Bromobenzene	<1.0							1.0
Bromochloromethane	<1.0							1.0
Bromodichloromethane	<1.0							1.0
Bromoform	<1.0							1.0
Bromomethane	<5.0							5.0
n-Butylbenzene	<1.0					--		1.0
sec-Butylbenzene	<1.0					--		1.0
tert-Butylbenzene	<1.0							1.0
Carbon Disulfide	<1.0					--		1.0
Carbon Tetrachloride	<1.0							1.0
Chlorobenzene	<1.0							1.0
Chloroethane	<5.0							5.0
Chloroform	<1.0							1.0
Chloromethane	<5.0					--		5.0
1,2-Dibromo-3-chloropropane	<5.0							5.0
Dibromochloromethane	<1.0							1.0
1,2-Dibromoethane	<1.0							1.0

Continued on next page

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312808 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

 Analyzed: 11/25/2013 By: COR
 Analytical Batch: 3K27045

Unit: ug/L

Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0					1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0			--		1.0
Ethyl Ether			<5.0					5.0
2-Hexanone			<5.0					5.0
Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0			--		5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0			--		5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			<5.0			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0			--		5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0
Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0			--		1.0
1,2,3-Trichlorobenzene			<5.0					5.0
1,2,4-Trichlorobenzene			<5.0			--		5.0
1,1,1-Trichloroethane			<1.0					1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312808 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 11/25/2013 By: COR
Analytical Batch: 3K27045

Unit: ug/L

1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0			--		1.0
1,3,5-Trimethylbenzene			<1.0			--		1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>				99	85-118			
<i>1,2-Dichloroethane-d4</i>				104	87-122			
<i>Toluene-d8</i>				96	85-113			
<i>4-Bromofluorobenzene</i>				101	82-110			

Laboratory Control Sample

Analyzed: 11/25/2013 By: COR
Analytical Batch: 3K27045

Unit: ug/L

Benzene	40.0	38.8		97	84-119	--		1.0
Chlorobenzene	40.0	40.1		100	84-118	--		1.0
1,1-Dichloroethene	40.0	36.7		92	77-123	--		1.0
Toluene	40.0	40.1		100	85-118	--		1.0
Trichloroethene	40.0	38.5		96	82-119	--		1.0

Surrogates:

<i>Dibromofluoromethane</i>				99	85-118			
<i>1,2-Dichloroethane-d4</i>				103	87-122			
<i>Toluene-d8</i>				100	85-113			
<i>4-Bromofluorobenzene</i>				103	82-110			

QC Batch: 1312917 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Analyzed: 11/27/2013 By: LEW
Analytical Batch: 3L02020

Unit: ug/L

Acetone			<20			--		20
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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312917 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 11/27/2013 By: LEW
 Analytical Batch: 3L02020

Unit: ug/L

Acrylonitrile			<2.0					2.0
Benzene			<1.0			--		1.0
Bromobenzene			<1.0			--		1.0
Bromochloromethane			<1.0					1.0
Bromodichloromethane			<1.0					1.0
Bromoform			<1.0					1.0
Bromomethane			<5.0			--		5.0
n-Butylbenzene			<1.0			--		1.0
sec-Butylbenzene			<1.0					1.0
tert-Butylbenzene			<1.0			--		1.0
Carbon Disulfide			<1.0			--		1.0
Carbon Tetrachloride			<1.0					1.0
Chlorobenzene			<1.0			--		1.0
Chloroethane			<5.0					5.0
Chloroform			<1.0					1.0
Chloromethane			<5.0			--		5.0
1,2-Dibromo-3-chloropropane			<5.0					5.0
Dibromochloromethane			<1.0					1.0
1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0			--		1.0
1,3-Dichlorobenzene			<1.0			--		1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0			--		1.0
Ethyl Ether			<5.0					5.0
2-Hexanone			<5.0					5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312917 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 11/27/2013 By: LEW
 Analytical Batch: 3L02020

Unit: ug/L

Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0			--		1.0
4-Isopropyltoluene			<5.0			--		5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0			--		5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			<5.0			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0			--		5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0
Tetrachloroethene			<1.0			--		1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0			--		1.0
1,2,3-Trichlorobenzene			<5.0			--		5.0
1,2,4-Trichlorobenzene			<5.0			--		5.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0					1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>104</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>97</i>	<i>82-110</i>

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312917 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample	Analyzed:	11/27/2013	By: LEW
Unit: ug/L	Analytical Batch:	3L02020	

Benzene	40.0	40.3	101	84-119	--	1.0
Chlorobenzene	40.0	41.4	103	84-118	--	1.0
1,1-Dichloroethene	40.0	40.2	101	77-123	--	1.0
Toluene	40.0	40.5	101	85-118	--	1.0
Trichloroethene	40.0	39.3	98	82-119	--	1.0

Surrogates:

<i>Dibromofluoromethane</i>	98	85-118
<i>1,2-Dichloroethane-d4</i>	99	87-122
<i>Toluene-d8</i>	100	85-113
<i>4-Bromofluorobenzene</i>	102	82-110

QC Batch: 1312927 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank	Analyzed:	11/26/2013	By: COR
Unit: ug/L	Analytical Batch:	3L02025	

Acetone	<20	20	
Acrylonitrile	<2.0	2.0	
Benzene	<1.0	1.0	
Bromobenzene	<1.0	1.0	
Bromochloromethane	<1.0	1.0	
Bromodichloromethane	<1.0	1.0	
Bromoform	<1.0	1.0	
Bromomethane	<5.0	5.0	
n-Butylbenzene	<1.0	--	1.0
sec-Butylbenzene	<1.0		1.0
tert-Butylbenzene	<1.0		1.0
Carbon Disulfide	<1.0	--	1.0
Carbon Tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<5.0		5.0
Chloroform	<1.0		1.0
Chloromethane	<5.0		5.0
1,2-Dibromo-3-chloropropane	<5.0		5.0
Dibromochloromethane	<1.0		1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312927 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 11/26/2013 By: COR
 Analytical Batch: 3L02025

Unit: ug/L

1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0					1.0
1,4-Dichlorobenzene			<1.0					1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0					1.0
Ethyl Ether			<5.0					5.0
2-Hexanone			<5.0					5.0
Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0					5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0					5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			<5.0					5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0					5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0
Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0			--		1.0
1,2,3-Trichlorobenzene			<5.0					5.0
1,2,4-Trichlorobenzene			<5.0					5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1312927 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 11/26/2013 By: COR
 Analytical Batch: 3L02025

Unit: ug/L

1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0					1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>				103	85-118			
<i>1,2-Dichloroethane-d4</i>				119	87-122			
<i>Toluene-d8</i>				99	85-113			
<i>4-Bromofluorobenzene</i>				99	82-110			

Laboratory Control Sample

Analyzed: 11/26/2013 By: COR
 Analytical Batch: 3L02025

Unit: ug/L

Benzene	40.0	42.6		107	84-119	--		1.0
Chlorobenzene	40.0	41.2		103	84-118	--		1.0
1,1-Dichloroethene	40.0	38.3		96	77-123	--		1.0
Toluene	40.0	42.8		107	85-118	--		1.0
Trichloroethene	40.0	39.8		100	82-119	--		1.0

Surrogates:

<i>Dibromofluoromethane</i>				104	85-118			
<i>1,2-Dichloroethane-d4</i>				115	87-122			
<i>Toluene-d8</i>				101	85-113			
<i>4-Bromofluorobenzene</i>				105	82-110			

For Lab Use Only
Cart # 214-65
VQA Rack/Tray # 416-65
Receipt Log No. 1823
Project Chemist 1823
Work Order No. 1311335
Client Name TPC PRB
Address 1500 Eisenhower Place
City, State Zip Ann Arbor MI 48106
Phone/Fax 734971 2000 734971 9000
Email Stacy Maltz
Project Name TPC PRB
Client Project No. / P.O. No.
Invoice To Client Other (comments)
Contact/Report To Stacy Maltz

VOC Edge	0
methane	0
ethane	0
ethene	0

- Container Type (corresponds to Container Packing List) 1 ← 1 →
- PRESERVATIVES
A NONE pH<7
B HNO₃ pH<2
C H₂SO₄ pH<2
D 1+1 HCl pH<2
E NaOH pH>12
F ZnAc₂/NaOH pH>9
G MeOH
H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Total	Sample Comments
02	01	01	PRB 12a	3258	11/13/13	1407	+G	1	2	
	02	02	Duo #01		11/13/13	—	+G	1	2	
	03	03	PRB 13s	3258	11/13/13	1500	+G	1	2	
	04	04	PRB 14s		11/13/13	1557	+G	1	2	
	05	05	PRB 15s		11/14/13	1257	+G	1	2	
03<	05	05	PRB 15s inst+msd		11/14/13	1257	+G	1	3	
02	06	06	RRB 15D		11/14/13	1336	+G	1	2	
02	07	07	PRB 05s		2/27/14	1431	+G	1	2	
04	08	08	PRB 06s		11/14/13	1505	+G	1	5	
04	09	09	PRB 09a		11/14/13	1532	+G	1	5	

Sampled By (print) SAUER JASZ
Sample's Signature [Signature]
Company [Signature]
How Shipped? Hand Carrier
Tracking No.
1. Requested by [Signature] Date 11/14/13 Time 1930
2. Requisitioned by [Signature] Date 11/13/13 Time 1513
3. Received by [Signature] Date 11-15-13 Time 1700
4. Released by [Signature] Date 11-15-13 Time 1700

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No. **143672**

Analyses Requested

Pg. 2 of 2

PRESERVATIVES

- A NONE pH<7
- B HNO₃ pH<2
- C H₂SO₄ pH<2
- D 1+1 HCl pH<2
- E NaOH pH>12
- F ZnAc₂/MeOH pH>9
- G MeOH
- H Other (note below)

For Lab Use Only
Cart # 214-65
Vial Rack Tray # 416-28
Box # 18-23

Client Name: TRE
Project Name: TRC PRG
Client Project No. / P.O. No.:

Address: 1500 Eisenhower Blvd
City/State/Zip: Ann Arbor MI 48106
Phone/Fax: 7349717060 7345719000

Work Order No.: 1311335
Email:

Invoice To: Client
 Other (comments)

Contact/Report To: Steve McD

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix			Total	Sample Comments
							C	R	G		
01		10	TRC PRG 102	3358			UF	+	1		
02		11	PRB 10s	2927	11/14/13	1607	PRB	+	2		
		12	PRB 10s		11/14/13	1637	PRB	+	2		

Sampled By (gmt): SHAR SASE
Sample's Signature: [Signature]
Company: TRC

How Shipped? Sample
Tracking No.

1. Requisitioned By: Shane Hill Date: 11/14/13 Time: 1800
2. Received By: Ray Johnson Date: 11/15/13 Time: 0905
3. Requisitioned By: Ray Johnson Date: 11/15/13 Time: 1700

Comments:

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD



5660 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No. **143676**

Analyses Requested

Pg. 1 of 2

For Lab Use Only
Cart # 214-45
VOC Pack/Tray BOX #416-65
Receipt Log No. 18-23

Client Name
Address
City, State Zip
Phone/Fax
Email

Project Name
Client Project No. / P.O. No.
Invoice To
Contact/Report To

Container Type (corresponds to Container Packing List)	Number of Containers Submitted	Total
VOC 8260	1	1
methan	1	1
ethane	1	1
ethene	1	1

- ← PRESERVATIVES
- A NONE pH-7
- B HNO₃ pH-2
- C H₂SO₄ pH-2
- D 1+1 HCl pH-2
- E NaOH pH-12
- F ZnAc₂/NaOH pH-9
- G MeOH
- H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Total	Sample Comments
01		13	Trip Blows-01 M3216		11/15/13	0624	DF	1	1	
04		14	PER 085		11/15/13	0624	DF	1	1	
02		15	PER 08D		11/15/13	0719	DF	1	1	
04		16	PER 025		11/15/13	0801	DF	1	1	
		17	PER 075		11/15/13	0856	DF	1	1	
		18	PER 015		11/15/13	0932	DF	1	1	
04		19	DUP #01		11/15/13		DF	1	1	
04		20	PER-045		11/15/13	1017	DF	1	1	
02		21	PER 04D		11/15/13	1043	DF	1	1	
02		22	PER 035		11/15/13	1111	DF	1	1	

Sampled By (print) Joier Jase
 Sampler's Signature [Signature]
 Company INC
 How Shipped? Carrier
 Tracking No.
 Requisitioned By [Signature] Date 11/15/13 Time 1300
 2. Requested By [Signature] Date 11-15-13 Time 1700
 3. Requested For Label By [Signature] Date 11-15-13 Time 1700

WHITE COPY - REPORT YELLOW COPY - LABORATORY PINK COPY - FIELD

pg. 4

For Lab Use Only

Cart # 511-61

WGA Reagent Tray

Receiving Log No. 18-23

Project Client

Work Order No. 1311335

Client Name TRC

Address 1540 Eisenhower Plaza

City, State, Zip Ann Arbor MI 48106

Phone/Fax 734 971 2080 734 971 9000

Project Name T.P.C

Client Project No. / P.O. No.

Invoice To

Contact/Report To Stacy Mch

Analyses Requested

Pg. 2 of 2

Container Type (corresponds to Container Packing List)	Number of Containers Submitted	Total	Sample Comments
VOC 80cc	0		

- RESERVATIVES
- A NONE pH<7
 - B HNO₃ pH<2
 - C H₂SO₄ pH<2
 - D 1+1 HCl pH<2
 - E NaOH pH>12
 - F ZnAc₂/NaOH pH>9
 - G MeOH
 - H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	C	R	M	A	B	Matrix	Number of Containers Submitted	Total	Sample Comments
		23	P2B 11s		3/24/15	1156						66	1	2	

Sampled By (print) JAAN SAAS

How Shipped? Tracking No. Hand Carrier

Company TRC

1 Retransported By Ray Johnson 11/5/13 Date 11/5/13 Time 1300

2 Requisitioned By Ray Johnson 11/5-13 Date 11/5-13 Time 1405

3 Prepared for Lab By D. J. Gordon 11/5-13 Date 11/5-13 Time 1700

WHITE COPY - REPORT

YELLOW COPY - LABORATORY

PINK COPY - FIELD

SAMPLE RECEIVING / LOG-IN CHECKLIST

	Client: <u>TRC</u>	Work Order #: <u>1311335</u>
	Receipt Record Page/Line #: <u>18-23</u>	New / Add To Project Chemist: <u>JLR</u>

Recorded by (Initials/date): <u>DN 11-15-13</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other	Qty Received: <u>3</u>	<input checked="" type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> Other (#)	<input type="checkbox"/> See Additional Cooler Information Form
--	--	---------------------------	--	---

Cooler #	Time	Cooler #	Time	Cooler #	Time
<u>1173216</u>	<u>1953</u>	<u>1173258</u>	<u>2004</u>	<u>1172967</u>	<u>2015</u>

Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact
Coolant Location: <u>Dispersed / Top / Middle / Bottom</u>		Coolant Location: <u>Dispersed / Top / Middle / Bottom</u>	
Coolant/Temperature Taken Via: <input checked="" type="checkbox"/> Loose Ice / Avg 2-3 containers <input type="checkbox"/> Bagged Ice / Avg 2-3 containers <input type="checkbox"/> Blue Ice / Avg 2-3 containers <input type="checkbox"/> None / Avg 2-3 containers		Coolant/Temperature Taken Via: <input checked="" type="checkbox"/> Loose Ice / Avg 2-3 containers <input type="checkbox"/> Bagged Ice / Avg 2-3 containers <input type="checkbox"/> Blue Ice / Avg 2-3 containers <input type="checkbox"/> None / Avg 2-3 containers	
Alternate Temperature Taken Via: <input checked="" type="checkbox"/> Temperature Blank (TB) <input type="checkbox"/> 1 Container		Alternate Temperature Taken Via: <input checked="" type="checkbox"/> Temperature Blank (TB) <input type="checkbox"/> 1 Container	

Recorded °C	Correction Factor °C	Actual °C	Recorded °C	Correction Factor °C	Actual °C
Temp Blank: <u>0</u>	<u>2.6</u>	<u>2.6</u>	Temp Blank: <u>0</u>	<u>2.3</u>	<u>2.3</u>
TB location: Representative / Not Representative		TB location: Representative / Not Representative		TB location: Representative / Not Representative	
1	<u>4.4</u>	<u>0</u>	<u>4.4</u>		
2	<u>3.4</u>	<u>0</u>	<u>3.4</u>		
3	<u>3.3</u>	<u>0</u>	<u>3.3</u>		
Average °C		Average °C		Average °C	
<u>3.7</u>		<u>3.8</u>		<u>3.3</u>	

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received Yes No <input checked="" type="checkbox"/> Chain of Custody record(s)? If No, Initiated By _____ <input checked="" type="checkbox"/> Received for Lab Signed/Date/Time? <input checked="" type="checkbox"/> Shipping document? <u>F</u> <input checked="" type="checkbox"/> Other	Check Sample Preservation N/A Yes No <input checked="" type="checkbox"/> Average sample temperature ≤ 6° C? <input checked="" type="checkbox"/> Was thermal preservation required? If "No", Project Chemist Approval Initials: _____ <input checked="" type="checkbox"/> If "Yes" Completed Non Con Cooler - Cont Inventory Form? <input checked="" type="checkbox"/> Completed Sample Preservation Verification Form? <input checked="" type="checkbox"/> Samples chemically preserved correctly? If "No", added orange tag? <input checked="" type="checkbox"/> Received pre-preserved VOC soils? <input type="checkbox"/> MeOH <input type="checkbox"/> Na ₂ SO ₄						
COC Information <input checked="" type="checkbox"/> TriMatrix COC <input type="checkbox"/> Other COC ID Numbers: <u>142118, 143672, 143674, 143673, 138985</u>	Check for Short Hold-Time Prep/Analyses <input type="checkbox"/> Bacteriological <input type="checkbox"/> Air Bags <input type="checkbox"/> EnCores / Methanol Pre-Preserved <input type="checkbox"/> Formaldehyde/Aldehyde <input type="checkbox"/> Green-tagged containers <input type="checkbox"/> Yellow/White-tagged 1L ambers (SV Prep-Lab)						
Check COC for Accuracy Yes No <input checked="" type="checkbox"/> Analysis Requested? <input checked="" type="checkbox"/> Sample ID matches COC? <input checked="" type="checkbox"/> Sample Date and Time matches COC? <input checked="" type="checkbox"/> Container type completed on COC? <input checked="" type="checkbox"/> All container types indicated are received?	Notes <input checked="" type="checkbox"/> Trip Blank received <input type="checkbox"/> Trip Blank not listed on COC <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr> <th style="width: 33%;">Cooler Received (Date/Time)</th> <th style="width: 33%;">Paperwork Delivered (Date/Time)</th> <th style="width: 33%;">≤1 Hour Goal Met?</th> </tr> <tr> <td><u>DN 11-15-13</u></td> <td><u>11-15-13</u></td> <td style="text-align: center;">Yes / No</td> </tr> </table>	Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?	<u>DN 11-15-13</u>	<u>11-15-13</u>	Yes / No
Cooler Received (Date/Time)	Paperwork Delivered (Date/Time)	≤1 Hour Goal Met?					
<u>DN 11-15-13</u>	<u>11-15-13</u>	Yes / No					
Sample Condition Summary N/A Yes No <input checked="" type="checkbox"/> Broken containers/lids? <input checked="" type="checkbox"/> Missing or incomplete labels? <input checked="" type="checkbox"/> Illegible information on labels? <input checked="" type="checkbox"/> Low volume received? <input checked="" type="checkbox"/> Inappropriate or non-TriMatrix containers received? <input checked="" type="checkbox"/> VOC vials / TOX containers have headspace? <input checked="" type="checkbox"/> Extra sample locations / containers not listed on COC?							

June 23, 2014

TRC Companies. - Ann Arbor Office
Attn: Ms. Stacy Metz
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TPC - PRB Performance Monitoring

Dear Ms. Stacy Metz,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1406001	05/30/2014	Laboratory Services
1406164	06/10/2014	Laboratory Services


This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACCLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#103068); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-14-4); Virginia DCLS (#460153/2592); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Jennifer L. Rice
Project Chemist

PROJECT TECHNICAL NARRATIVE(s)**Dissolved Gases in Water by RSK-175 Headspace Analysis**

Narrative: Due to sample volumes, batch matrix quality control (QC) was not performed for this analysis. A Method Blank and Laboratory Control Sample comprise the batch QC.

Analysis: RSK-175

Sample/Analyte: 1406001-03 PRB-04s
1406001-03 PRB-04s
1406001-03 PRB-04s
1406001-04 DUP-01
1406001-04 DUP-01
1406001-04 DUP-01
1406001-05 PRB-07s
1406001-05 PRB-07s
1406001-05 PRB-07s
1406001-06 PRB-08s
1406001-06 PRB-08s
1406001-06 PRB-08s
1406001-14 PRB-06s
1406001-14 PRB-06s
1406001-14 PRB-06s
1406001-16 PRB-09s
1406001-16 PRB-09s
1406001-16 PRB-09s
1406001-19 PRB-01s
1406001-19 PRB-01s
1406001-19 PRB-01s

Narrative: Matrix QC results are not available due to sample dilution.

Analysis: RSK-175

Sample/Analyte: 1406164-01 PRB-02s

Methane

STATEMENT OF DATA QUALIFICATIONS
Volatile Organic Compounds by EPA Method 8260B

Qualification: The corresponding CCV for this analytical batch had a recovery exceeding the upper control limit of the method. A positive result for this analyte in any associated samples are considered estimated. Non-detectable results are not qualified.

Analysis: USEPA-8260B

Sample/Analyte:	1406001-02	PRB-04d	Acetone
	1406001-04	DUP-01	Acetone
	1406001-05	PRB-07s	Acetone
	1406001-06	PRB-08s	Acetone
	1406001-07	PRB-08d	Acetone
	1406001-08	PRB-11s	Acetone
	1406001-09	PRB-15d	Acetone
	1406001-11	PRB-14s	Acetone
	1406001-12	PRB-13s	Acetone
	1406001-13	PRB-12s	Acetone

Qualification: The corresponding CCV for this analytical batch had a recovery below the lower control limit of the method. Positive results for this analyte in any associated samples are considered estimated; non-detectable results are considered approximate.

Analysis: USEPA-8260B

Sample/Analyte:	1406001-02	PRB-04d	trans-1,4-Dichloro-2-butene
	1406001-04	DUP-01	trans-1,4-Dichloro-2-butene
	1406001-05	PRB-07s	trans-1,4-Dichloro-2-butene
	1406001-06	PRB-08s	trans-1,4-Dichloro-2-butene
	1406001-07	PRB-08d	trans-1,4-Dichloro-2-butene
	1406001-08	PRB-11s	trans-1,4-Dichloro-2-butene
	1406001-09	PRB-15d	trans-1,4-Dichloro-2-butene
	1406001-11	PRB-14s	trans-1,4-Dichloro-2-butene
	1406001-12	PRB-13s	trans-1,4-Dichloro-2-butene
	1406001-13	PRB-12s	trans-1,4-Dichloro-2-butene

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-03s	Sampled: 5/28/14 11:46
Lab Sample ID: 1406001-01	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 2	Analyzed: 6/4/14 13:51 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<40	40
107-13-1	Acrylonitrile	<4.0	4.0
71-43-2	Benzene	<2.0	2.0
108-86-1	Bromobenzene	<2.0	2.0
74-97-5	Bromochloromethane	<2.0	2.0
75-27-4	Bromodichloromethane	<2.0	2.0
75-25-2	Bromoform	<2.0	2.0
74-83-9	Bromomethane	<10	10
104-51-8	n-Butylbenzene	<2.0	2.0
135-98-8	sec-Butylbenzene	<2.0	2.0
98-06-6	tert-Butylbenzene	<2.0	2.0
75-15-0	Carbon Disulfide	<2.0	2.0
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
75-00-3	Chloroethane	120	10
67-66-3	Chloroform	<2.0	2.0
74-87-3	Chloromethane	<10	10
96-12-8	1,2-Dibromo-3-chloropropane	<10	10
124-48-1	Dibromochloromethane	<2.0	2.0
106-93-4	1,2-Dibromoethane	<2.0	2.0
74-95-3	Dibromomethane	<2.0	2.0
110-57-6	trans-1,4-Dichloro-2-butene	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
541-73-1	1,3-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-71-8	Dichlorodifluoromethane	<10	10
75-34-3	1,1-Dichloroethane	41	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	<2.0	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-03s	Sampled:	5/28/14 11:46
Lab Sample ID:	1406001-01	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	2	Analyzed:	6/4/14 13:51 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.0	2.0
10061-01-5	cis-1,3-Dichloropropene	<2.0	2.0
10061-02-6	trans-1,3-Dichloropropene	<2.0	2.0
100-41-4	Ethylbenzene	110	2.0
60-29-7	Ethyl Ether	<10	10
591-78-6	2-Hexanone	<10	10
74-88-4	Iodomethane	<2.0	2.0
98-82-8	Isopropylbenzene	<2.0	2.0
99-87-6	4-Isopropyltoluene	<10	10
1634-04-4	Methyl tert-Butyl Ether	<10	10
75-09-2	Methylene Chloride	<10	10
78-93-3	2-Butanone (MEK)	<10	10
91-57-6	2-Methylnaphthalene	<10	10
108-10-1	4-Methyl-2-pentanone (MIBK)	<10	10
91-20-3	Naphthalene	<10	10
103-65-1	n-Propylbenzene	<2.0	2.0
100-42-5	Styrene	<2.0	2.0
630-20-6	1,1,1,2-Tetrachloroethane	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.0	2.0
127-18-4	Tetrachloroethene	<2.0	2.0
109-99-9	Tetrahydrofuran	<10	10
108-88-3	Toluene	<2.0	2.0
87-61-6	1,2,3-Trichlorobenzene	<10	10
120-82-1	1,2,4-Trichlorobenzene	<10	10
71-55-6	1,1,1-Trichloroethane	3.8	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	18	2.0
75-69-4	Trichlorofluoromethane	<2.0	2.0
96-18-4	1,2,3-Trichloropropane	<2.0	2.0
95-63-6	1,2,4-Trimethylbenzene	<2.0	2.0
108-67-8	1,3,5-Trimethylbenzene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-03s	Sampled:	5/28/14 11:46
Lab Sample ID:	1406001-01	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	2	Analyzed:	6/4/14 13:51 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<2.0	2.0
179601-23-1	Xylene, Meta + Para	200	4.0
95-47-6	Xylene, Ortho	160	2.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>102</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-04d	Sampled: 5/28/14 14:42
Lab Sample ID: 1406001-02	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 0:34 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
*110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04d	Sampled:	5/28/14 14:42
Lab Sample ID:	1406001-02	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 0:34 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04d	Sampled:	5/28/14 14:42
Lab Sample ID:	1406001-02	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 0:34 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	9.8	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>106</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	5/28/14 15:32
Lab Sample ID:	1406001-03	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	36	1.0	ug/L	1	RSK-175	06/09/14 11:17	JMF	1405518
Methane	4600	100	ug/L	200	RSK-175	06/09/14 11:24	JMF	1405518
Ethylene	59	1.0	ug/L	1	RSK-175	06/09/14 11:17	JMF	1405518

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-04s	Sampled: 5/28/14 15:32
Lab Sample ID: 1406001-03	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 14:18 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	15	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	21	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-04s	Sampled: 5/28/14 15:32
Lab Sample ID: 1406001-03	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 14:18 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	28	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	2.3	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-04s	Sampled:	5/28/14 15:32
Lab Sample ID:	1406001-03	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 14:18 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	1.5	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>105</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>110</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	DUP-01	Sampled:	5/28/14 0:00
Lab Sample ID:	1406001-04	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.5	1.0	ug/L	1	RSK-175	06/09/14 11:28	JMF	1405518
Methane	1900	25	ug/L	50	RSK-175	06/09/14 11:33	JMF	1405518
Ethylene	5.6	1.0	ug/L	1	RSK-175	06/09/14 11:28	JMF	1405518

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: DUP-01	Sampled: 5/28/14 0:00
Lab Sample ID: 1406001-04	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 5	Analyzed: 6/4/14 1:29 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
*110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: DUP-01	Sampled: 5/28/14 0:00
Lab Sample ID: 1406001-04	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 5	Analyzed: 6/4/14 1:29 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	54	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	31	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	620	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	DUP-01	Sampled:	5/28/14 0:00
Lab Sample ID:	1406001-04	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	5	Analyzed:	6/4/14 1:29 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0
75-01-4	Vinyl Chloride	5.9	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>106</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-07s	Sampled:	5/28/14 16:12
Lab Sample ID:	1406001-05	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.0	1.0	ug/L	1	RSK-175	06/09/14 11:38	JMF	1405518
Methane	1100	25	ug/L	50	RSK-175	06/09/14 11:44	JMF	1405518
Ethylene	3.6	1.0	ug/L	1	RSK-175	06/09/14 11:38	JMF	1405518

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-07s	Sampled: 5/28/14 16:12
Lab Sample ID: 1406001-05	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 5	Analyzed: 6/4/14 1:57 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
*110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-07s	Sampled: 5/28/14 16:12
Lab Sample ID: 1406001-05	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 5	Analyzed: 6/4/14 1:57 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	45	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	38	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	730	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-07s	Sampled:	5/28/14 16:12
Lab Sample ID:	1406001-05	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	5	Analyzed:	6/4/14 1:57 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0
75-01-4	Vinyl Chloride	6.4	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08s	Sampled:	5/28/14 16:58
Lab Sample ID:	1406001-06	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	06/09/14 11:49	JMF	1405518
Methane	100	2.0	ug/L	4	RSK-175	06/09/14 11:54	JMF	1405518
Ethylene	<1.0	1.0	ug/L	1	RSK-175	06/09/14 11:49	JMF	1405518

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-08s	Sampled: 5/28/14 16:58
Lab Sample ID: 1406001-06	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 2:24 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
*110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	4.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-08s	Sampled: 5/28/14 16:58
Lab Sample ID: 1406001-06	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 2:24 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	13	1.0
156-60-5	trans-1,2-Dichloroethene	1.7	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08s	Sampled:	5/28/14 16:58
Lab Sample ID:	1406001-06	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 2:24 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	1.3	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>106</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-08d	Sampled: 5/28/14 17:30
Lab Sample ID: 1406001-07	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 2:51 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
*110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08d	Sampled:	5/28/14 17:30
Lab Sample ID:	1406001-07	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 2:51 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-08d	Sampled:	5/28/14 17:30
Lab Sample ID:	1406001-07	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 2:51 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	49	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-11s	Sampled: 5/29/14 11:19
Lab Sample ID: 1406001-08	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 3:19 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
*110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-11s	Sampled: 5/29/14 11:19
Lab Sample ID: 1406001-08	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 3:19 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	1.4	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-11s	Sampled:	5/29/14 11:19
Lab Sample ID:	1406001-08	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 3:19 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-15d	Sampled: 5/29/14 12:03
Lab Sample ID: 1406001-09	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 3:46 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
*110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-15d	Sampled: 5/29/14 12:03
Lab Sample ID: 1406001-09	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 3:46 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	6.5	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15d	Sampled:	5/29/14 12:03
Lab Sample ID:	1406001-09	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 3:46 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-15s	Sampled: 5/29/14 13:01
Lab Sample ID: 1406001-10	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 10	Analyzed: 6/4/14 14:45 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	<10	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	41	10
156-60-5	trans-1,2-Dichloroethene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15s	Sampled:	5/29/14 13:01
Lab Sample ID:	1406001-10	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	10	Analyzed:	6/4/14 14:45 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	350	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1500	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-15s	Sampled:	5/29/14 13:01
Lab Sample ID:	1406001-10	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	10	Analyzed:	6/4/14 14:45 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-14s	Sampled: 5/29/14 13:37
Lab Sample ID: 1406001-11	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 20	Analyzed: 6/4/14 4:41 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
*110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	<20	20
156-60-5	trans-1,2-Dichloroethene	<20	20

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-14s	Sampled: 5/29/14 13:37
Lab Sample ID: 1406001-11	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 20	Analyzed: 6/4/14 4:41 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	1000	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	2800	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-14s	Sampled:	5/29/14 13:37
Lab Sample ID:	1406001-11	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	20	Analyzed:	6/4/14 4:41 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	42	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-13s	Sampled: 5/29/14 14:08
Lab Sample ID: 1406001-12	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 20	Analyzed: 6/4/14 5:08 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
*110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	<20	20
156-60-5	trans-1,2-Dichloroethene	<20	20

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*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-13s	Sampled:	5/29/14 14:08
Lab Sample ID:	1406001-12	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	20	Analyzed:	6/4/14 5:08 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	1200	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	2400	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-13s	Sampled:	5/29/14 14:08
Lab Sample ID:	1406001-12	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	20	Analyzed:	6/4/14 5:08 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<20	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>105</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-12s	Sampled: 5/29/14 14:46
Lab Sample ID: 1406001-13	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/3/14 20:00 By: BAG
Dilution Factor: 10	Analyzed: 6/4/14 5:36 By: BAG
QC Batch: 1405344	Analytical Batch: 4F04013

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
*67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
*110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	<10	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	<10	10
156-60-5	trans-1,2-Dichloroethene	<10	10

Continued on next page

*See Statement of Data Qualifications

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-12s	Sampled:	5/29/14 14:46
Lab Sample ID:	1406001-13	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	10	Analyzed:	6/4/14 5:36 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	11	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	26	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	870	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-12s	Sampled:	5/29/14 14:46
Lab Sample ID:	1406001-13	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/3/14 20:00 By: BAG
Dilution Factor:	10	Analyzed:	6/4/14 5:36 By: BAG
QC Batch:	1405344	Analytical Batch:	4F04013

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-06s	Sampled:	5/29/14 17:05
Lab Sample ID:	1406001-14	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	29	1.0	ug/L	1	RSK-175	06/09/14 12:47	JMF	1405518
Methane	6200	100	ug/L	200	RSK-175	06/09/14 12:53	JMF	1405518
Ethylene	13	1.0	ug/L	1	RSK-175	06/09/14 12:47	JMF	1405518

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-06s	Sampled: 5/29/14 17:05
Lab Sample ID: 1406001-14	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 2.5	Analyzed: 6/4/14 15:13 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<50	50
107-13-1	Acrylonitrile	<5.0	5.0
71-43-2	Benzene	<2.5	2.5
108-86-1	Bromobenzene	<2.5	2.5
74-97-5	Bromochloromethane	<2.5	2.5
75-27-4	Bromodichloromethane	<2.5	2.5
75-25-2	Bromoform	<2.5	2.5
74-83-9	Bromomethane	<12	12
104-51-8	n-Butylbenzene	<2.5	2.5
135-98-8	sec-Butylbenzene	<2.5	2.5
98-06-6	tert-Butylbenzene	<2.5	2.5
75-15-0	Carbon Disulfide	<2.5	2.5
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
75-00-3	Chloroethane	<12	12
67-66-3	Chloroform	<2.5	2.5
74-87-3	Chloromethane	<12	12
96-12-8	1,2-Dibromo-3-chloropropane	<12	12
124-48-1	Dibromochloromethane	<2.5	2.5
106-93-4	1,2-Dibromoethane	<2.5	2.5
74-95-3	Dibromomethane	<2.5	2.5
110-57-6	trans-1,4-Dichloro-2-butene	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
541-73-1	1,3-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-71-8	Dichlorodifluoromethane	<12	12
75-34-3	1,1-Dichloroethane	<2.5	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-06s	Sampled: 5/29/14 17:05
Lab Sample ID: 1406001-14	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 2.5	Analyzed: 6/4/14 15:13 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	<2.5	2.5
156-60-5	trans-1,2-Dichloroethene	<2.5	2.5
78-87-5	1,2-Dichloropropane	<2.5	2.5
10061-01-5	cis-1,3-Dichloropropene	<2.5	2.5
10061-02-6	trans-1,3-Dichloropropene	<2.5	2.5
100-41-4	Ethylbenzene	3.7	2.5
60-29-7	Ethyl Ether	<12	12
591-78-6	2-Hexanone	<12	12
74-88-4	Iodomethane	<2.5	2.5
98-82-8	Isopropylbenzene	<2.5	2.5
99-87-6	4-Isopropyltoluene	<12	12
1634-04-4	Methyl tert-Butyl Ether	<12	12
75-09-2	Methylene Chloride	<12	12
78-93-3	2-Butanone (MEK)	42	12
91-57-6	2-Methylnaphthalene	<12	12
108-10-1	4-Methyl-2-pentanone (MIBK)	<12	12
91-20-3	Naphthalene	<12	12
103-65-1	n-Propylbenzene	<2.5	2.5
100-42-5	Styrene	<2.5	2.5
630-20-6	1,1,1,2-Tetrachloroethane	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<2.5	2.5
109-99-9	Tetrahydrofuran	<12	12
108-88-3	Toluene	310	2.5
87-61-6	1,2,3-Trichlorobenzene	<12	12
120-82-1	1,2,4-Trichlorobenzene	<12	12
71-55-6	1,1,1-Trichloroethane	<2.5	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	3.5	2.5
75-69-4	Trichlorofluoromethane	<2.5	2.5
96-18-4	1,2,3-Trichloropropane	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-06s	Sampled:	5/29/14 17:05
Lab Sample ID:	1406001-14	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	2.5	Analyzed:	6/4/14 15:13 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<2.5	2.5
108-67-8	1,3,5-Trimethylbenzene	<2.5	2.5
75-01-4	Vinyl Chloride	<2.5	2.5
179601-23-1	Xylene, Meta + Para	<5.0	5.0
95-47-6	Xylene, Ortho	<2.5	2.5

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>105</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-05s	Sampled: 5/29/14 17:50
Lab Sample ID: 1406001-15	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 5	Analyzed: 6/4/14 11:34 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-05s	Sampled: 5/29/14 17:50
Lab Sample ID: 1406001-15	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 5	Analyzed: 6/4/14 11:34 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	320	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	50	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	760	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-05s	Sampled:	5/29/14 17:50
Lab Sample ID:	1406001-15	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	5	Analyzed:	6/4/14 11:34 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>103</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-09s	Sampled:	5/30/14 9:18
Lab Sample ID:	1406001-16	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	6.4	1.0	ug/L	1	RSK-175	06/09/14 12:57	JMF	1405518
Methane	8400	100	ug/L	200	RSK-175	06/09/14 13:02	JMF	1405518
Ethylene	<1.0	1.0	ug/L	1	RSK-175	06/09/14 12:57	JMF	1405518

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-09s	Sampled:	5/30/14 9:18
Lab Sample ID:	1406001-16	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 12:02 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-09s	Sampled: 5/30/14 9:18
Lab Sample ID: 1406001-16	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 12:02 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	2.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	18	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-09s	Sampled:	5/30/14 9:18
Lab Sample ID:	1406001-16	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 12:02 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-16s	Sampled: 5/30/14 10:04
Lab Sample ID: 1406001-17	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 12:29 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	8.2	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	3.0	1.0
156-59-2	cis-1,2-Dichloroethene	19	1.0
156-60-5	trans-1,2-Dichloroethene	1.6	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-16s	Sampled: 5/30/14 10:04
Lab Sample ID: 1406001-17	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 12:29 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	4.5	1.0
79-01-6	Trichloroethene	25	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-16s	Sampled:	5/30/14 10:04
Lab Sample ID:	1406001-17	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 12:29 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>104</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>109</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-10s	Sampled: 5/30/14 10:42
Lab Sample ID: 1406001-18	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 12:56 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	31	1.0
156-60-5	trans-1,2-Dichloroethene	4.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-10s	Sampled: 5/30/14 10:42
Lab Sample ID: 1406001-18	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 12:56 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-10s	Sampled:	5/30/14 10:42
Lab Sample ID:	1406001-18	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 12:56 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>106</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>108</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>103</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	5/30/14 11:38
Lab Sample ID:	1406001-19	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	<1.0	1.0	ug/L	1	RSK-175	06/09/14 13:06	JMF	1405518
Methane	930	20	ug/L	40	RSK-175	06/09/14 13:10	JMF	1405518
Ethylene	7.4	1.0	ug/L	1	RSK-175	06/09/14 13:06	JMF	1405518

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	5/30/14 11:38
Lab Sample ID:	1406001-19	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	10	Analyzed:	6/4/14 13:23 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	330	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	45	10

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-01s	Sampled: 5/30/14 11:38
Lab Sample ID: 1406001-19	Sampled By: R.S.
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 10	Analyzed: 6/4/14 13:23 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	550	10
156-60-5	trans-1,2-Dichloroethene	<10	10
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	1500	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1700	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-01s	Sampled:	5/30/14 11:38
Lab Sample ID:	1406001-19	Sampled By:	R.S.
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	10	Analyzed:	6/4/14 13:23 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10
75-01-4	Vinyl Chloride	64	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10

<i>Surrogates:</i>	<i>% Recovery</i>	<i>Control Limits</i>
<i>Dibromofluoromethane</i>	<i>107</i>	<i>85-118</i>
<i>1,2-Dichloroethane-d4</i>	<i>109</i>	<i>87-122</i>
<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
<i>4-Bromofluorobenzene</i>	<i>104</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	5/30/14 0:00
Lab Sample ID:	1406001-20	Sampled By:	TML
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 11:07 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406001
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: TB-01	Sampled: 5/30/14 0:00
Lab Sample ID: 1406001-20	Sampled By: TML
Matrix: Water	Received: 5/30/14 18:00
Unit: ug/L	Prepared: 6/4/14 8:00 By: BAG
Dilution Factor: 1	Analyzed: 6/4/14 11:07 By: BAG
QC Batch: 1405380	Analytical Batch: 4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406001
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	5/30/14 0:00
Lab Sample ID:	1406001-20	Sampled By:	TML
Matrix:	Water	Received:	5/30/14 18:00
Unit:	ug/L	Prepared:	6/4/14 8:00 By: BAG
Dilution Factor:	1	Analyzed:	6/4/14 11:07 By: BAG
QC Batch:	1405380	Analytical Batch:	4F05008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>105</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>107</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406164
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	6/5/14 14:52
Lab Sample ID:	1406164-01	Sampled By:	C.S.
Matrix:	Water	Received:	6/10/14 18:30

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Analytical Result	RL	Unit	Dilution Factor	Method	Date Time Analyzed	By	QC Batch
Ethane	1.2	1.0	ug/L	1	RSK-175	06/18/14 10:34	JMF	1405850
Methane	2700	50	ug/L	100	RSK-175	06/18/14 10:39	JMF	1405850
Ethylene	4.2	1.0	ug/L	1	RSK-175	06/18/14 10:34	JMF	1405850

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406164
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	6/5/14 14:52
Lab Sample ID:	1406164-01	Sampled By:	C.S.
Matrix:	Water	Received:	6/10/14 18:30
Unit:	ug/L	Prepared:	6/16/14 8:00 By: DLV
Dilution Factor:	2.5	Analyzed:	6/16/14 11:22 By: DLV
QC Batch:	1405828	Analytical Batch:	4F17010

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<50	50
107-13-1	Acrylonitrile	<5.0	5.0
71-43-2	Benzene	<2.5	2.5
108-86-1	Bromobenzene	<2.5	2.5
74-97-5	Bromochloromethane	<2.5	2.5
75-27-4	Bromodichloromethane	<2.5	2.5
75-25-2	Bromoform	<2.5	2.5
74-83-9	Bromomethane	<12	12
104-51-8	n-Butylbenzene	<2.5	2.5
135-98-8	sec-Butylbenzene	<2.5	2.5
98-06-6	tert-Butylbenzene	<2.5	2.5
75-15-0	Carbon Disulfide	<2.5	2.5
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
75-00-3	Chloroethane	<12	12
67-66-3	Chloroform	<2.5	2.5
74-87-3	Chloromethane	<12	12
96-12-8	1,2-Dibromo-3-chloropropane	<12	12
124-48-1	Dibromochloromethane	<2.5	2.5
106-93-4	1,2-Dibromoethane	<2.5	2.5
74-95-3	Dibromomethane	<2.5	2.5
110-57-6	trans-1,4-Dichloro-2-butene	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
541-73-1	1,3-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-71-8	Dichlorodifluoromethane	<12	12
75-34-3	1,1-Dichloroethane	2.8	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1406164
Project: TPC - PRB Performance Monitoring	Description: Laboratory Services
Client Sample ID: PRB-02s	Sampled: 6/5/14 14:52
Lab Sample ID: 1406164-01	Sampled By: C.S.
Matrix: Water	Received: 6/10/14 18:30
Unit: ug/L	Prepared: 6/16/14 8:00 By: DLV
Dilution Factor: 2.5	Analyzed: 6/16/14 11:22 By: DLV
QC Batch: 1405828	Analytical Batch: 4F17010

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
156-59-2	cis-1,2-Dichloroethene	350	2.5
156-60-5	trans-1,2-Dichloroethene	3.0	2.5
78-87-5	1,2-Dichloropropane	<2.5	2.5
10061-01-5	cis-1,3-Dichloropropene	<2.5	2.5
10061-02-6	trans-1,3-Dichloropropene	<2.5	2.5
100-41-4	Ethylbenzene	<2.5	2.5
60-29-7	Ethyl Ether	<12	12
591-78-6	2-Hexanone	<12	12
74-88-4	Iodomethane	<2.5	2.5
98-82-8	Isopropylbenzene	<2.5	2.5
99-87-6	4-Isopropyltoluene	<12	12
1634-04-4	Methyl tert-Butyl Ether	<12	12
75-09-2	Methylene Chloride	<12	12
78-93-3	2-Butanone (MEK)	<12	12
91-57-6	2-Methylnaphthalene	<12	12
108-10-1	4-Methyl-2-pentanone (MIBK)	<12	12
91-20-3	Naphthalene	<12	12
103-65-1	n-Propylbenzene	<2.5	2.5
100-42-5	Styrene	<2.5	2.5
630-20-6	1,1,1,2-Tetrachloroethane	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<2.5	2.5
109-99-9	Tetrahydrofuran	<12	12
108-88-3	Toluene	<2.5	2.5
87-61-6	1,2,3-Trichlorobenzene	<12	12
120-82-1	1,2,4-Trichlorobenzene	<12	12
71-55-6	1,1,1-Trichloroethane	<2.5	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	230	2.5
75-69-4	Trichlorofluoromethane	<2.5	2.5
96-18-4	1,2,3-Trichloropropane	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1406164
Project:	TPC - PRB Performance Monitoring	Description:	Laboratory Services
Client Sample ID:	PRB-02s	Sampled:	6/5/14 14:52
Lab Sample ID:	1406164-01	Sampled By:	C.S.
Matrix:	Water	Received:	6/10/14 18:30
Unit:	ug/L	Prepared:	6/16/14 8:00 By: DLV
Dilution Factor:	2.5	Analyzed:	6/16/14 11:22 By: DLV
QC Batch:	1405828	Analytical Batch:	4F17010

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
95-63-6	1,2,4-Trimethylbenzene	<2.5	2.5
108-67-8	1,3,5-Trimethylbenzene	<2.5	2.5
75-01-4	Vinyl Chloride	29	2.5
179601-23-1	Xylene, Meta + Para	<5.0	5.0
95-47-6	Xylene, Ortho	<2.5	2.5

Surrogates:	% Recovery	Control Limits
<i>Dibromofluoromethane</i>	103	85-118
<i>1,2-Dichloroethane-d4</i>	93	87-122
<i>Toluene-d8</i>	96	85-113
<i>4-Bromofluorobenzene</i>	88	82-110

QUALITY CONTROL REPORT

Dissolved Gases in Water by RSK-175 Headspace Analysis

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405518 Method-Specific Extraction/RSK-175

Method Blank					Analyzed:	06/09/2014	By: JMF
Unit: ug/L					Analytical Batch:	4F09029	

Ethane			<1.0				1.0
Methane			<0.50		--		0.50
Ethylene			<1.0				1.0

Laboratory Control Sample					Analyzed:	06/09/2014	By: JMF
Unit: ug/L					Analytical Batch:	4F09029	

Ethane		69.0	57.0	83	67-122	--	1.0
Methane		34.1	28.6	84	70-116	--	0.50
Ethylene		60.8	49.2	81	67-121	--	1.0

QC Batch: 1405850 Method-Specific Extraction/RSK-175

Method Blank					Analyzed:	06/18/2014	By: JMF
Unit: ug/L					Analytical Batch:	4F18042	

Ethane			<1.0				1.0
Methane			<0.50				0.50
Ethylene			<1.0				1.0

Laboratory Control Sample					Analyzed:	06/18/2014	By: JMF
Unit: ug/L					Analytical Batch:	4F18042	

Ethane		69.0	56.8	82	67-122	--	1.0
Methane		34.1	28.6	84	70-116	--	0.50
Ethylene		60.8	46.5	77	67-121	--	1.0

Matrix Spike 1406164-01 PRB-02s					Analyzed:	06/18/2014	By: JMF
Unit: ug/L					Analytical Batch:	4F18042	

Ethane	1.24	69.0	48.2	68	51-108	--	1.0
Ethylene	4.17	60.8	42.9	64	52-107	--	1.0

Matrix Spike Duplicate 1406164-01 PRB-02s					Analyzed:	06/18/2014	By: JMF
Unit: ug/L					Analytical Batch:	4F18042	

Ethane	1.24	69.0	46.7	66	51-108	3	20	1.0
Ethylene	4.17	60.8	41.6	62	52-107	3	20	1.0

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405344 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Unit: ug/L

Analyzed: 06/03/2014 By: BAG
 Analytical Batch: 4F04013

Acetone	<20	--	20
Acrylonitrile	<2.0		2.0
Benzene	<1.0		1.0
Bromobenzene	<1.0		1.0
Bromochloromethane	<1.0		1.0
Bromodichloromethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<5.0		5.0
n-Butylbenzene	<1.0	--	1.0
sec-Butylbenzene	<1.0	--	1.0
tert-Butylbenzene	<1.0	--	1.0
Carbon Disulfide	<1.0	--	1.0
Carbon Tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<5.0		5.0
Chloroform	<1.0		1.0
Chloromethane	<5.0		5.0
1,2-Dibromo-3-chloropropane	<5.0		5.0
Dibromochloromethane	<1.0		1.0
1,2-Dibromoethane	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<1.0		1.0
1,2-Dichlorobenzene	<1.0	--	1.0
1,3-Dichlorobenzene	<1.0	--	1.0
1,4-Dichlorobenzene	<1.0	--	1.0
Dichlorodifluoromethane	<5.0		5.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0	--	1.0
Ethyl Ether	<5.0		5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405344 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 06/03/2014 By: BAG
 Analytical Batch: 4F04013

Unit: ug/L

2-Hexanone	<5.0		5.0
Iodomethane	<1.0		1.0
Isopropylbenzene	<1.0	--	1.0
4-Isopropyltoluene	<5.0	--	5.0
Methyl tert-Butyl Ether	<5.0		5.0
Methylene Chloride	<5.0	--	5.0
2-Butanone (MEK)	<5.0		5.0
2-Methylnaphthalene	<5.0	--	5.0
4-Methyl-2-pentanone (MIBK)	<5.0		5.0
Naphthalene	<5.0	--	5.0
n-Propylbenzene	<1.0		1.0
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Tetrahydrofuran	<5.0		5.0
Toluene	<1.0		1.0
1,2,3-Trichlorobenzene	<5.0		5.0
1,2,4-Trichlorobenzene	<5.0		5.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
1,2,4-Trimethylbenzene	<1.0		1.0
1,3,5-Trimethylbenzene	<1.0		1.0
Vinyl Chloride	<1.0		1.0
Xylene, Meta + Para	<2.0		2.0
Xylene, Ortho	<1.0		1.0

Surrogates:

<i>Dibromofluoromethane</i>	101	85-118
<i>1,2-Dichloroethane-d4</i>	105	87-122
<i>Toluene-d8</i>	100	85-113

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405344 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 06/03/2014 By: BAG
Analytical Batch: 4F04013

Surrogates (Continued):

4-Bromofluorobenzene

103 82-110

Laboratory Control Sample

Unit: ug/L

Analyzed: 06/03/2014 By: BAG
Analytical Batch: 4F04013

Benzene	40.0	42.4	106	84-119	--	1.0
Chlorobenzene	40.0	41.4	104	84-118	--	1.0
1,1-Dichloroethene	40.0	40.7	102	77-123	--	1.0
Toluene	40.0	41.9	105	85-118	--	1.0
Trichloroethene	40.0	43.0	108	82-119	--	1.0

Surrogates:

Dibromofluoromethane

102 85-118

1,2-Dichloroethane-d4

106 87-122

Toluene-d8

101 85-113

4-Bromofluorobenzene

101 82-110

QC Batch: 1405380 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Unit: ug/L

Analyzed: 06/04/2014 By: BAG
Analytical Batch: 4F05008

Acetone	<20	--	20
Acrylonitrile	<2.0	--	2.0
Benzene	<1.0	--	1.0
Bromobenzene	<1.0	--	1.0
Bromochloromethane	<1.0	--	1.0
Bromodichloromethane	<1.0	--	1.0
Bromoform	<1.0	--	1.0
Bromomethane	<5.0	--	5.0
n-Butylbenzene	<1.0	--	1.0
sec-Butylbenzene	<1.0	--	1.0
tert-Butylbenzene	<1.0	--	1.0
Carbon Disulfide	<1.0	--	1.0
Carbon Tetrachloride	<1.0	--	1.0
Chlorobenzene	<1.0	--	1.0

Continued on next page

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405380 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

 Analyzed: 06/04/2014 By: BAG
 Analytical Batch: 4F05008

Unit: ug/L

Chloroethane			<5.0					5.0
Chloroform			<1.0					1.0
Chloromethane			<5.0					5.0
1,2-Dibromo-3-chloropropane			<5.0					5.0
Dibromochloromethane			<1.0					1.0
1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0			--		1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0			--		1.0
Ethyl Ether			<5.0					5.0
2-Hexanone			<5.0					5.0
Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0			--		5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0			--		5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			<5.0			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0			--		5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405380 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L Analyzed: 06/04/2014 By: BAG
Analytical Batch: 4F05008

Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0					1.0
1,2,3-Trichlorobenzene			<5.0					5.0
1,2,4-Trichlorobenzene			<5.0					5.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0					1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>				104	85-118			
<i>1,2-Dichloroethane-d4</i>				109	87-122			
<i>Toluene-d8</i>				99	85-113			
<i>4-Bromofluorobenzene</i>				104	82-110			

Laboratory Control Sample

Unit: ug/L Analyzed: 06/04/2014 By: BAG
Analytical Batch: 4F05008

Benzene	40.0	42.0		105	84-119	--		1.0
Chlorobenzene	40.0	40.7		102	84-118	--		1.0
1,1-Dichloroethene	40.0	41.6		104	77-123	--		1.0
Toluene	40.0	40.8		102	85-118	--		1.0
Trichloroethene	40.0	41.6		104	82-119	--		1.0

Surrogates:

<i>Dibromofluoromethane</i>				104	85-118			
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Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405380 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued)

Unit: ug/L

Analyzed: 06/04/2014 By: BAG
Analytical Batch: 4F05008

Surrogates (Continued):

<i>1,2-Dichloroethane-d4</i>				107	87-122			
<i>Toluene-d8</i>				100	85-113			
<i>4-Bromofluorobenzene</i>				102	82-110			

Matrix Spike 1406001-01 PRB-03s

Unit: ug/L

Analyzed: 06/04/2014 By: BAG
Analytical Batch: 4F05008

Benzene	<2.0	80.0	82.9	104	80-129	--		2.0
Chlorobenzene	<2.0	80.0	80.1	100	80-121	--		2.0
1,1-Dichloroethene	<2.0	80.0	79.4	99	74-134	--		2.0
Toluene	0.460	80.0	81.9	102	79-129	--		2.0
Trichloroethene	18.4	80.0	98.8	100	75-127	--		2.0

Surrogates:

<i>Dibromofluoromethane</i>				102	85-118			
<i>1,2-Dichloroethane-d4</i>				108	87-122			
<i>Toluene-d8</i>				101	85-113			
<i>4-Bromofluorobenzene</i>				101	82-110			

Matrix Spike Duplicate 1406001-01 PRB-03s

Unit: ug/L

Analyzed: 06/04/2014 By: BAG
Analytical Batch: 4F05008

Benzene	<2.0	80.0	86.6	108	80-129	4	9	2.0
Chlorobenzene	<2.0	80.0	83.0	104	80-121	4	8	2.0
1,1-Dichloroethene	<2.0	80.0	84.0	105	74-134	6	11	2.0
Toluene	0.460	80.0	85.5	106	79-129	4	9	2.0
Trichloroethene	18.4	80.0	102	105	75-127	4	10	2.0

Surrogates:

<i>Dibromofluoromethane</i>				103	85-118			
<i>1,2-Dichloroethane-d4</i>				109	87-122			
<i>Toluene-d8</i>				101	85-113			
<i>4-Bromofluorobenzene</i>				101	82-110			

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405828 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank	Analyzed:	06/16/2014	By: DLV
Unit: ug/L	Analytical Batch:	4F17010	

Acetone	<20	--	20
Acrylonitrile	<2.0		2.0
Benzene	<1.0		1.0
Bromobenzene	<1.0		1.0
Bromochloromethane	<1.0		1.0
Bromodichloromethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<5.0		5.0
n-Butylbenzene	<1.0	--	1.0
sec-Butylbenzene	<1.0		1.0
tert-Butylbenzene	<1.0		1.0
Carbon Disulfide	<1.0	--	1.0
Carbon Tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<5.0		5.0
Chloroform	<1.0		1.0
Chloromethane	<5.0		5.0
1,2-Dibromo-3-chloropropane	<5.0		5.0
Dibromochloromethane	<1.0		1.0
1,2-Dibromoethane	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<1.0		1.0
1,2-Dichlorobenzene	<1.0		1.0
1,3-Dichlorobenzene	<1.0		1.0
1,4-Dichlorobenzene	<1.0	--	1.0
Dichlorodifluoromethane	<5.0		5.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0	--	1.0
Ethyl Ether	<5.0		5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405828 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 06/16/2014 By: DLV
 Analytical Batch: 4F17010

Unit: ug/L

2-Hexanone			<5.0					5.0
Iodomethane			<1.0					1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0					5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0					5.0
2-Butanone (MEK)			<5.0					5.0
2-Methylnaphthalene			5.7			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0			--		5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0
Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0			--		1.0
1,2,3-Trichlorobenzene			<5.0					5.0
1,2,4-Trichlorobenzene			<5.0					5.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0					1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0			--		2.0
Xylene, Ortho			<1.0			--		1.0

Surrogates:

<i>Dibromofluoromethane</i>	105	85-118
<i>1,2-Dichloroethane-d4</i>	95	87-122
<i>Toluene-d8</i>	96	85-113

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405828 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 06/16/2014 By: DLV
Analytical Batch: 4F17010

Surrogates (Continued):

4-Bromofluorobenzene

89 82-110

Laboratory Control Sample

Unit: ug/L

Analyzed: 06/16/2014 By: DLV
Analytical Batch: 4F17010

Benzene	40.0	37.5	94	84-119	--	1.0
Chlorobenzene	40.0	40.0	100	84-118	--	1.0
1,1-Dichloroethene	40.0	38.2	96	77-123	--	1.0
Toluene	40.0	39.1	98	85-118	--	1.0
Trichloroethene	40.0	42.1	105	82-119	--	1.0

Surrogates:

Dibromofluoromethane

101 85-118

1,2-Dichloroethane-d4

90 87-122

Toluene-d8

101 85-113

4-Bromofluorobenzene

97 82-110

Matrix Spike 1406164-01 PRB-02s

Unit: ug/L

Analyzed: 06/16/2014 By: DLV
Analytical Batch: 4F17010

Benzene	<2.5	100	97.6	98	80-129	--	2.5
Chlorobenzene	<2.5	100	102	102	80-121	--	2.5
1,1-Dichloroethene	0.975	100	103	102	74-134	--	2.5
Toluene	<2.5	100	99.6	100	79-129	--	2.5
Trichloroethene	225	100	339	114	75-127	--	2.5

Surrogates:

Dibromofluoromethane

105 85-118

1,2-Dichloroethane-d4

90 87-122

Toluene-d8

99 85-113

4-Bromofluorobenzene

98 82-110

Matrix Spike Duplicate 1406164-01 PRB-02s

Unit: ug/L

Analyzed: 06/16/2014 By: DLV
Analytical Batch: 4F17010

Benzene	<2.5	100	91.4	91	80-129	6	9	2.5
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Continued on next page

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1405828 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1406164-01 PRB-02s

Analyzed: 06/16/2014 By: DLV

Unit: ug/L

Analytical Batch: 4F17010

Chlorobenzene	<2.5	100	97.4	97	80-121	5	8	2.5
1,1-Dichloroethene	0.975	100	92.4	91	74-134	11	11	2.5
Toluene	<2.5	100	93.6	94	79-129	6	9	2.5
Trichloroethene	225	100	310	85	75-127	9	10	2.5

Surrogates:

<i>Dibromofluoromethane</i>				100	85-118			
<i>1,2-Dichloroethane-d4</i>				90	87-122			
<i>Toluene-d8</i>				97	85-113			
<i>4-Bromofluorobenzene</i>				96	82-110			



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No. **148229**

For Lab Use Only
Cart # **VDS in Box**

VOC Receipt # **143-WS(MEE)**

Receipt Log No. **30-21**

Project Chemist **JTR**

Work Order No. **1400001**

Client Name **TRC Environmental**

Address **1540 Eisenhower Place**

City, State, Zip **Ann Arbor MI 48108**

Phone/Fax **734-971-7080 / 734-571-9025**

Email **smetz@trcsolutions.com**

Project Name **TRC-PRB**

Client Project No. / P.O. No. **186299.0001**

Invoice To Client Other (comments)

Contact/Report To **Stacy Metz**

Field Sample ID

Cooler ID

Sample Date

Sample Time

Matrix

Number of Containers Submitted

Total

Sample Comments

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Total	Sample Comments
03		01	PRB-035	1905	5/28/14	1146	GNX	1	2	
02		02	PRB-035 - MS/MSD			1146	X	1	5	
02		02	PRB-04D			1442	X	1	2	
04		03	PRB-04S			1532	X	1	4	
		04	DUP-01			XXXX	X	1	4	
		05	PRB-07S			1612	X	1	4	
		06	PRB-08S			1658	X	1	4	
		07	PRB-08D			1730	X	1	2	
		08	PRB-11S		5/29/14	1119	X	1	2	
02		09	PRB-15D			1203	X	1	2	

Container Type (corresponds to Container Packing List)	Number of Containers Submitted
VOC 82000	1
Methane	1
Ethane	1
Ethene	1

Analyses Requested

Pg. 1 of 2

PRESERVATIVES

- A NONE pH-7
- B HNO₃ pH-2
- C H₂SO₄ pH-2
- D 1+1 HCl pH-2
- E NaOH pH-12
- F ZnAc₂/NaOH pH-9
- G MeOH
- H Other (note below)

Sampled By (print) **Roeland T. Sotgiu**

Sampler's Signature *Roeland T. Sotgiu*

Company **Pocher N. Sotgiu**

How Shipped? **Carrier**

Tracking No.

1. Requisitioned By **Roeland T. Sotgiu** Date **5/20/14** Time **1315**

2. Requested by **Stacy Metz** Date **5/30/14** Time **1500**

3. Requested for Lab By **Stacy Metz** Date **5/30/14** Time **1500**



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No.

148230

Analyses Requested

Pg. 2 of 2

For Lab Use Only

Cart: Vials in Box
VOA Request/Type: 143-61 (FREE)
Receipt Log No.: 30-21
Project Chemist: JLR
Work Order No.: 1401001

Client Name: TRC Environmental
Address: 1540 Eisenhower Place
City/State/Zip: Ann Arbor, MI 48108
Client Project No./P.O. No.: TRC PRB 1860299.0001
Invoice To: Client Other (comments)

Project Name: TRC Environmental
Client Project No./P.O. No.: TRC PRB 1860299.0001
Invoice To: Client Other (comments)

Phone/Fax: 734-971-7080/734-571-9035
Email: smetz200@trcsolutions.com
Contact Report To: Stacy Metz

Container Type (corresponds to Container Packing List)	Number of Containers Submitted
VOC 82600	1
Methane	1
Ethane	
Ethene	

- PRESERVATIVES
- A NONE pH-7
 - B HNO₃ pH-2
 - C H₂SO₄ pH-2
 - D 1+1 HCl pH-2
 - E NaOH pH-12
 - F ZnAcNaOH pH-9
 - G NaOH
 - H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Size	Sample Comments
02		10	PRB-155	1905	5/29/14	1301	X GN X	1	2	
		11	PRB-145			1337	X X		2	
		12	PRB-135			1408	X X		2	
		13	PRB-125			1410	X X		2	
		14	PRB-0605			1705	X X X		4	
		15	PRB-055			1750	X X		2	
		16	PRB-095		5/30/14	0918	X X X		4	
		17	PRB-105			1004	X X		2	
		18	PRB-105			1042	X X		2	
		19	PRB-015			1138	X X		4	
		20	TR-01				X X X		1	

Sampled By (print): Rachel Sotter
Sampler's Signature: Rachel Sotter
Company: TRC

How Shipped? Carrier
Tracking No.:

1. Requested By: Rachel Sotter Date: 5/30/14 Time: 1315
2. Requested By: Key Johnson Date: 5/30/14 Time: 1500

3. Requested By: D. N. Jordan Date: 5/30/14 Time: 1500

WHITE COPY - REPORT

YELLOW COPY - LABORATORY

PINK COPY - FIELD

SAMPLE RECEIVING / LOG-IN CHECKLIST



Client: <u>TRC ENV.</u>	Work Order #: <u>H06001</u>
Receipt Record Page/Line #: <u>30-21</u>	New / Add To: <input type="checkbox"/> Project Chemist: <u>JLR</u> Sample #: _____

Recorded by (Initials/date): <u>JN 5/30/14</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other	Qty Received: <u>1</u>	<input checked="" type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> Other (# _____)	<input type="checkbox"/> Thermometer Used <input type="checkbox"/> See Additional Cooler Information Form
--	--	------------------------	---	--

Cooler #	Time	Cooler #	Time	Cooler #	Time
<u>JTR1905</u>	<u>2253</u>				
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	
Coolant Type: <input checked="" type="checkbox"/> Loose Ice <input checked="" type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None	
Coolant Location: Dispersed / Top / Middle / Bottom: _____ Temp Blank Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input checked="" type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom: _____ Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		Coolant Location: Dispersed / Top / Middle / Bottom: _____ Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative	
Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C
Temp Blank: <u>9.1</u>	<u>0</u>	<u>9.1</u>	Temp Blank:		
Sample 1: <u>4.9</u>	<u>0</u>	<u>4.9</u>	Sample 1:		
Sample 2: <u>4.3</u>	<u>0</u>	<u>4.3</u>	Sample 2:		
Sample 3: <u>6.4</u>	<u>0</u>	<u>6.4</u>	Sample 3:		
3 Sample Average °C: <u>5.2</u>			3 Sample Average °C:		
<input checked="" type="checkbox"/> Cooler ID on COC? <input checked="" type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> Cooler ID on COC? <input type="checkbox"/> VOC Trip Blank received?	

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Chain of Custody record(s)? If No, Initiated By _____ <input checked="" type="checkbox"/> Received for Lab Signed/Date/Time? <input type="checkbox"/> Shipping document? <input type="checkbox"/> Other	Check Sample Preservation N/A Yes No <input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> Temperature Blank OR average sample temperature, ≥6° C? <input type="checkbox"/> <input checked="" type="checkbox"/> If either is ≥6° C, was thermal preservation required? If "Yes", Project Chemist Approval Initials: _____ <input checked="" type="checkbox"/> <input type="checkbox"/> If "Yes" Completed Non Con Cooler - Cont Inventory Form? <input checked="" type="checkbox"/> <input type="checkbox"/> Completed Sample Preservation Verification Form? <input checked="" type="checkbox"/> <input type="checkbox"/> Samples chemically preserved correctly? If "No", added orange tag? <input type="checkbox"/> <input checked="" type="checkbox"/> Received pre-preserved VOC soils? <input type="checkbox"/> MeOH <input type="checkbox"/> Na ₂ SO ₄
--	--

Check COC for Accuracy Yes No <input checked="" type="checkbox"/> <input type="checkbox"/> Analysis Requested? <input checked="" type="checkbox"/> <input type="checkbox"/> Sample ID matches COC? <input checked="" type="checkbox"/> <input type="checkbox"/> Sample Date and Time matches COC? <input checked="" type="checkbox"/> <input type="checkbox"/> Container type completed on COC? <input checked="" type="checkbox"/> <input type="checkbox"/> All container types indicated are received?	Check for Short Hold-Time Prep/Analyses <input type="checkbox"/> Bacteriological <input type="checkbox"/> Air Bags <input type="checkbox"/> EnCores / Methanol Pre-Preserved <input type="checkbox"/> Formaldehyde/Aldehyde <input type="checkbox"/> Green-tagged containers <input type="checkbox"/> Yellow/White-tagged 1 L ambers (SV Prep-Lab)
---	---

AFTER HOURS ONLY:

COPIES OF COC TO LAB AREA(S)

NONE RECEIVED

RECEIVED, COCs TO LAB(S)

Sample Condition Summary N/A Yes No <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Broken containers/lids? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Missing or incomplete labels? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Illegible information on labels? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Low volume received? <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> Inappropriate or non-TriMatrix containers received? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> VOC vials / TOX containers have headspace? <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Extra sample locations / containers not listed on COC?	Notes <input checked="" type="checkbox"/> Trip Blank received <input type="checkbox"/> Trip Blank not listed on COC <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">Cooler Received (Date/Time): <u>JN 5/30/14</u></td> <td style="width: 33%;">Paperwork Delivered (Date/Time): <u>5/30/14</u></td> <td style="width: 33%;">≤1 Hour Goal Met?</td> </tr> <tr> <td></td> <td></td> <td style="text-align: center;">Yes / No</td> </tr> </table>	Cooler Received (Date/Time): <u>JN 5/30/14</u>	Paperwork Delivered (Date/Time): <u>5/30/14</u>	≤1 Hour Goal Met?			Yes / No
Cooler Received (Date/Time): <u>JN 5/30/14</u>	Paperwork Delivered (Date/Time): <u>5/30/14</u>	≤1 Hour Goal Met?					
		Yes / No					



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No.

148231

Analyses Requested

Pg. 1 of 1

For Lab Use Only

Cart 436-B (dls. Gas)

VOA Rack/Tray 436-B

Receipt Log No. 477-12

Project Chemist

Work Order No. 1406164

Schedule

Masks Code

Sample Number

OS

01

Client Name: TRC Environmental

Address: 1540 Eisenhower Place

City/State/Zip: Ann Arbor MI 48108

Phone/Fax: 734-297-7170/734-971-9022

Email: smetz@trcsolutions.com

Project Name: TRC-PRB Monitoring

Client Project No. / P.O. No. 186299.0001

Invoice To: Client Other (comments)

Contact/Report to: Stacy Metz

Field Sample ID

Cooler ID

Sample Date

Sample Time

Matrix

Number of Containers Submitted

Title

Sample Comments

Comments

How Shipped?

Hand

Carrier

Tracking No.

Received By

Date

Time

Received By

Date

Time

Received By

Date

Time

Container Type (corresponds to Container Packing List)	Number of Containers Submitted	Title	Sample Comments
VOC 8260	1		
Dissolved gases	1		

Container Type (corresponds to Container Packing List)

Number of Containers Submitted

Title

Sample Comments

Comments

How Shipped?

Hand

Carrier

Tracking No.

Received By

Date

Time

Received By

Date

Time

Received By

Date

Time

Received By

Date

Time

Received By

Date

RESERVATIVES

A NONE pH-7

B HNO₃ pH-2

C H₂SO₄ pH-2

D 1+1 HCl pH-2

E NaOH pH-12

F Zn-Ac/NaOH pH-9

G MeOH

H Other (note below)

Sampled By (print)
Chris Scieszka

Sampler's Signature
Chris Scieszka

Company
TRC Environmental

How Shipped?
Tracking No.

Received By

Date

Time

Received By

Date

Time

Received By

Date

Time

Received By

Date

Time

Received By

Date

Time

WHITE COPY - REPORT

YELLOW COPY - LABORATORY

PINK COPY - FIELD

SAMPLE RECEIVING / LOG-IN CHECKLIST



Client: <u>TRC - TPC</u>	Work Order #: <u>1406164</u>
Receipt Record Page/Line #: <u>47-12</u>	Project/Chemist: <u>JLR</u> Sample #s: _____

Recorded by (initials/date): <u>JN 6/10/14</u>	<input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other	Qty Received: <u>1</u>	Thermometer Used: <input checked="" type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> See Additional Cooler Information Form <input type="checkbox"/> Other (# _____)
--	--	------------------------	---

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time
<u>NONE</u>	<u>1957</u>						
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact	
Coolant Type: <input checked="" type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None	
Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom	
Temp Blank Present: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No	
If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative	
	Observed °C	Correction Factor °C	Actual °C		Observed °C	Correction Factor °C	Actual °C
Temp Blank:				Temp Blank:			
Sample 1:	<u>4.4</u>	<u>0</u>	<u>4.4</u>	Sample 1:			
Sample 2:	<u>4.6</u>	<u>0</u>	<u>4.6</u>	Sample 2:			
Sample 3:	<u>4.7</u>	<u>0</u>	<u>4.7</u>	Sample 3:			
3 Sample Average °C: <u>4.6</u>		3 Sample Average °C:		3 Sample Average °C:		3 Sample Average °C:	
<input type="checkbox"/> Cooler ID on COC?		<input type="checkbox"/> Cooler ID on COC?		<input type="checkbox"/> Cooler ID on COC?		<input type="checkbox"/> Cooler ID on COC?	
<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?	

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<input checked="" type="checkbox"/> Chain of Custody record(s)? If No, Initiated By _____	
<input type="checkbox"/> Received for Lab Signed/Date/Time?	
<input type="checkbox"/> Shipping document?	
<input type="checkbox"/> Other _____	

COC Information

TriMatrix COC Other _____

COC ID Numbers: 148231

Check COC for Accuracy

Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<input type="checkbox"/> Analysis Requested?	
<input checked="" type="checkbox"/> Sample ID matches COC?	
<input checked="" type="checkbox"/> Sample Date and Time matches COC?	
<input checked="" type="checkbox"/> Container type completed on COC?	
<input checked="" type="checkbox"/> All container types indicated are received?	

Sample Condition Summary

N/A <input type="checkbox"/>	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<input checked="" type="checkbox"/> Broken containers/lids?		
<input checked="" type="checkbox"/> Missing or incomplete labels?		
<input checked="" type="checkbox"/> Illegible information on labels?		
<input checked="" type="checkbox"/> Low volume received?		
<input checked="" type="checkbox"/> Inappropriate or non-TriMatrix containers received?		
<input type="checkbox"/> VOC vials / TOX containers have headspace?		
<input type="checkbox"/> Extra sample locations / containers not listed on COC?		

Check Sample Preservation

N/A <input checked="" type="checkbox"/>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>
<input checked="" type="checkbox"/> Temperature Blank OR average sample temperature, ≥26° C?		
<input type="checkbox"/> If either is ≥26° C, was thermal preservation required?		
If "Yes", Project Chemist Approval Initials: _____		
If "Yes" Completed Non Con Cooler - Cont Inventory Form?		
<input type="checkbox"/> Completed Sample Preservation Verification Form?		
<input checked="" type="checkbox"/> Samples chemically preserved correctly?		
If "No", added orange tag?		
<input checked="" type="checkbox"/> Received pre-preserved VOC soils?		
<input type="checkbox"/> MeOH <input type="checkbox"/> Na ₂ SO ₄		

Check for Short Hold-Time Prep/Analyses

<input type="checkbox"/> Bacteriological	AFTER HOURS ONLY: COPIES OF COC TO LAB AREA(S) <input checked="" type="checkbox"/> NONE RECEIVED <input type="checkbox"/> RECEIVED, COCs TO LAB(S)
<input type="checkbox"/> Air Bags	
<input type="checkbox"/> EnCores / Methanol Pre-Preserved	
<input type="checkbox"/> Formaldehyde/Aldehyde	
<input type="checkbox"/> Green-lagged containers	
<input type="checkbox"/> Yellow/White-lagged 1 L ambers (SV Prep-Lab)	

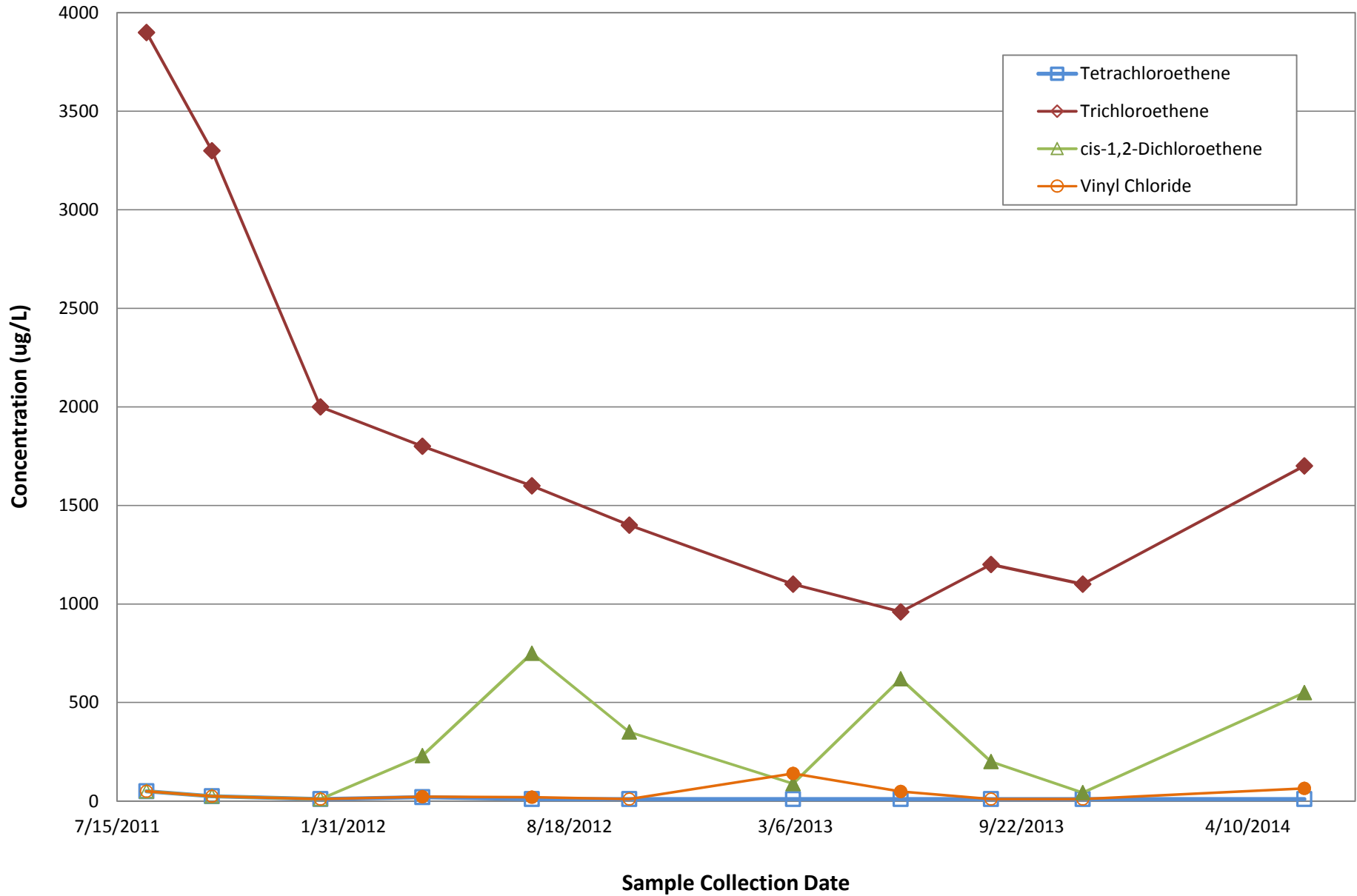
Notes

<input type="checkbox"/> Trip Blank received	<input type="checkbox"/> Trip Blank not listed on COC
Cooler Received (Date/Time): <u>JN 6/10/14</u>	Paperwork Delivered (Date/Time): <u>6/10/14</u>
≤1 Hour Goal Met? <u>Yes / No</u>	

Technical Memorandum

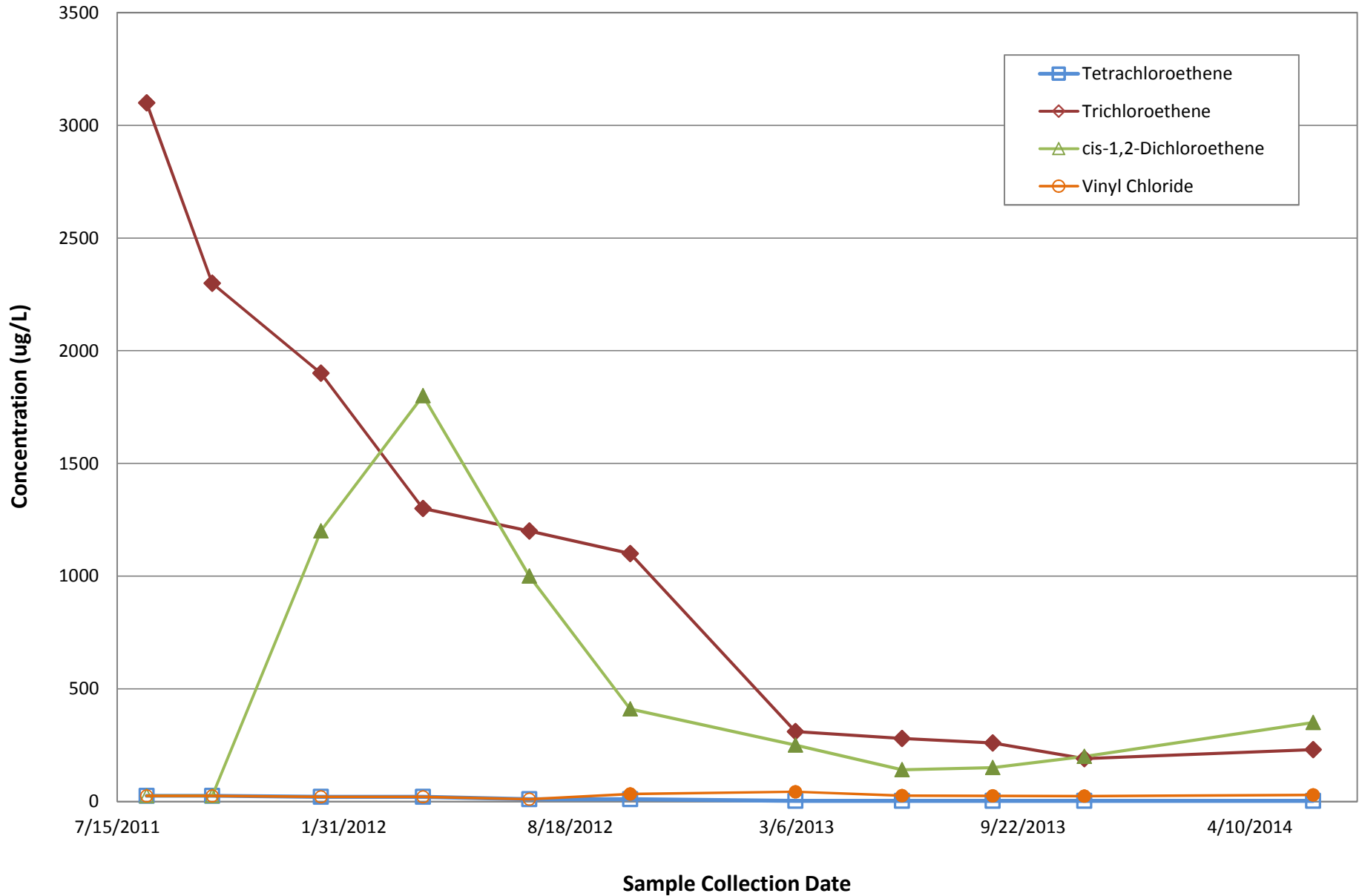
Attachment 2 Groundwater Trend Charts

PRB-01s



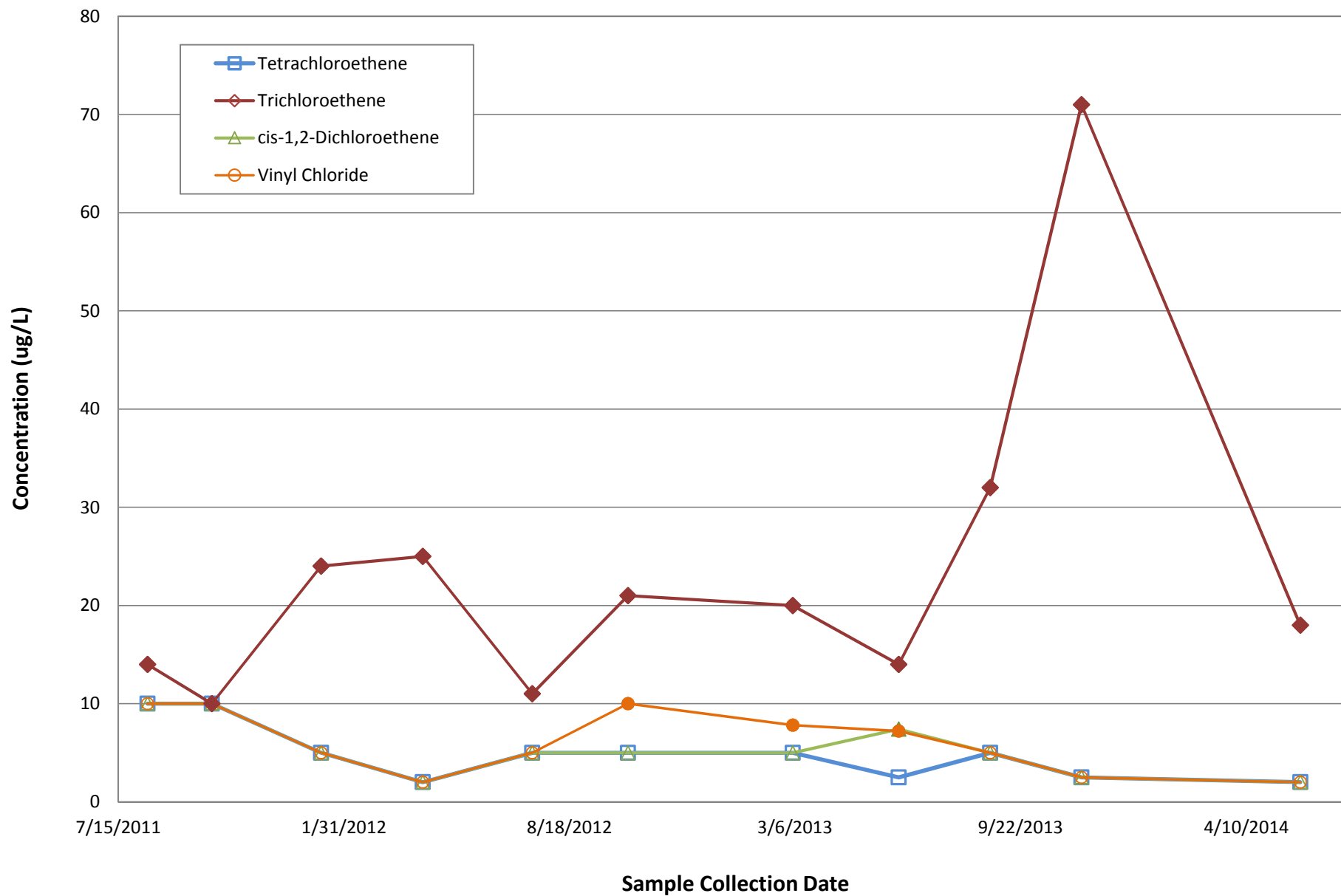
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-02s



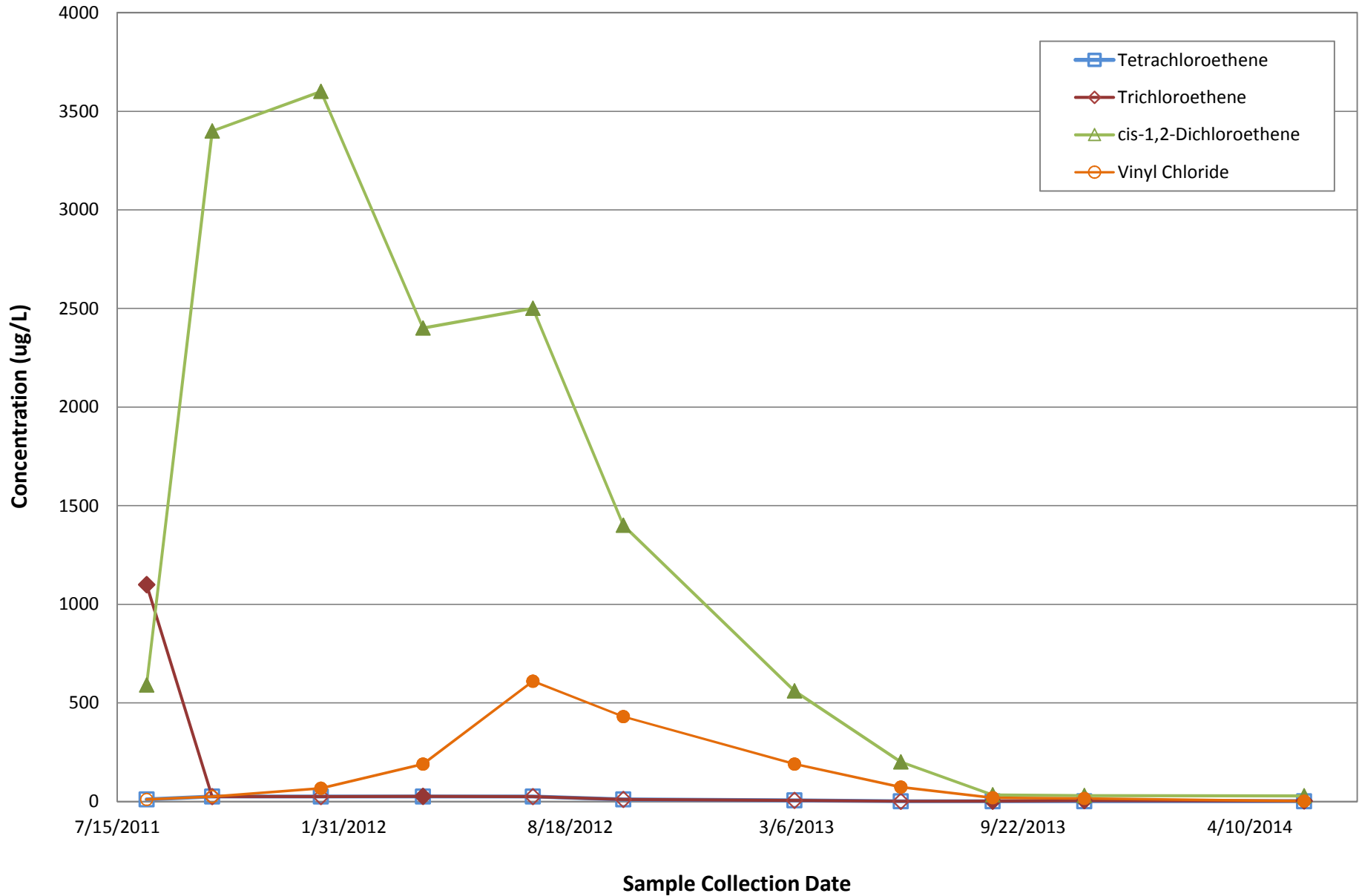
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-03s



Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-04s



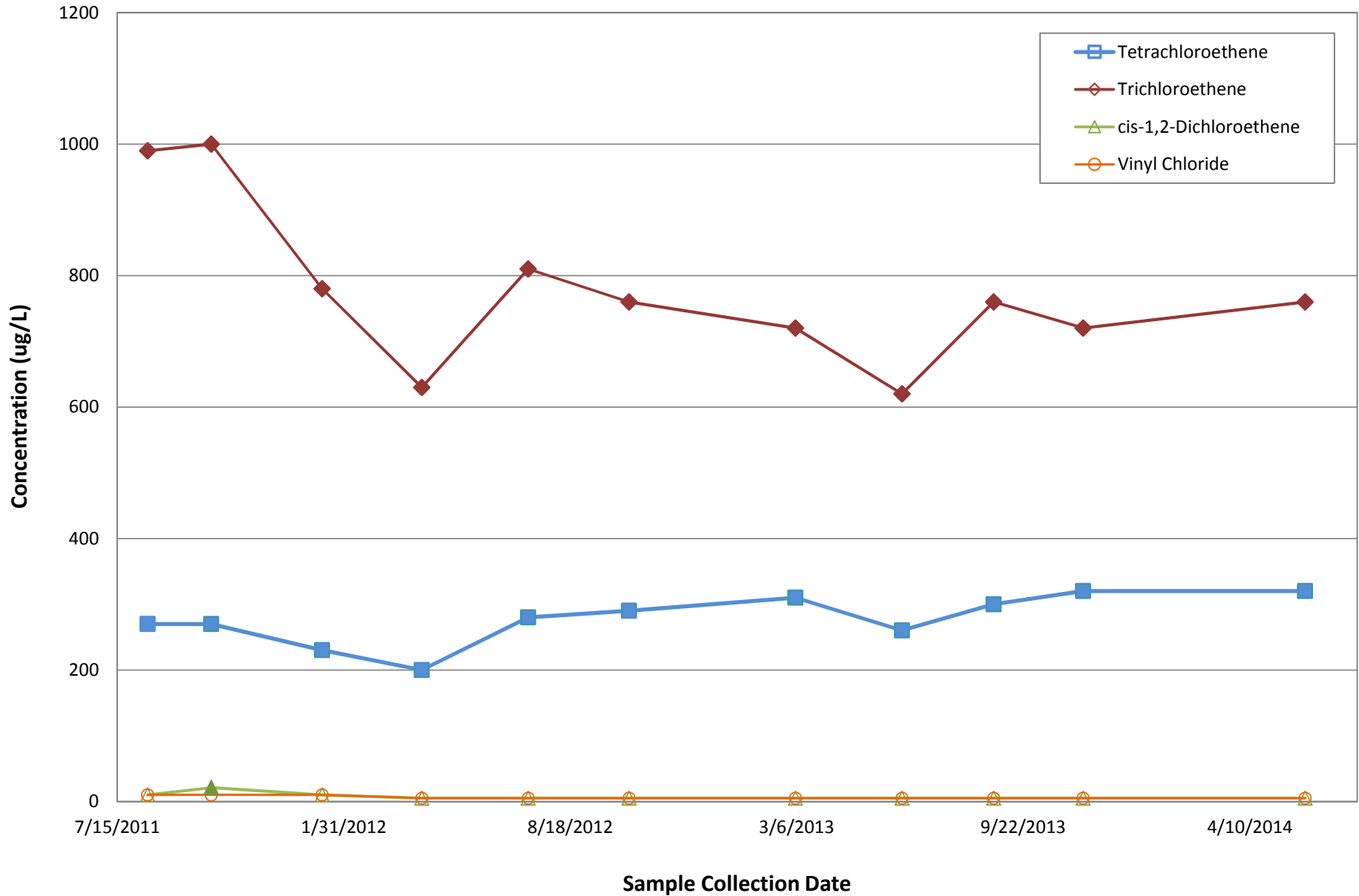
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-04d



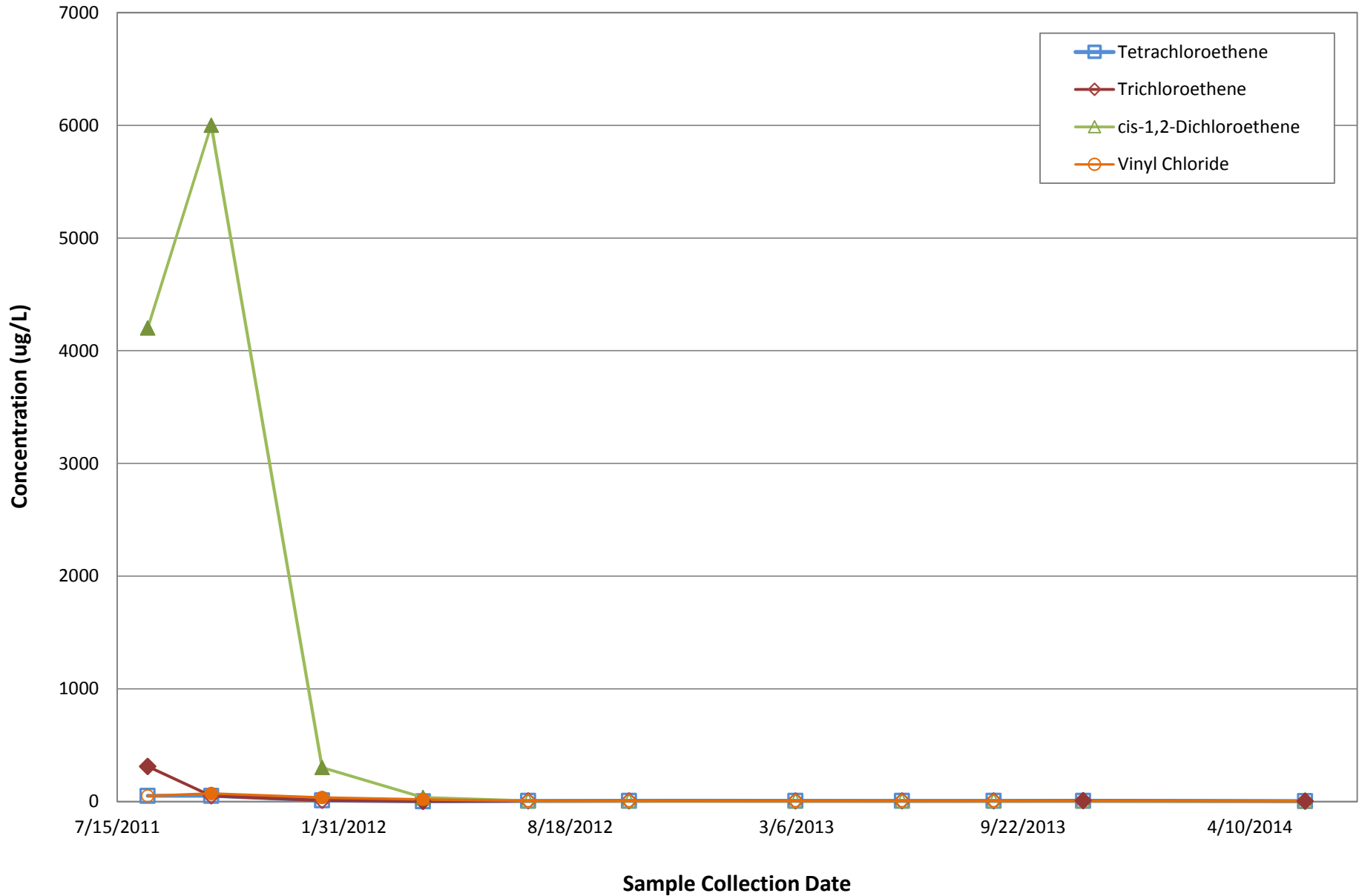
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-05s



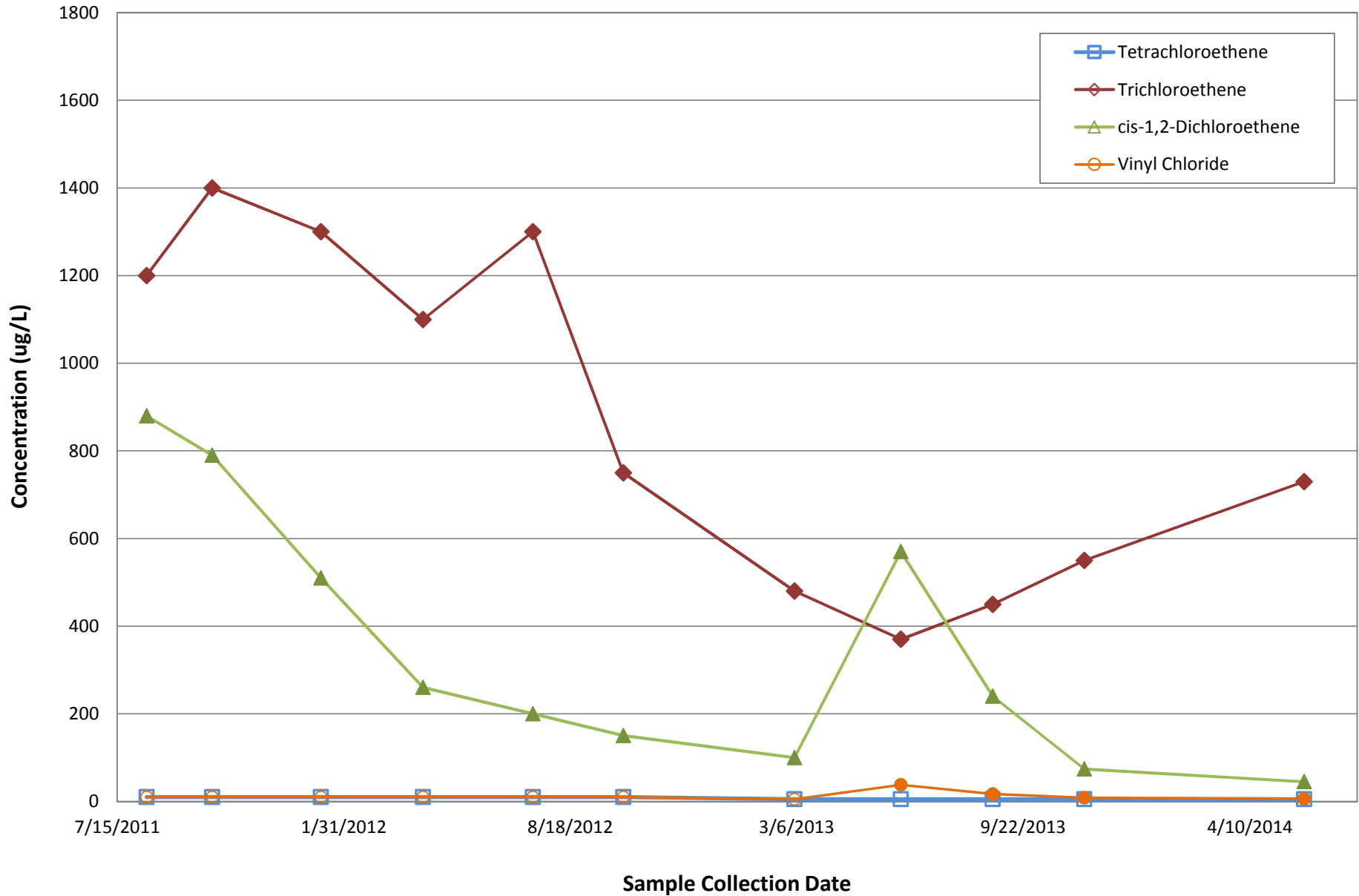
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-06s



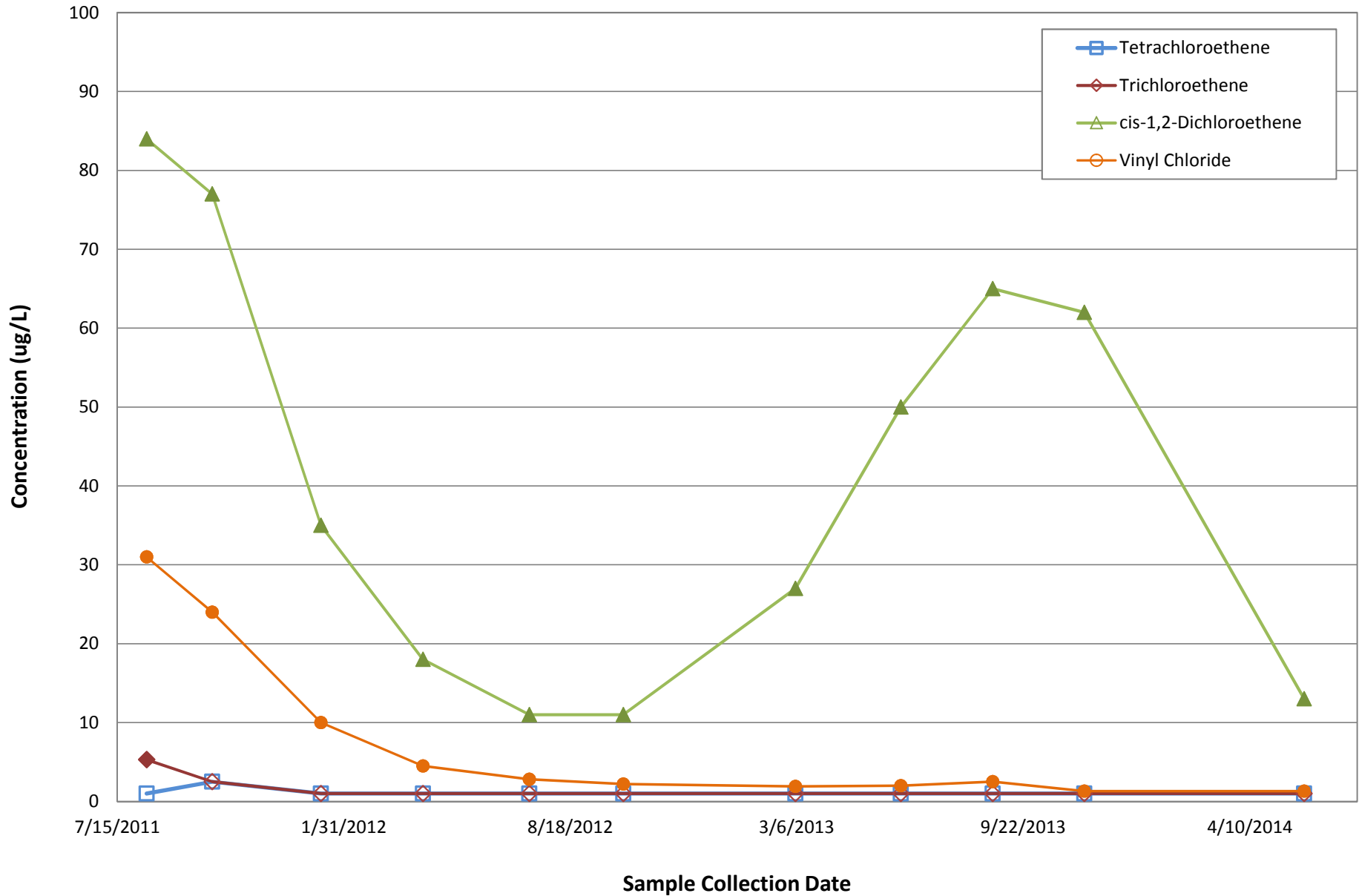
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-07s



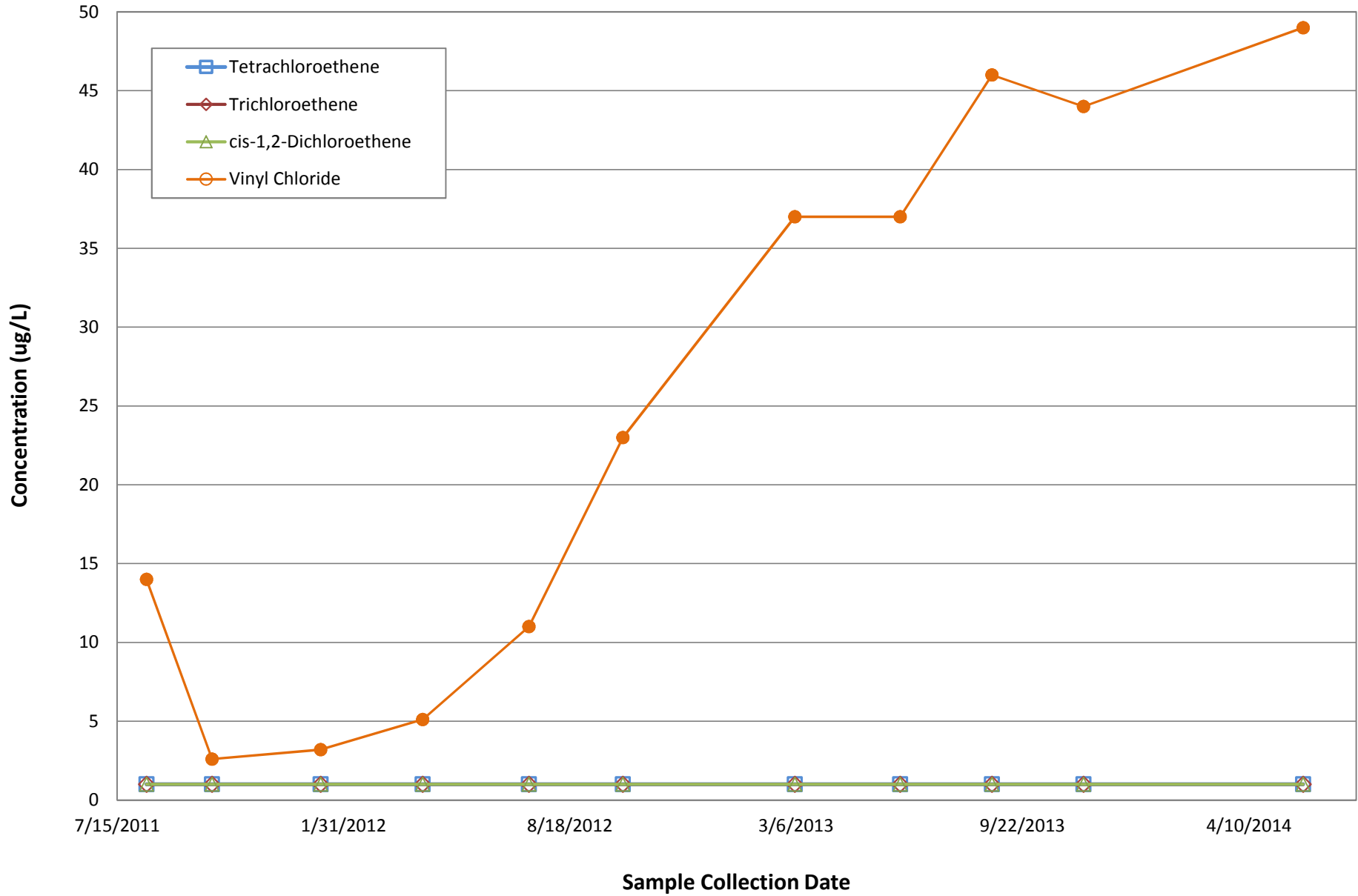
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-08s



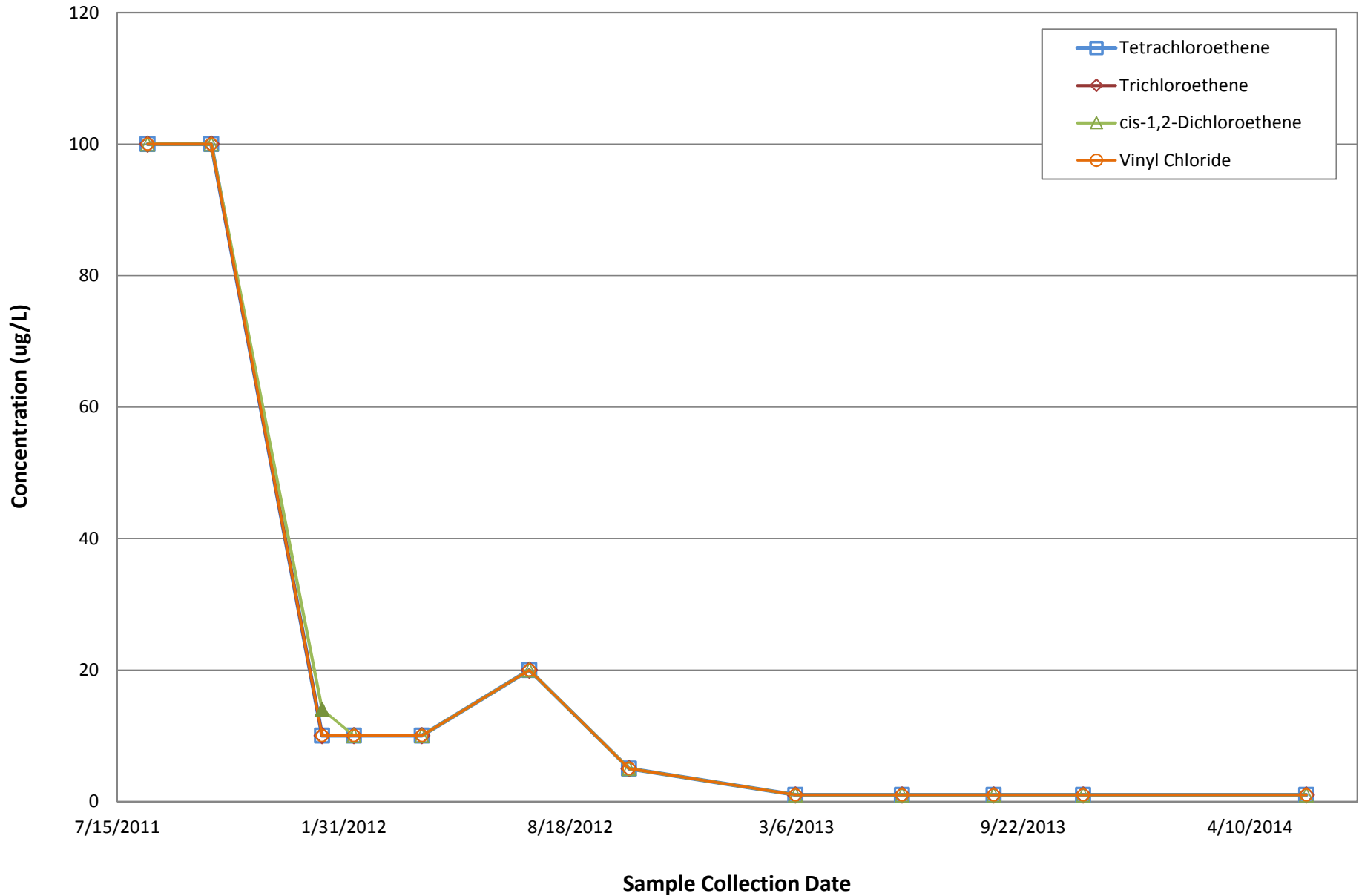
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-08d



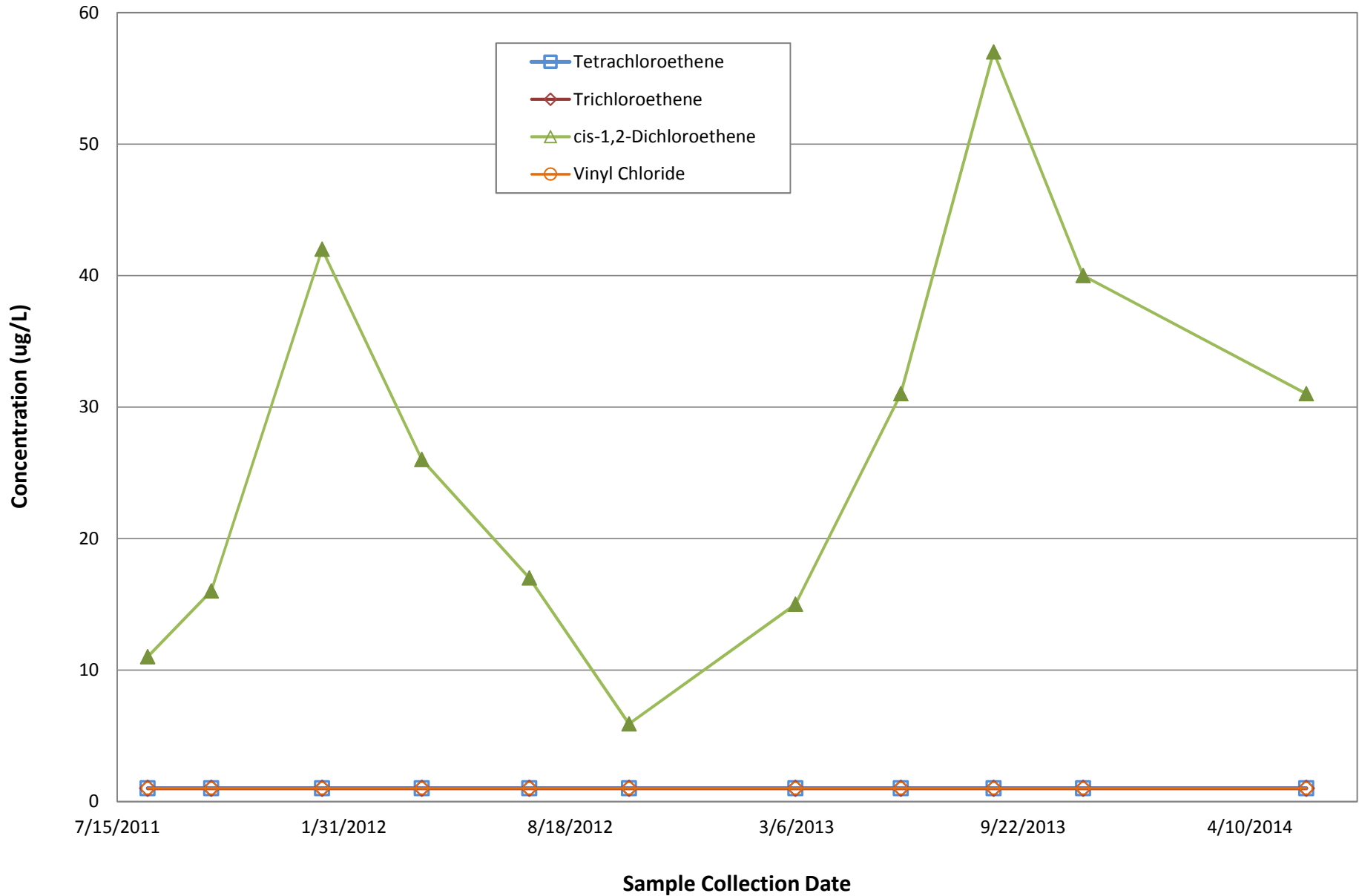
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-09s



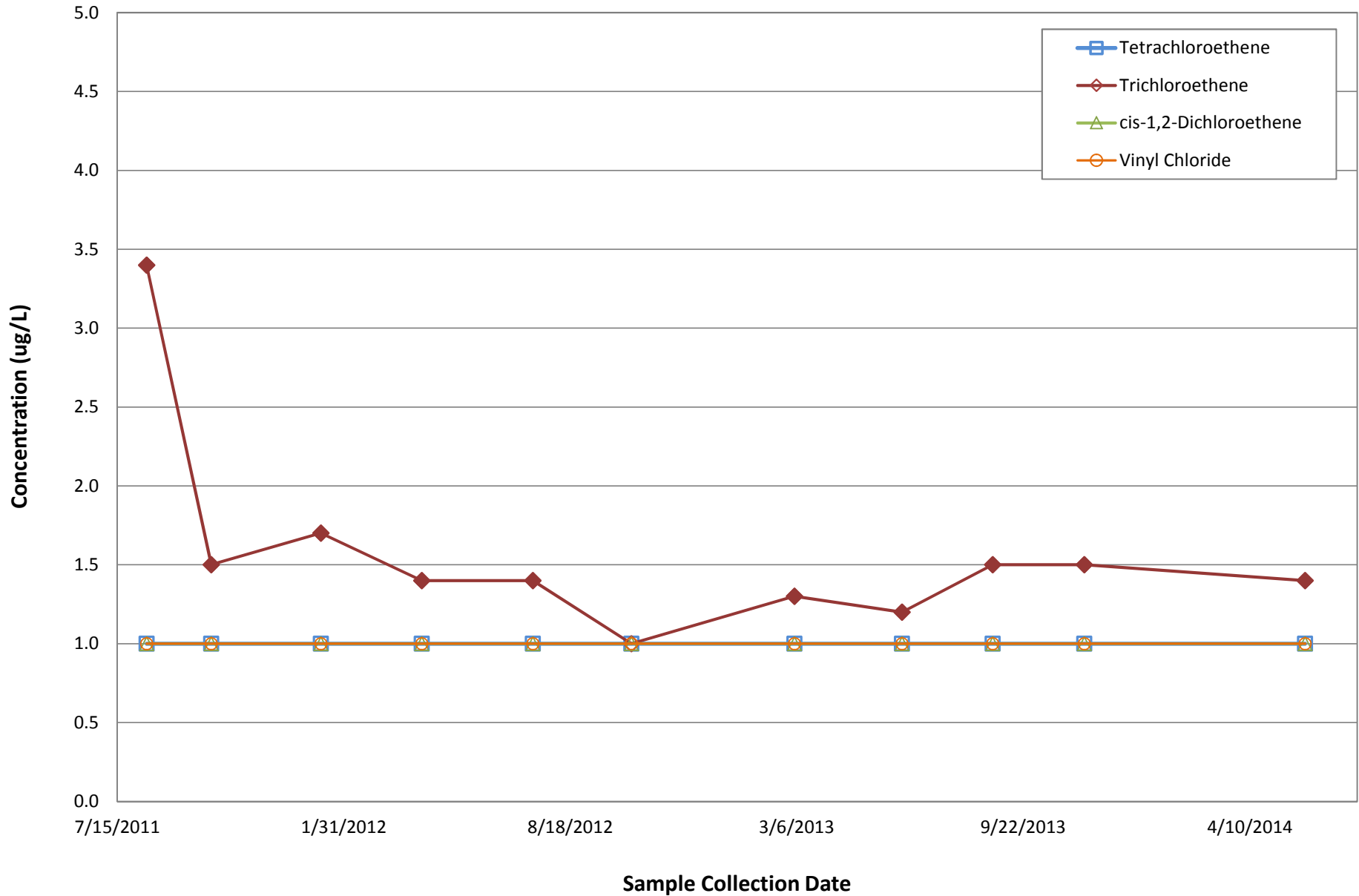
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-10s



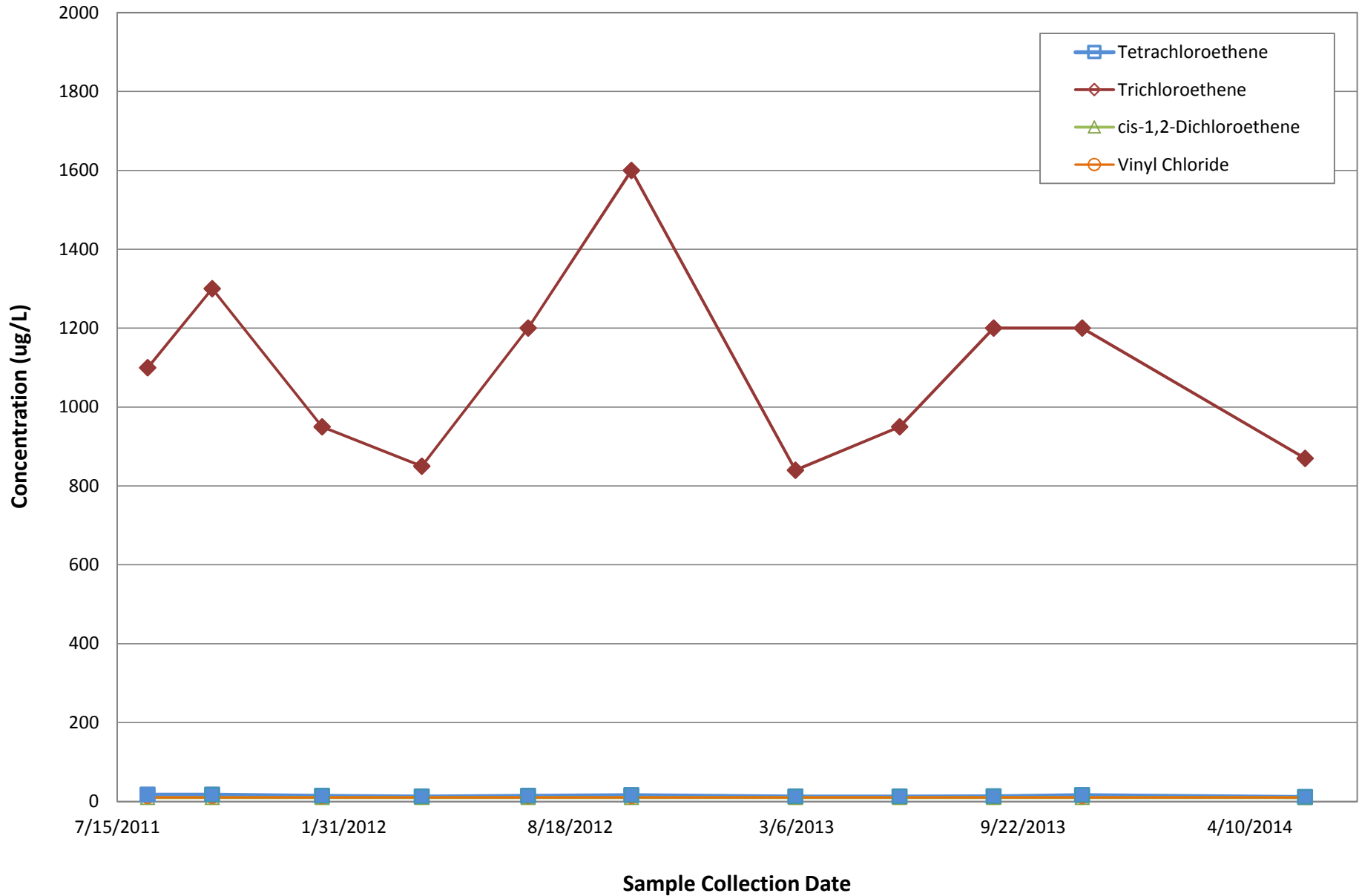
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-11s



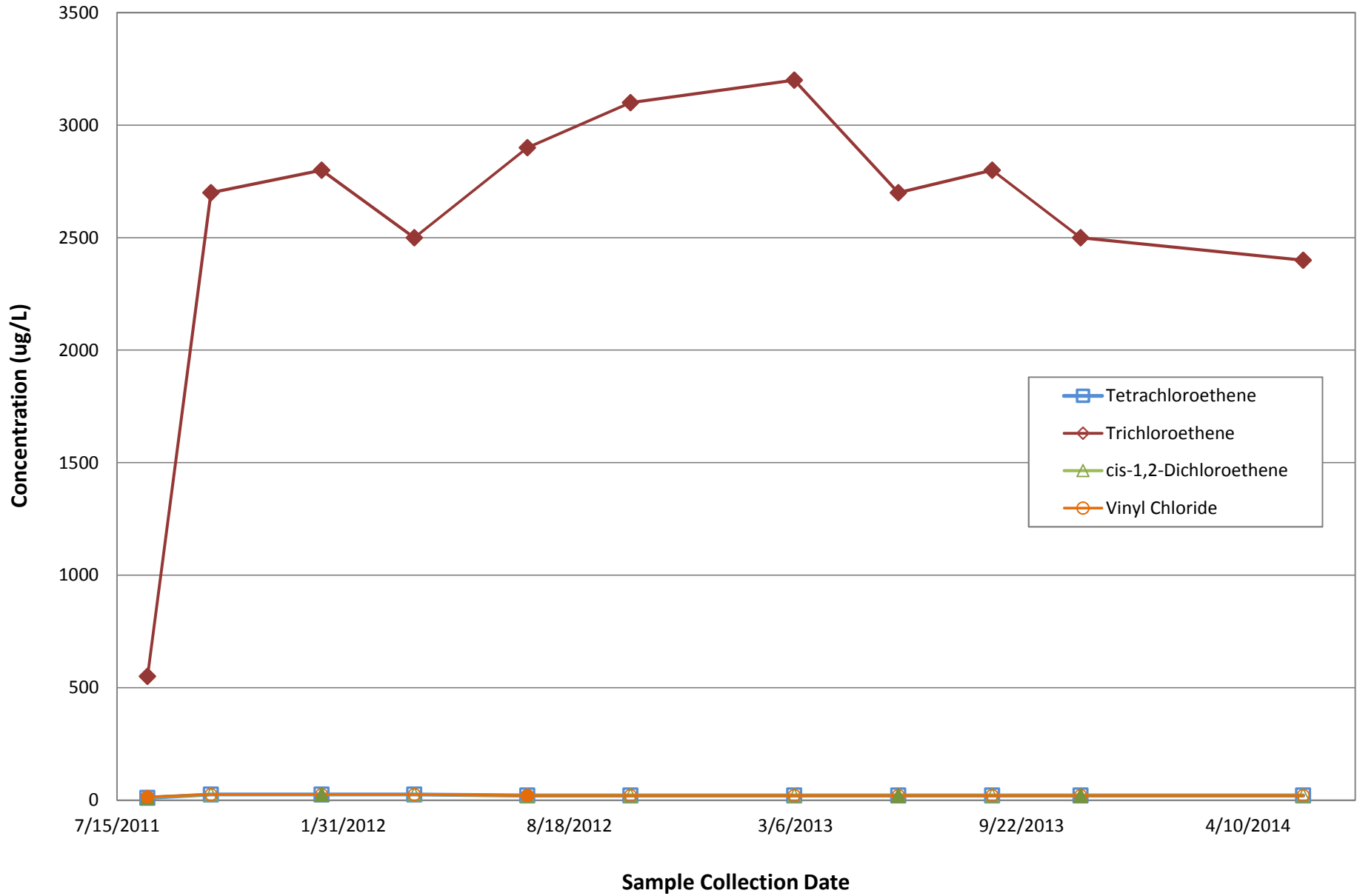
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-12s



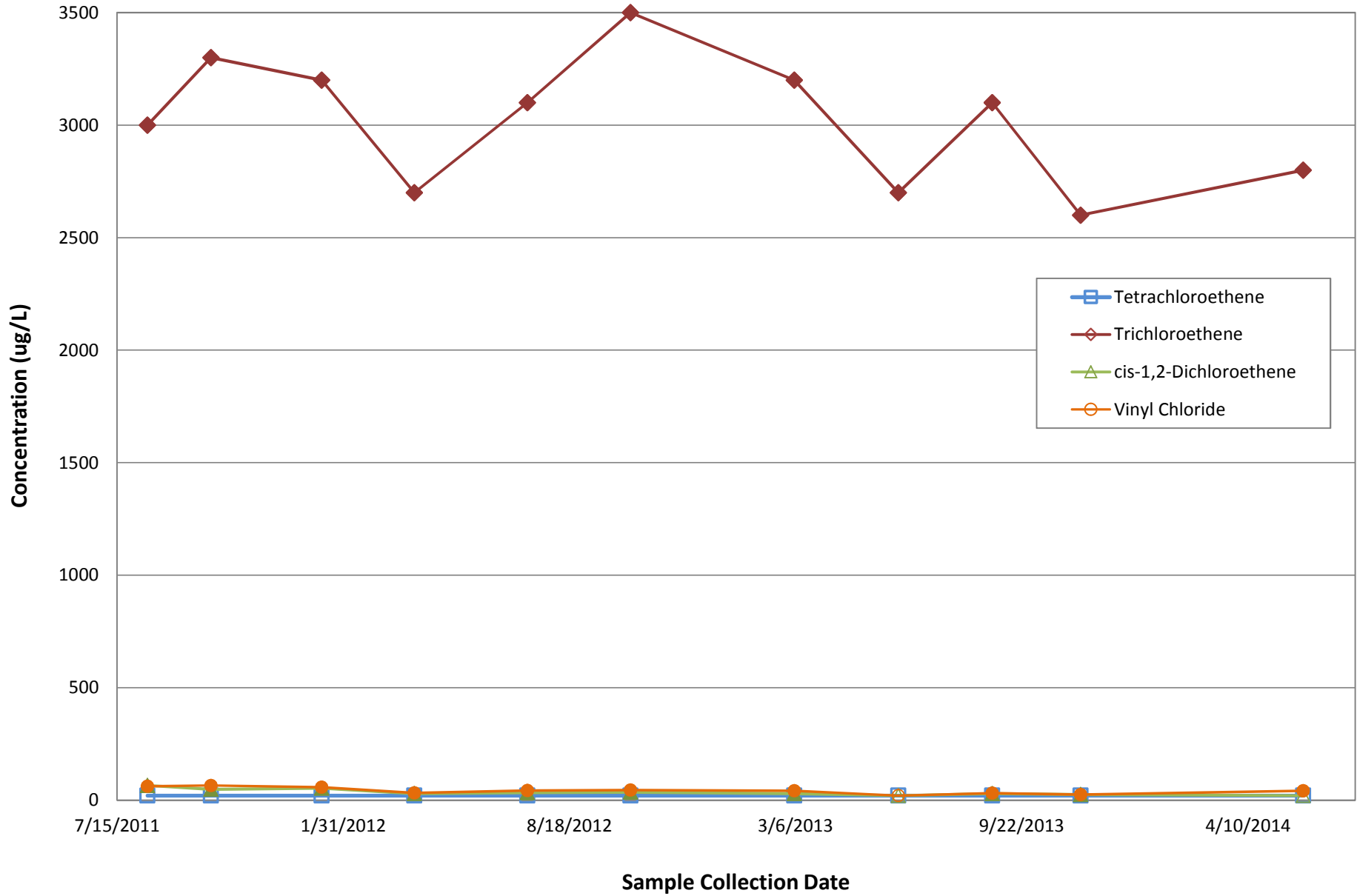
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-13s



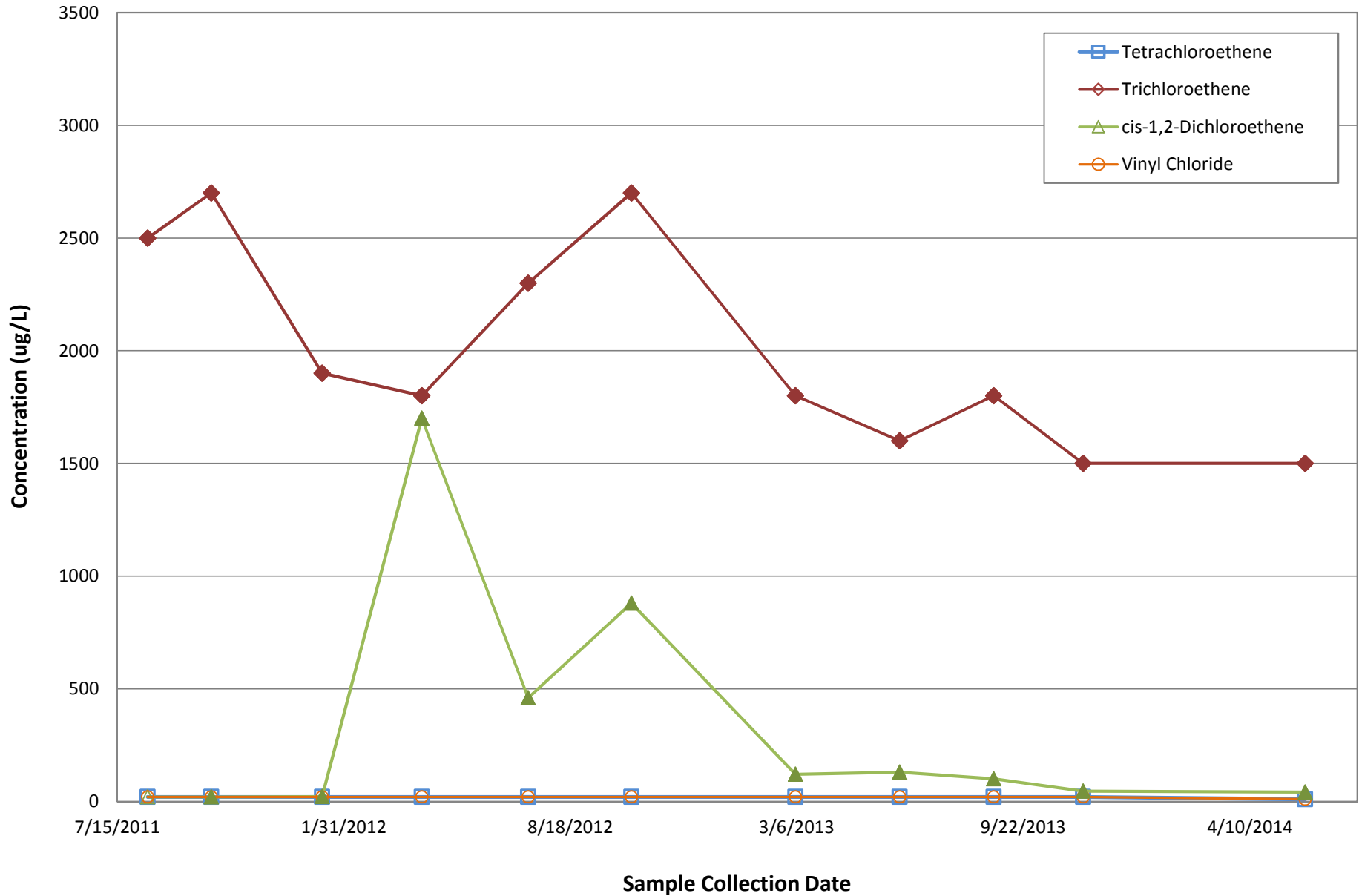
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-14s



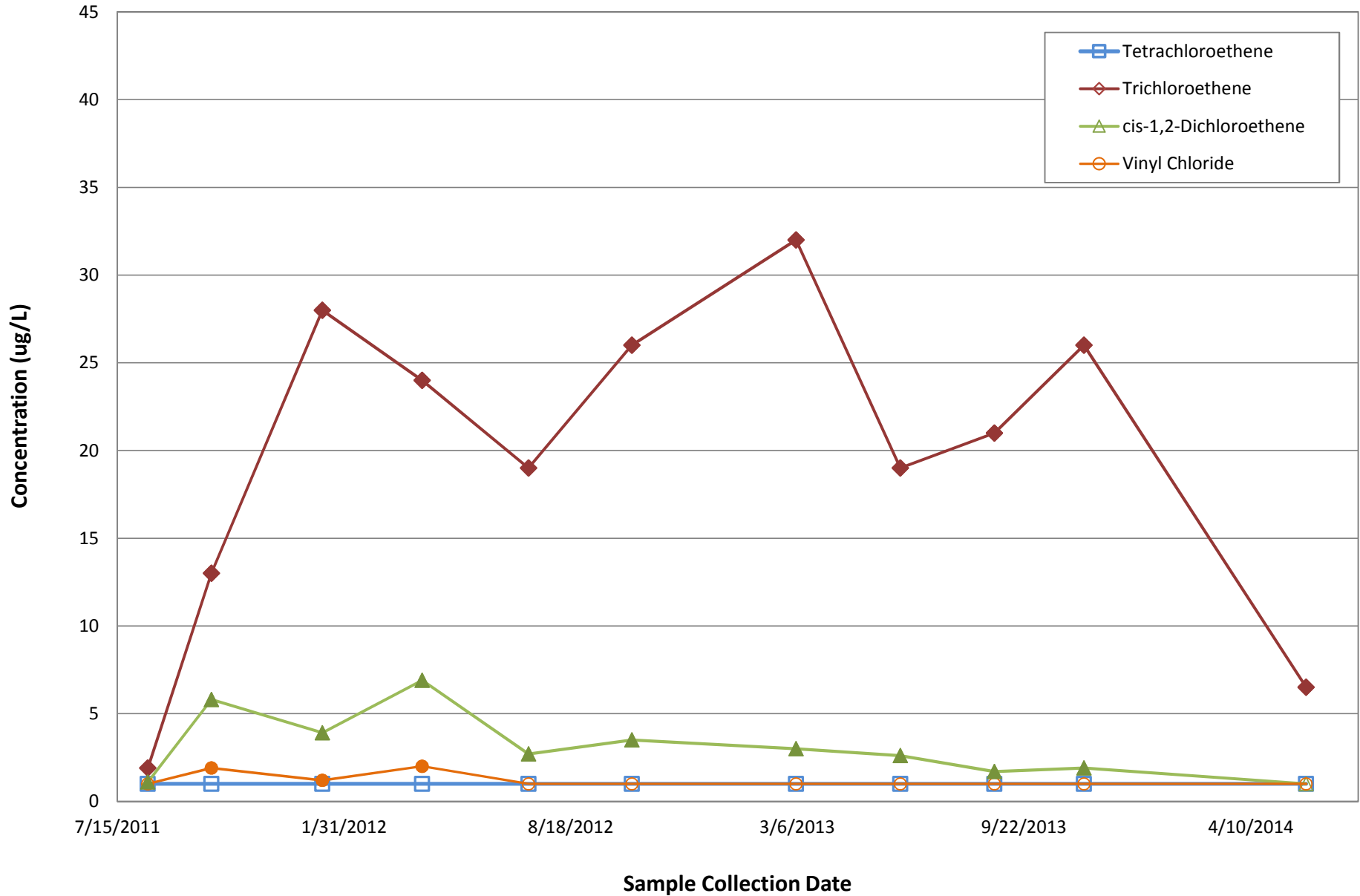
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-15s



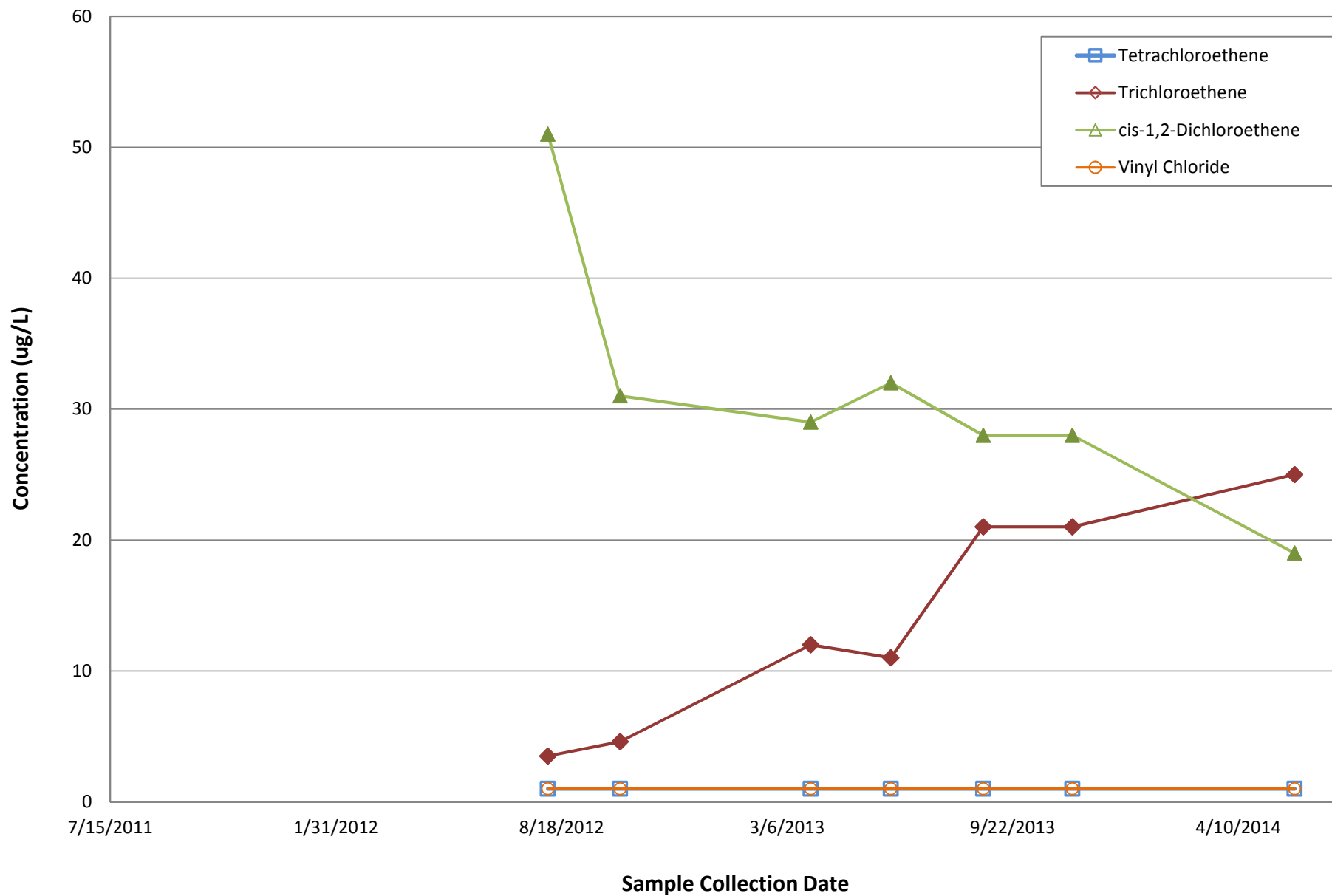
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-15d



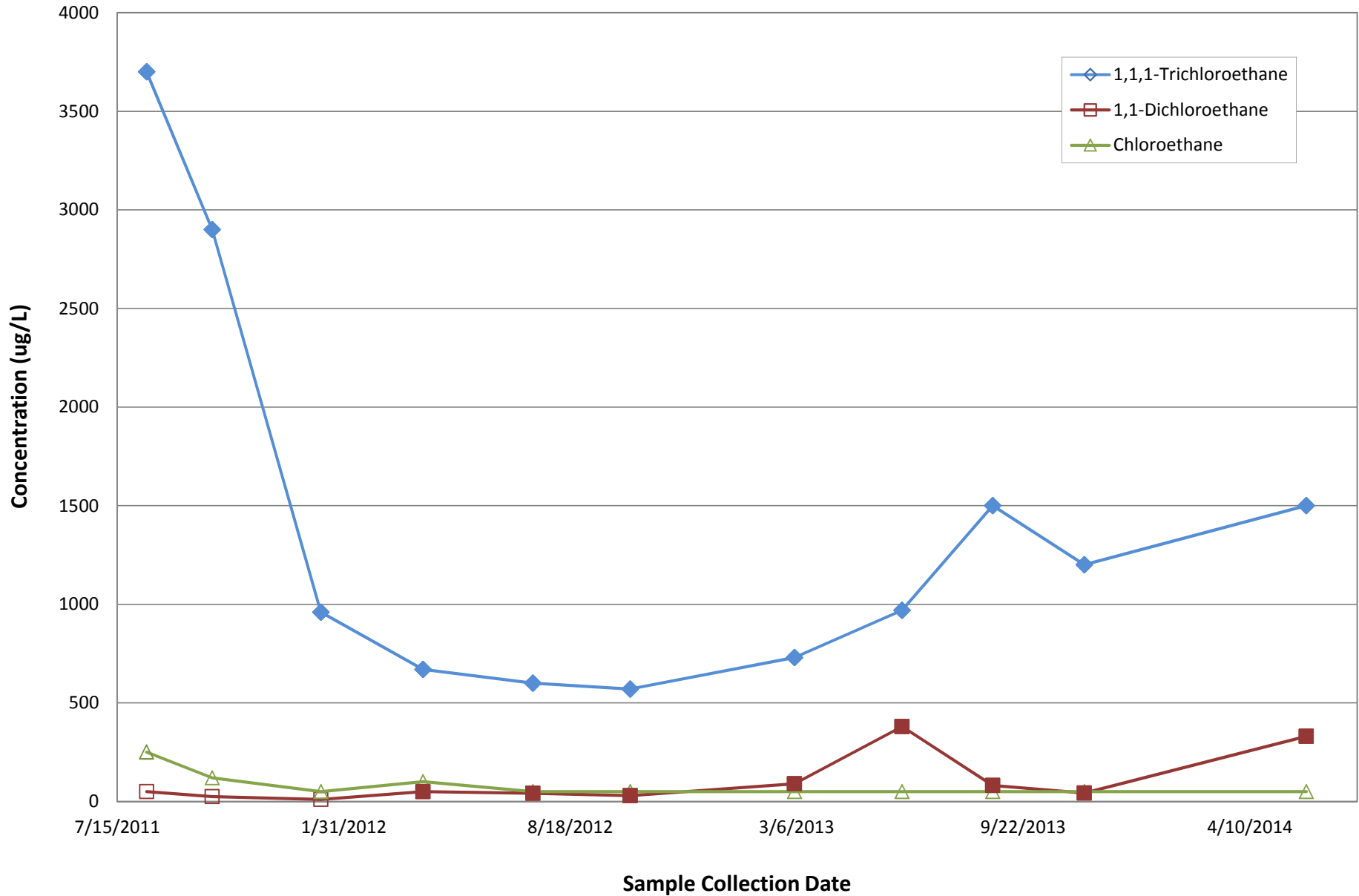
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-16s



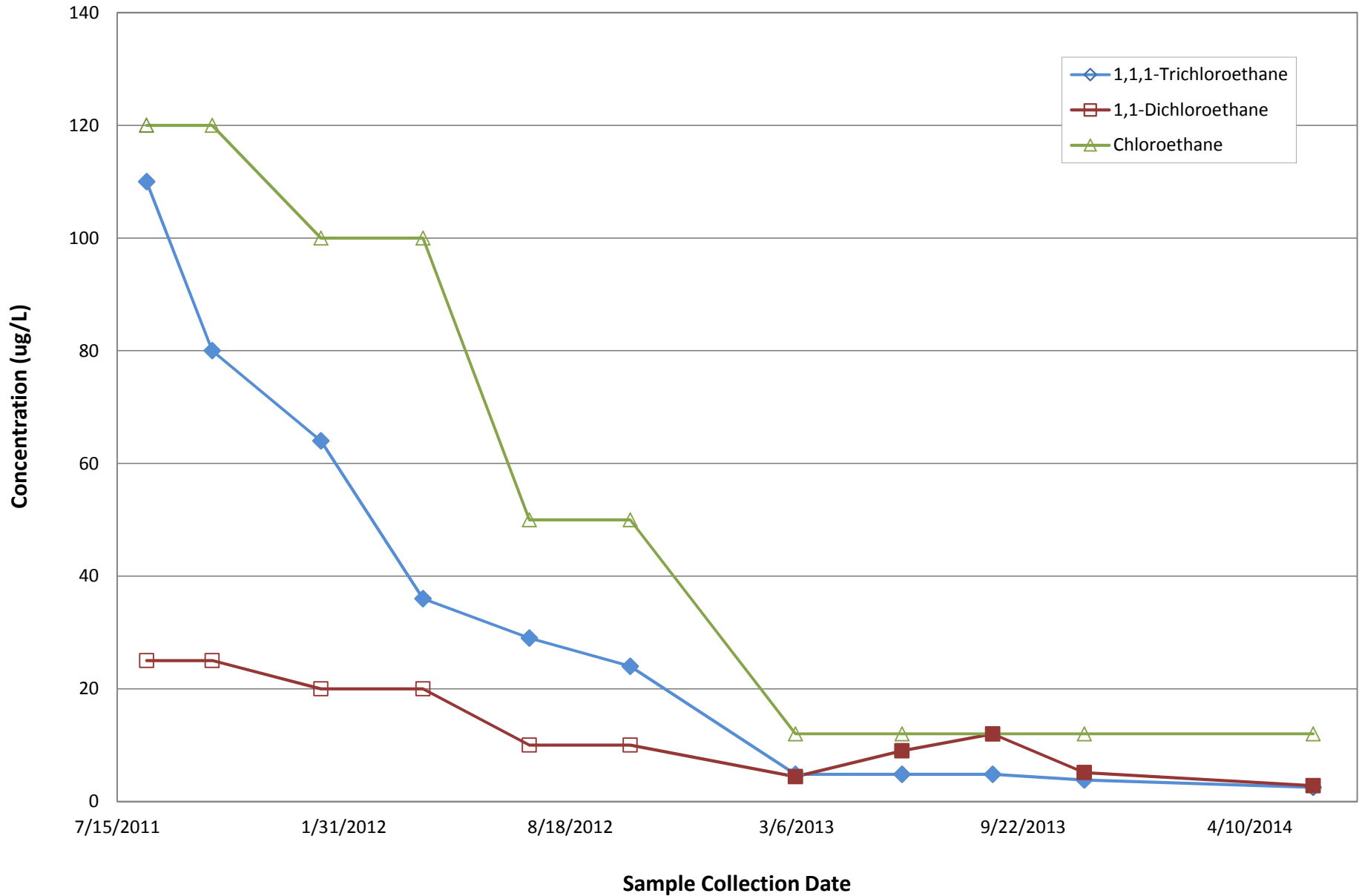
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-01s



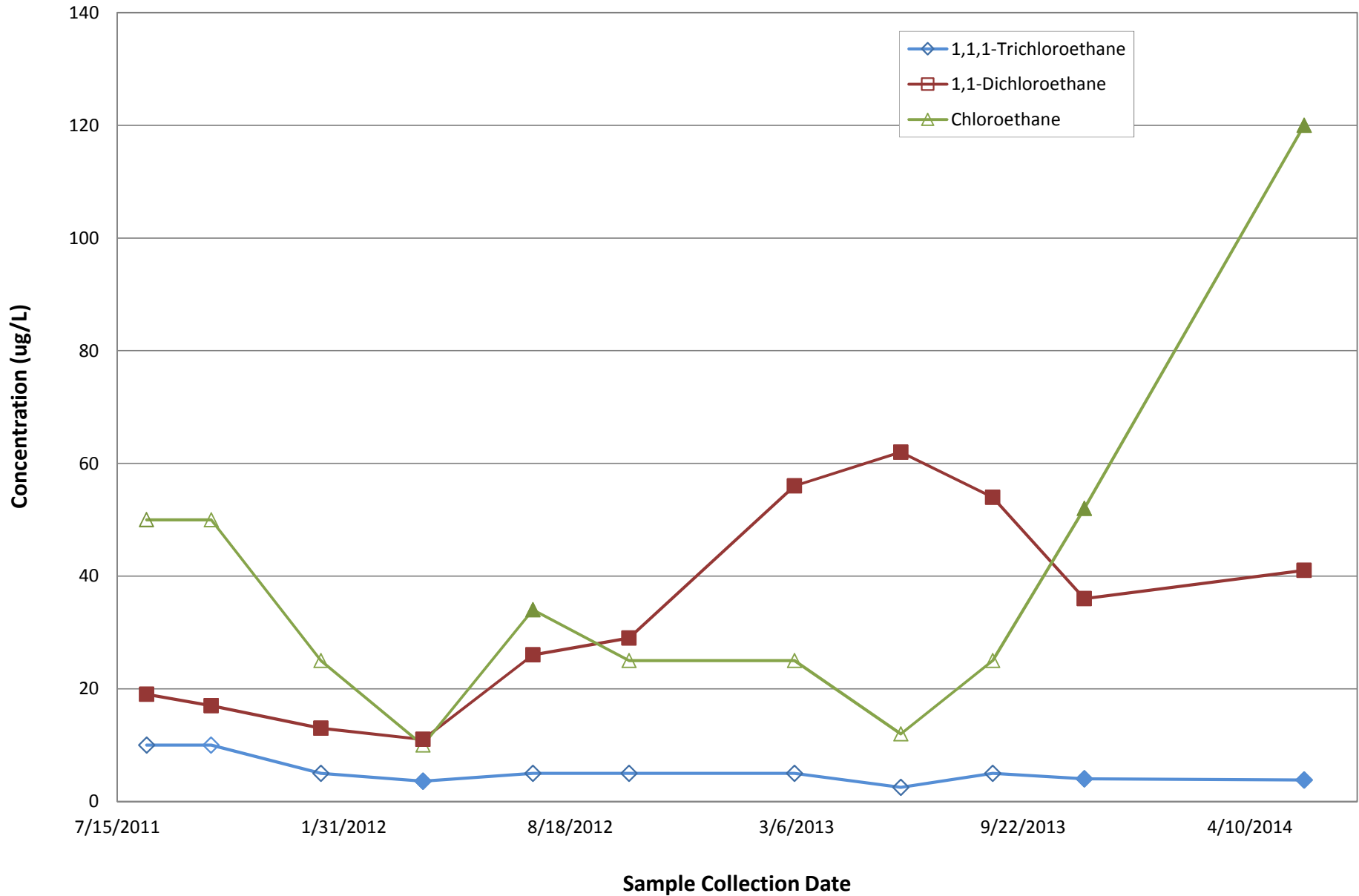
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-02s



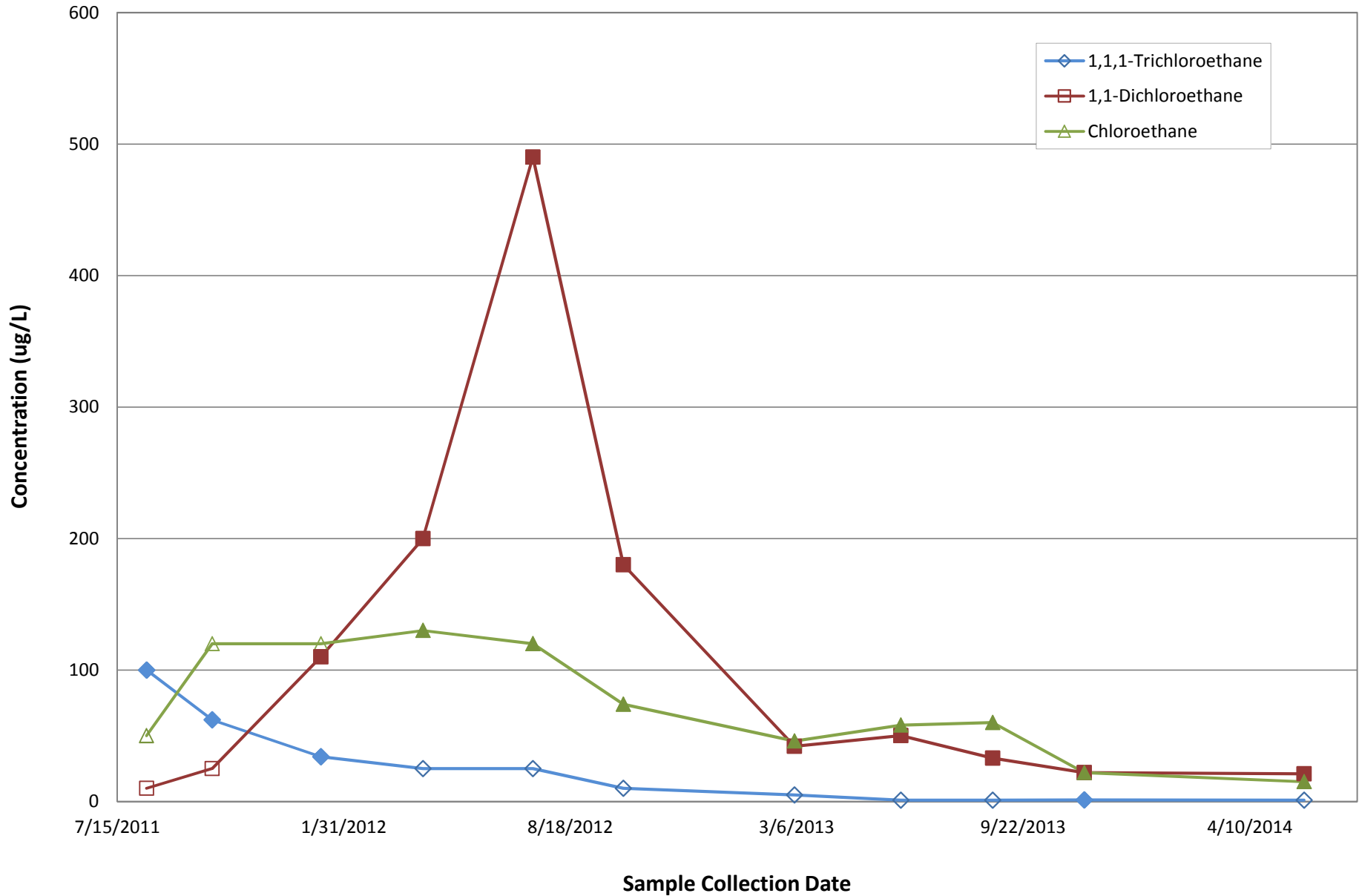
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-03s



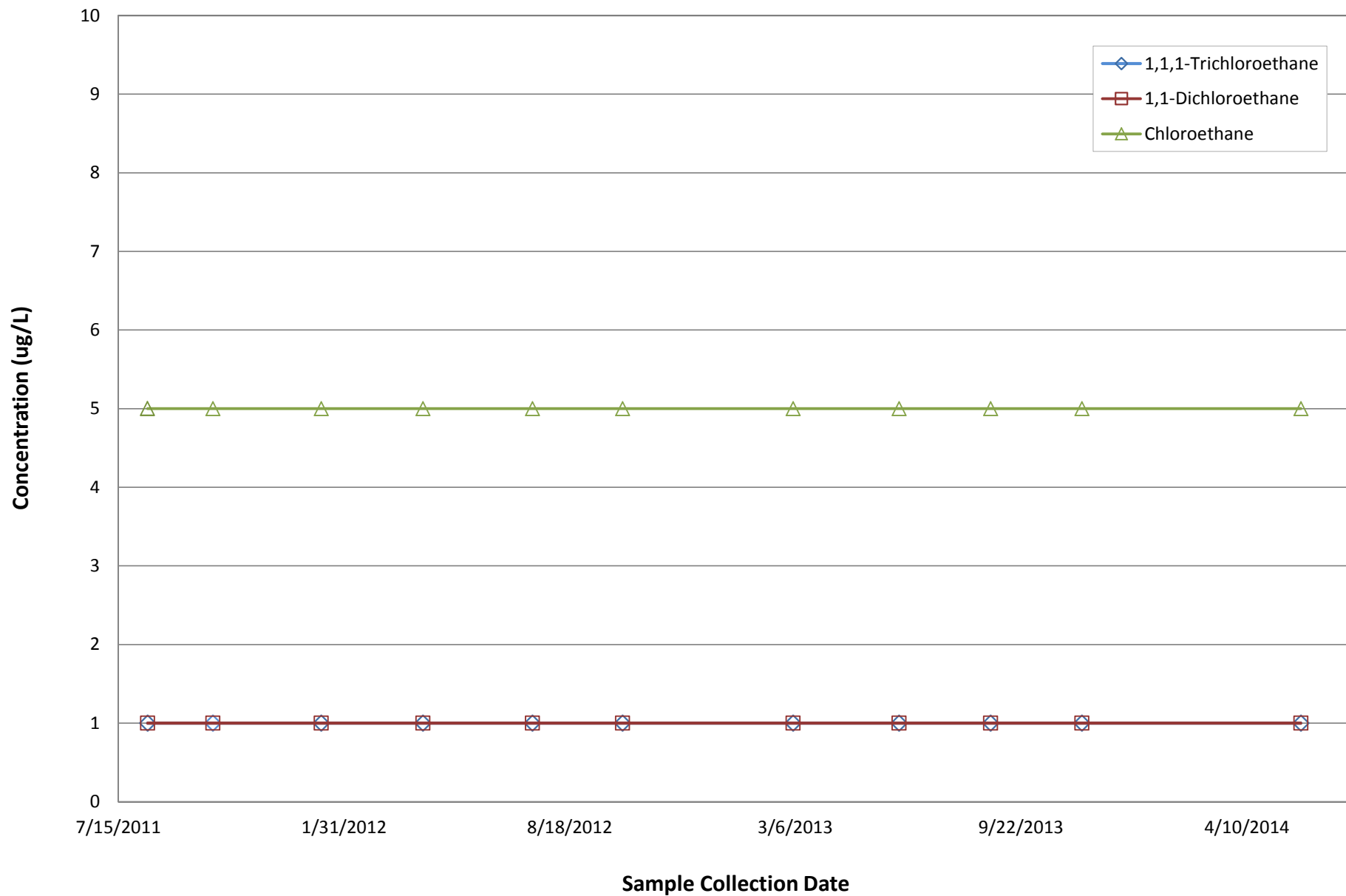
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-04s



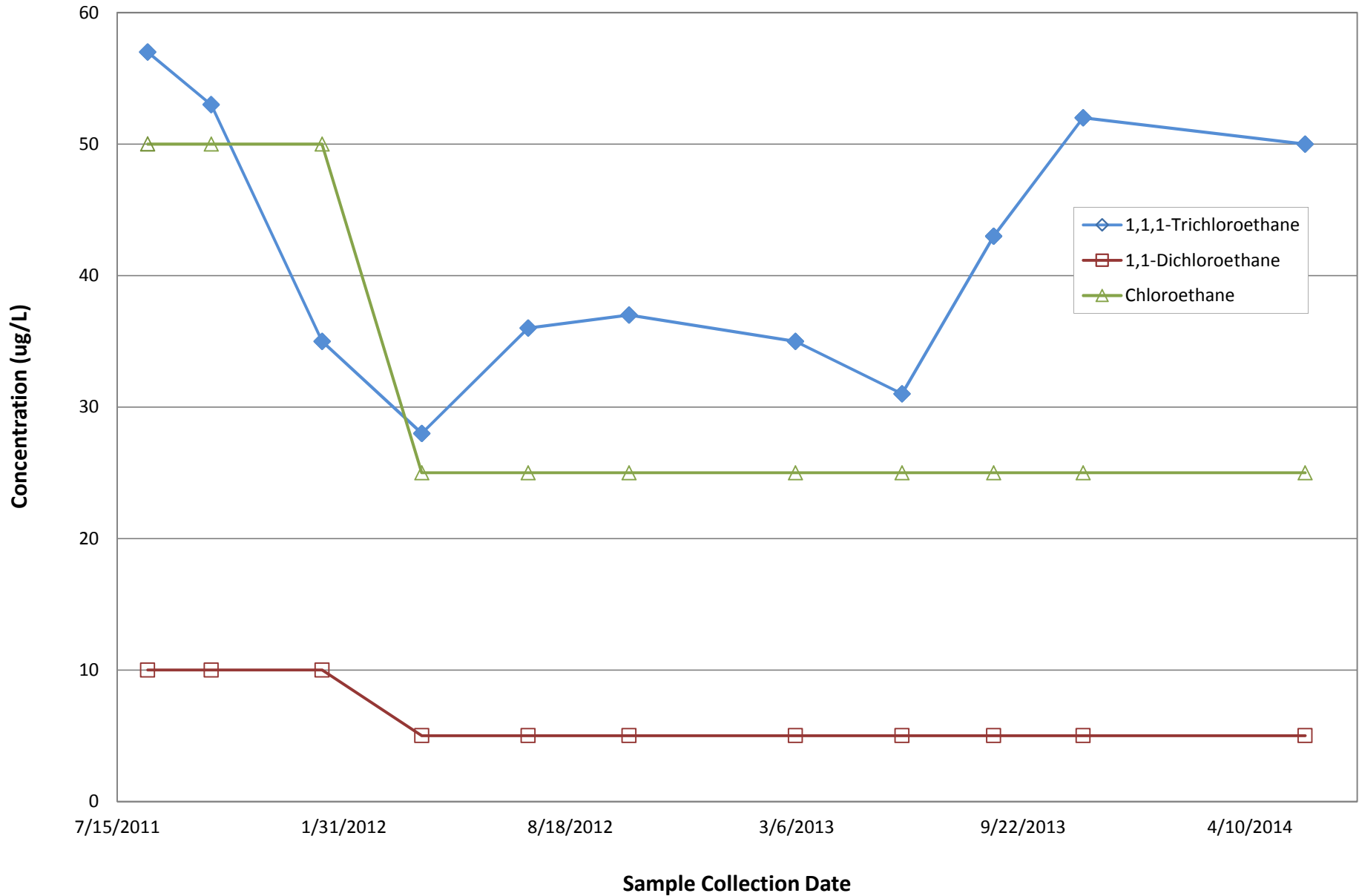
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-04d



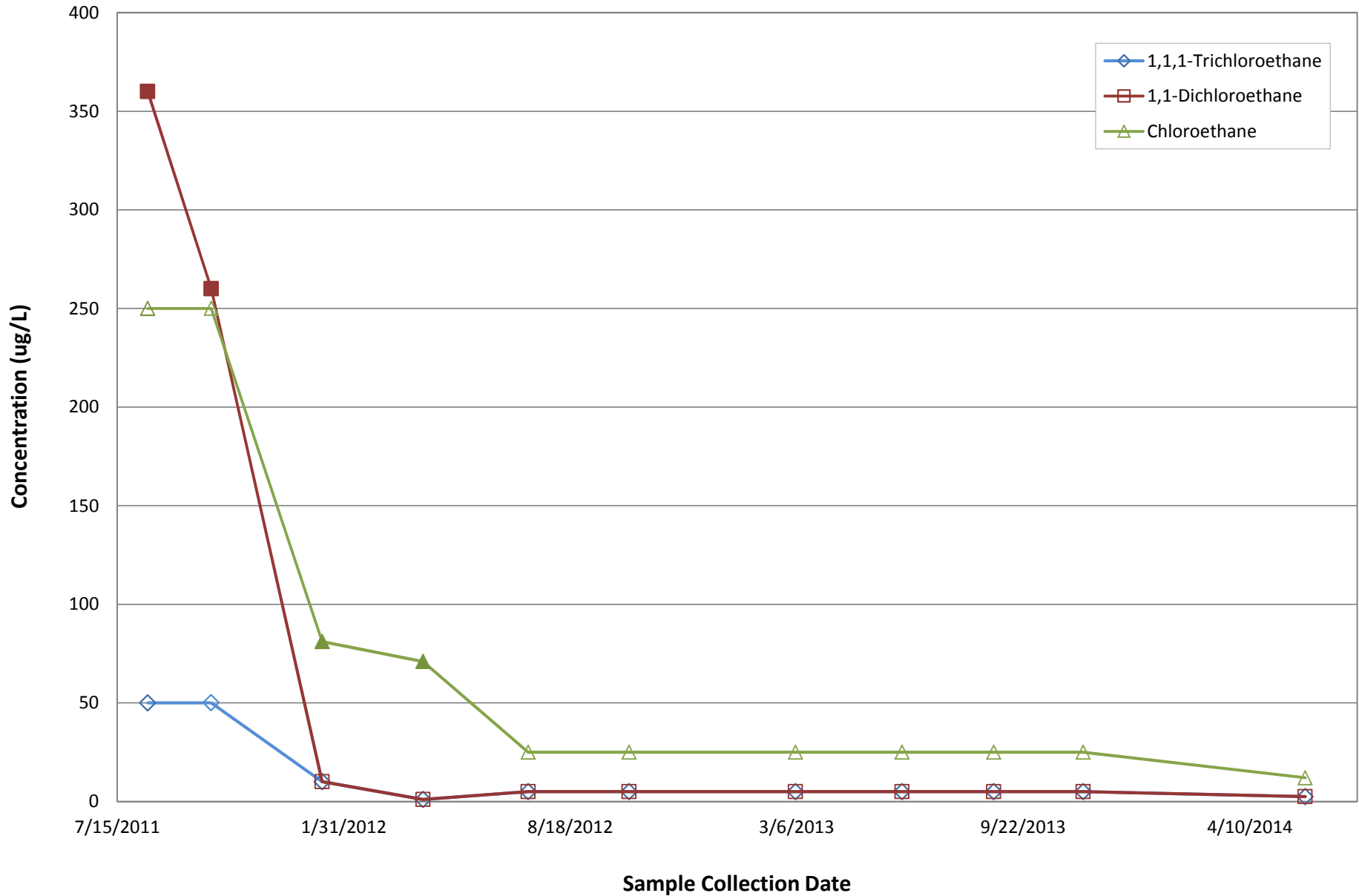
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-05s



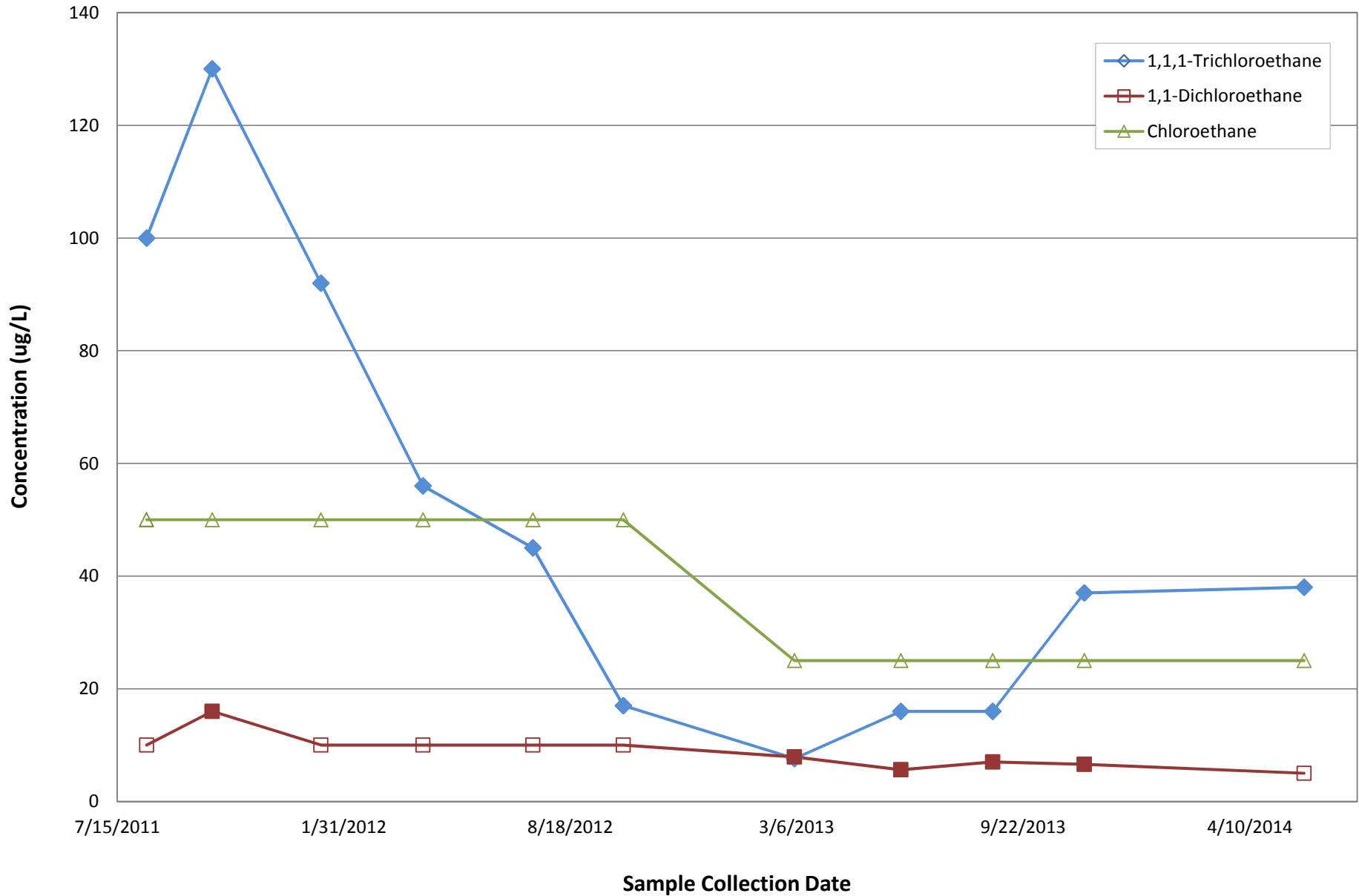
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-06s



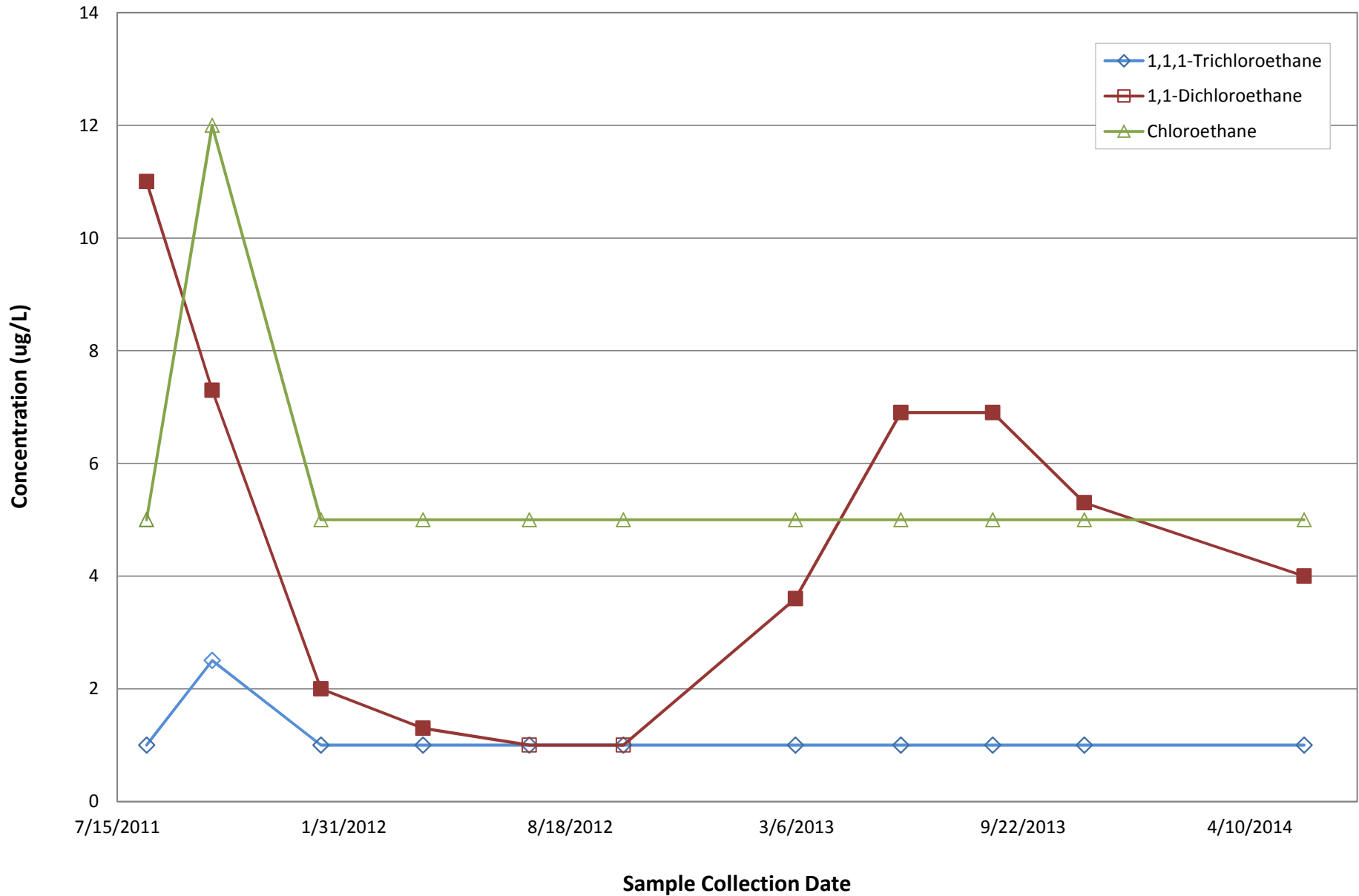
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-07s



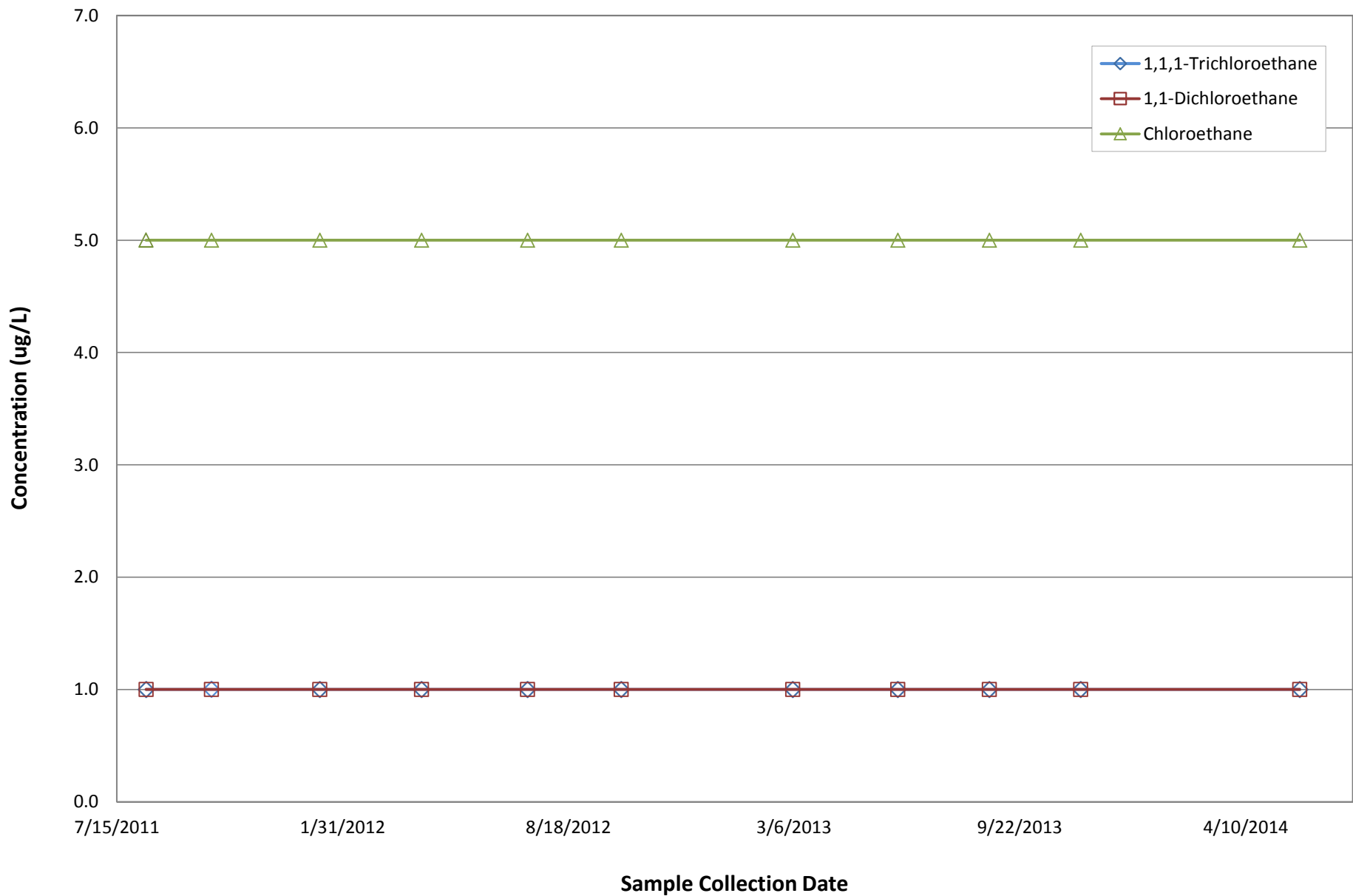
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-08s



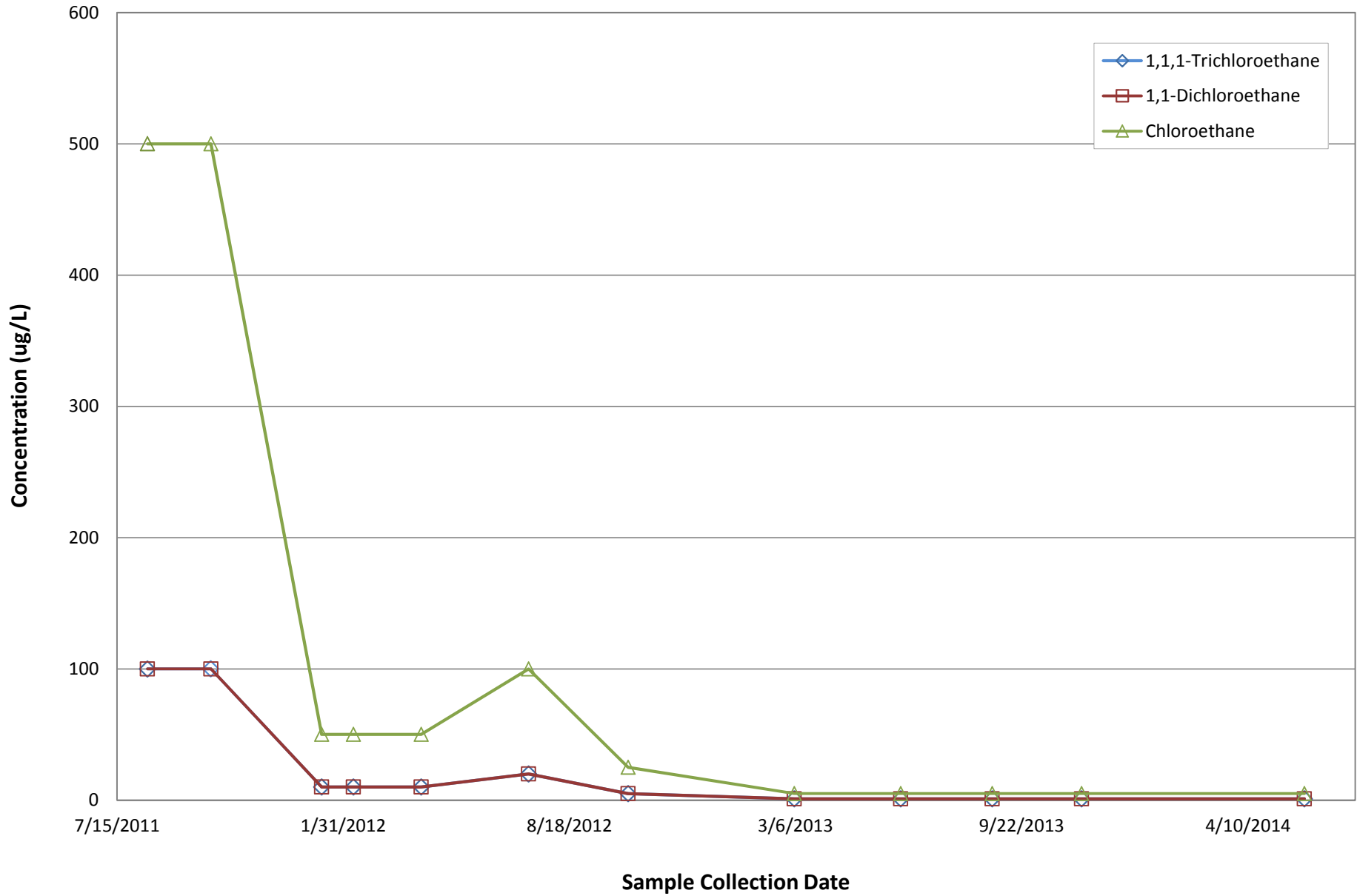
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-08d



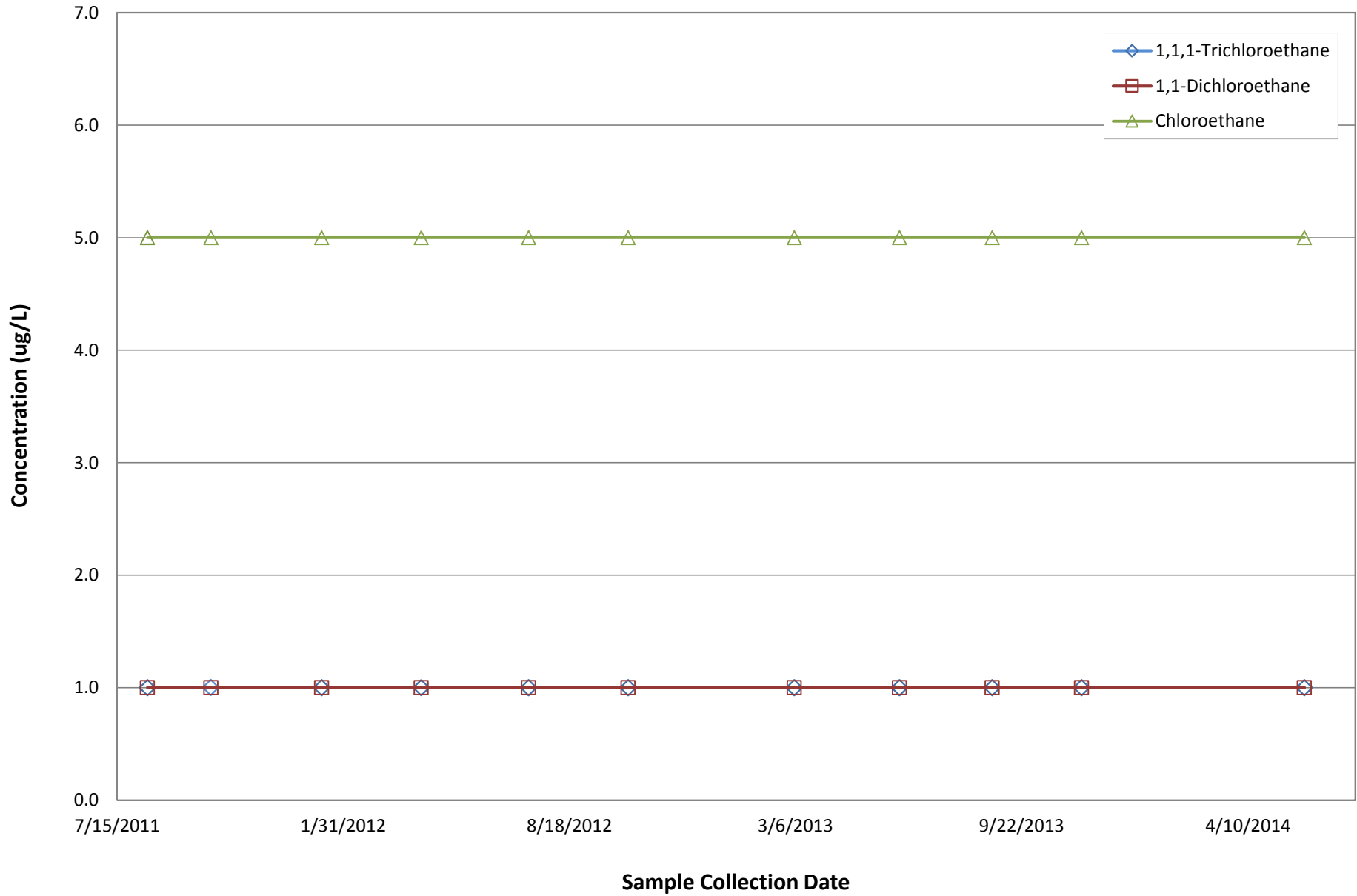
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-09s



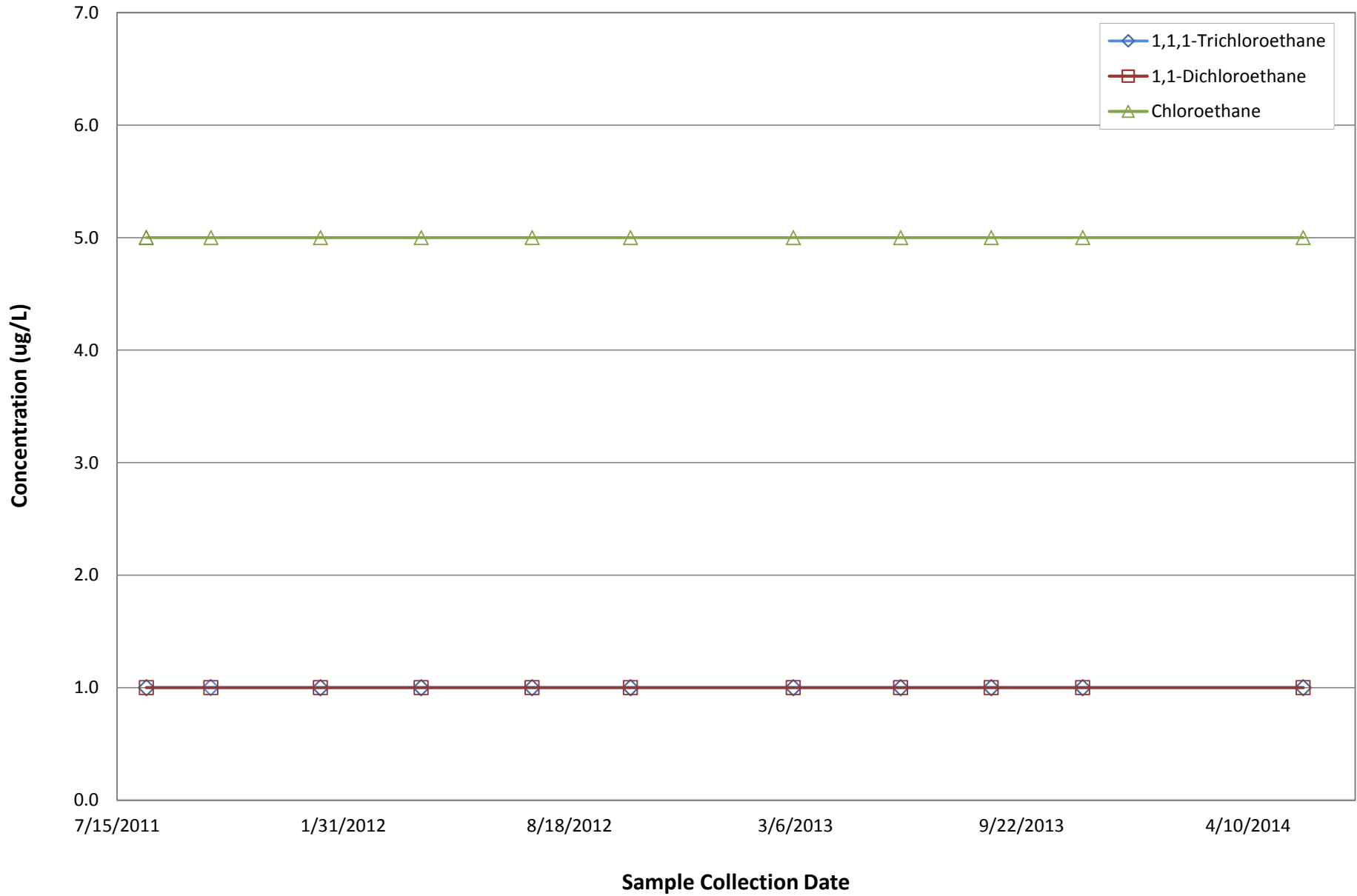
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-10s



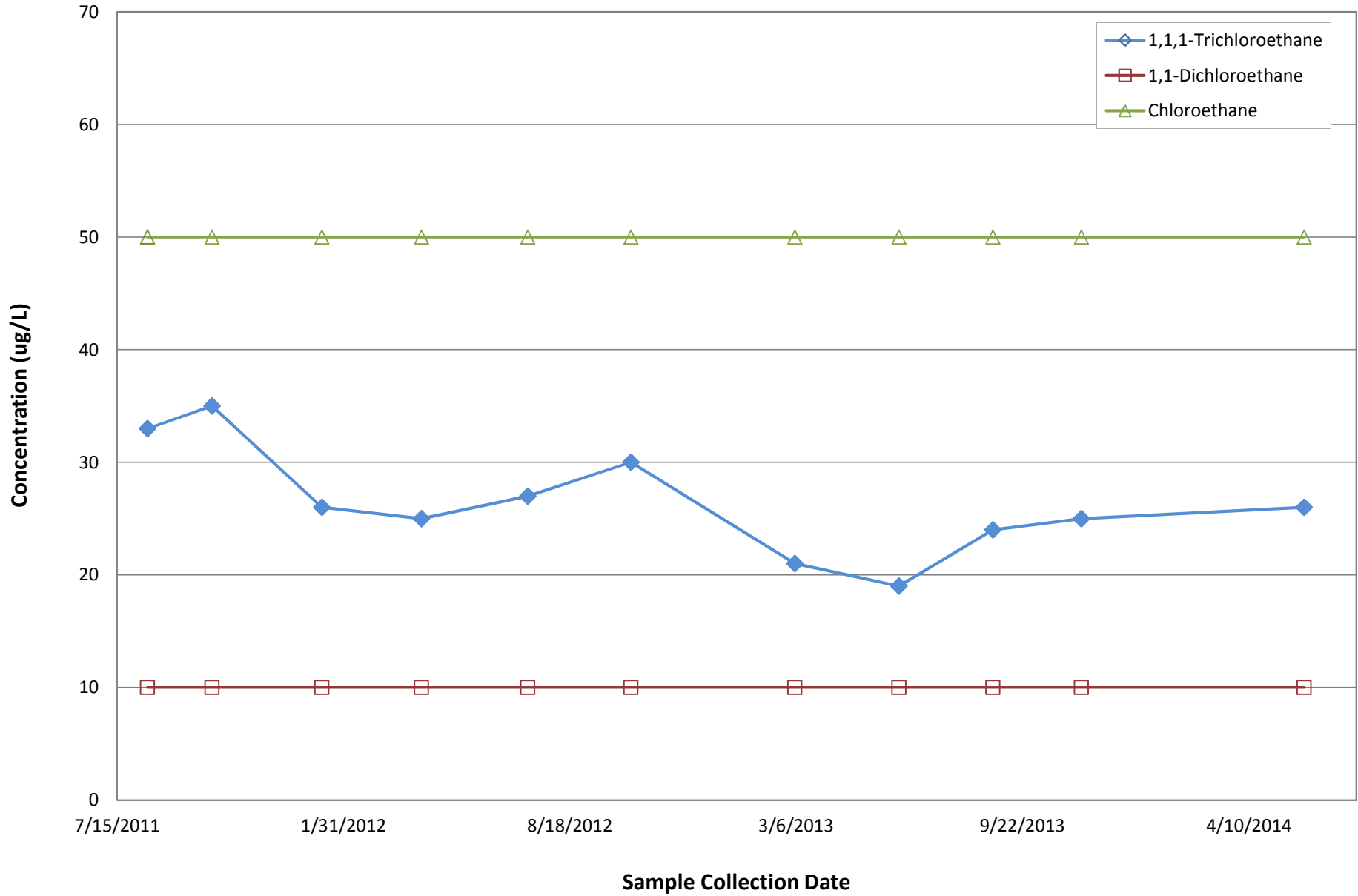
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-11s



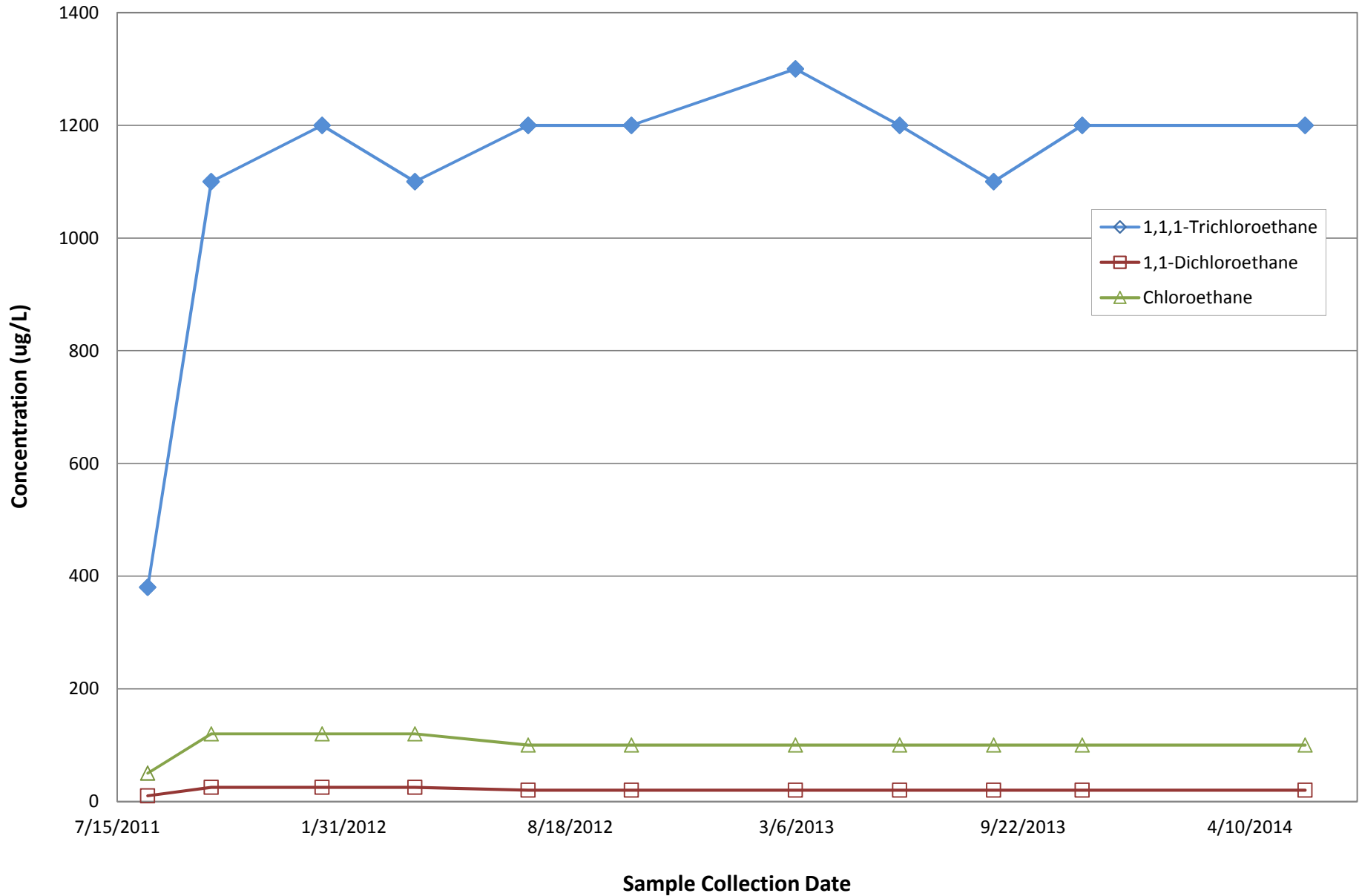
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-12s



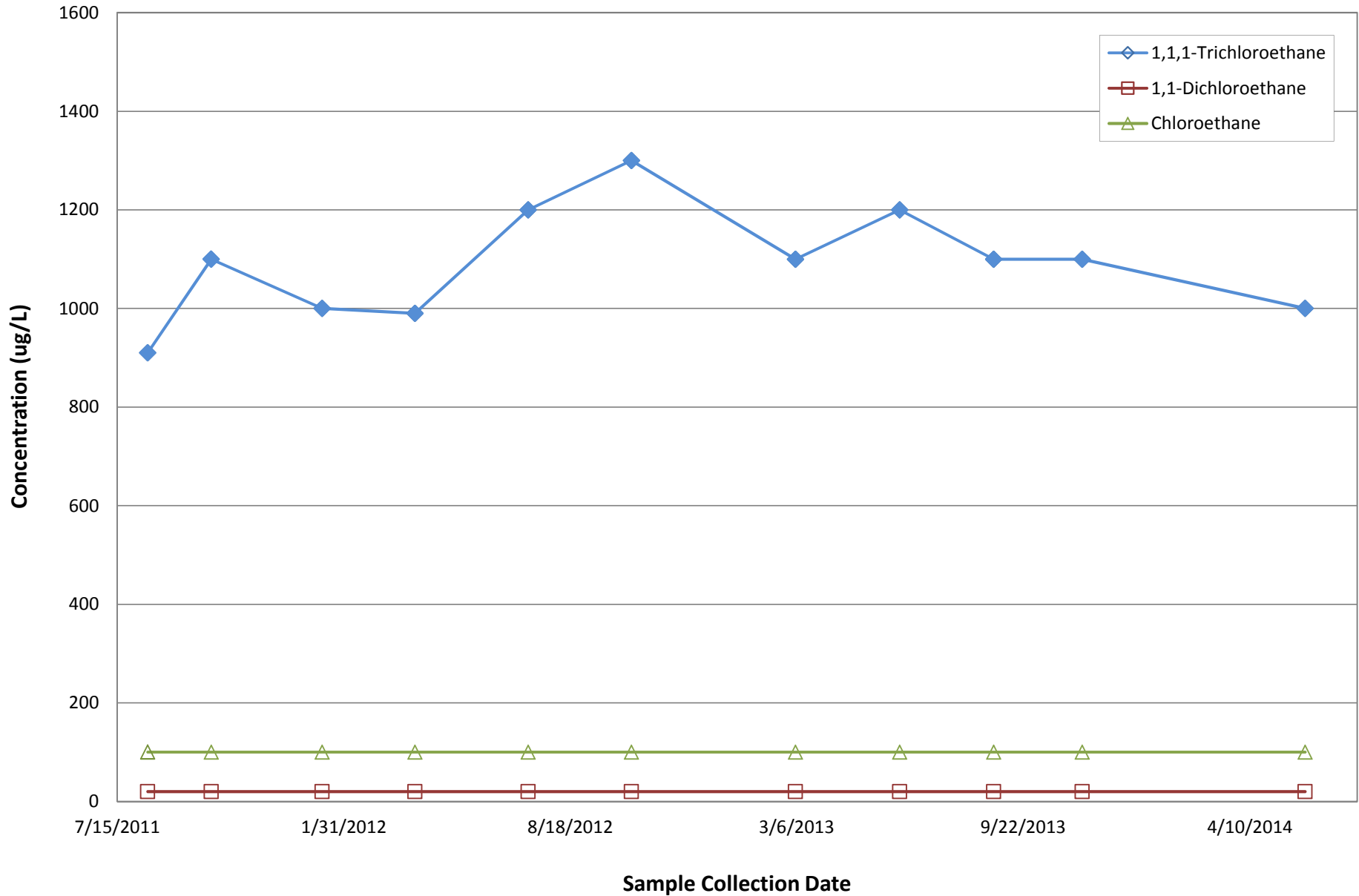
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-13s



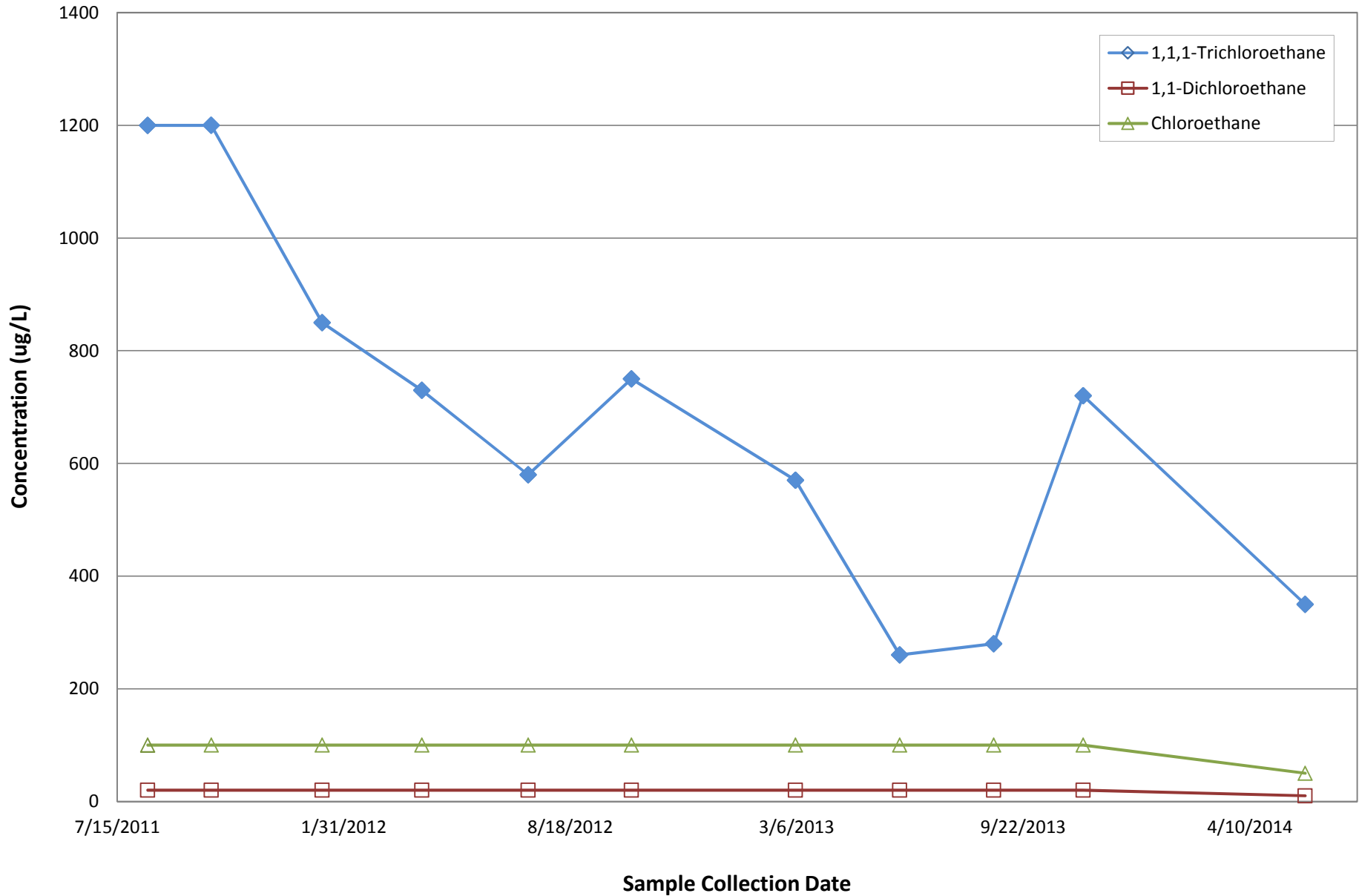
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-14s



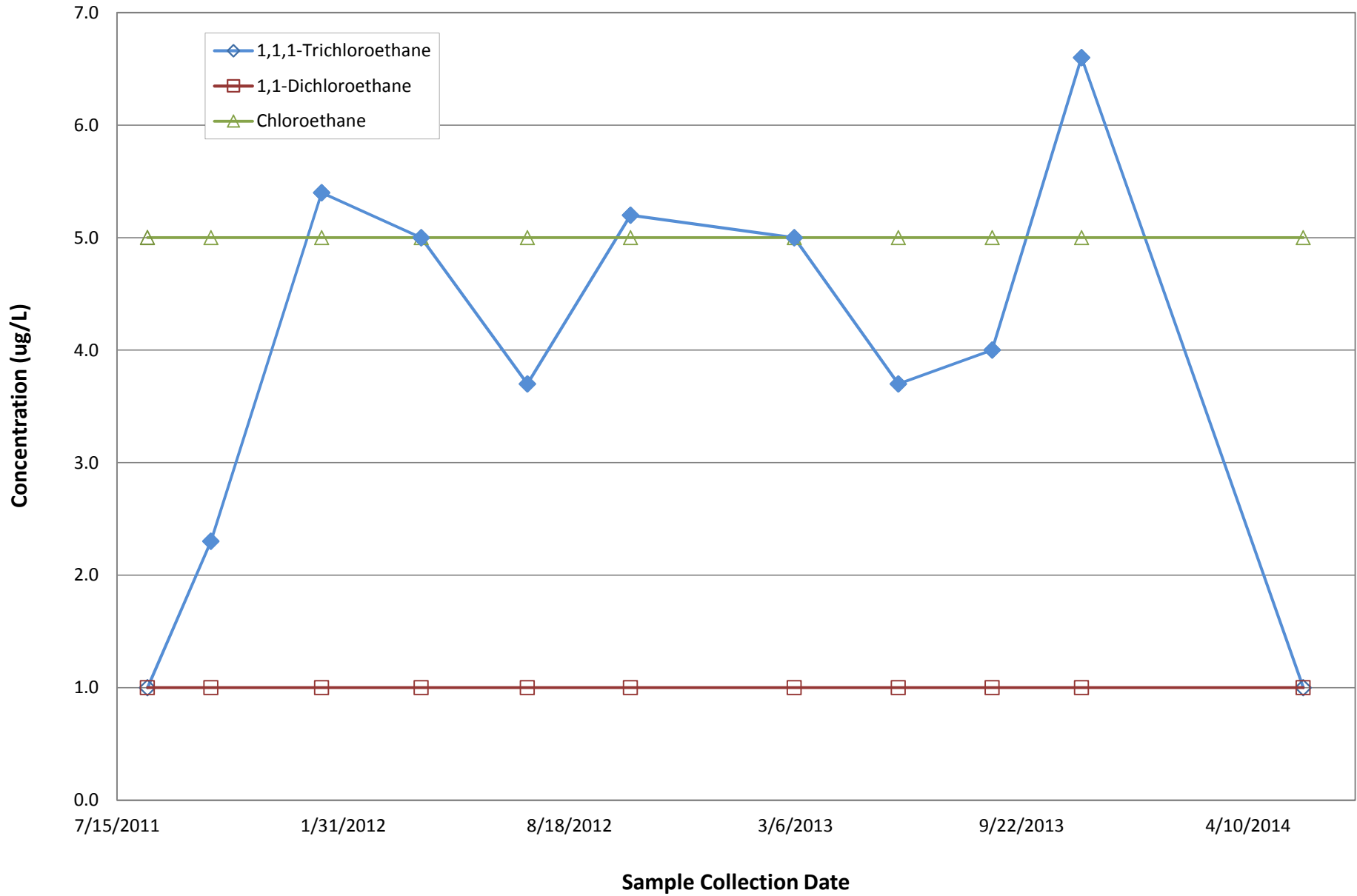
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-15s



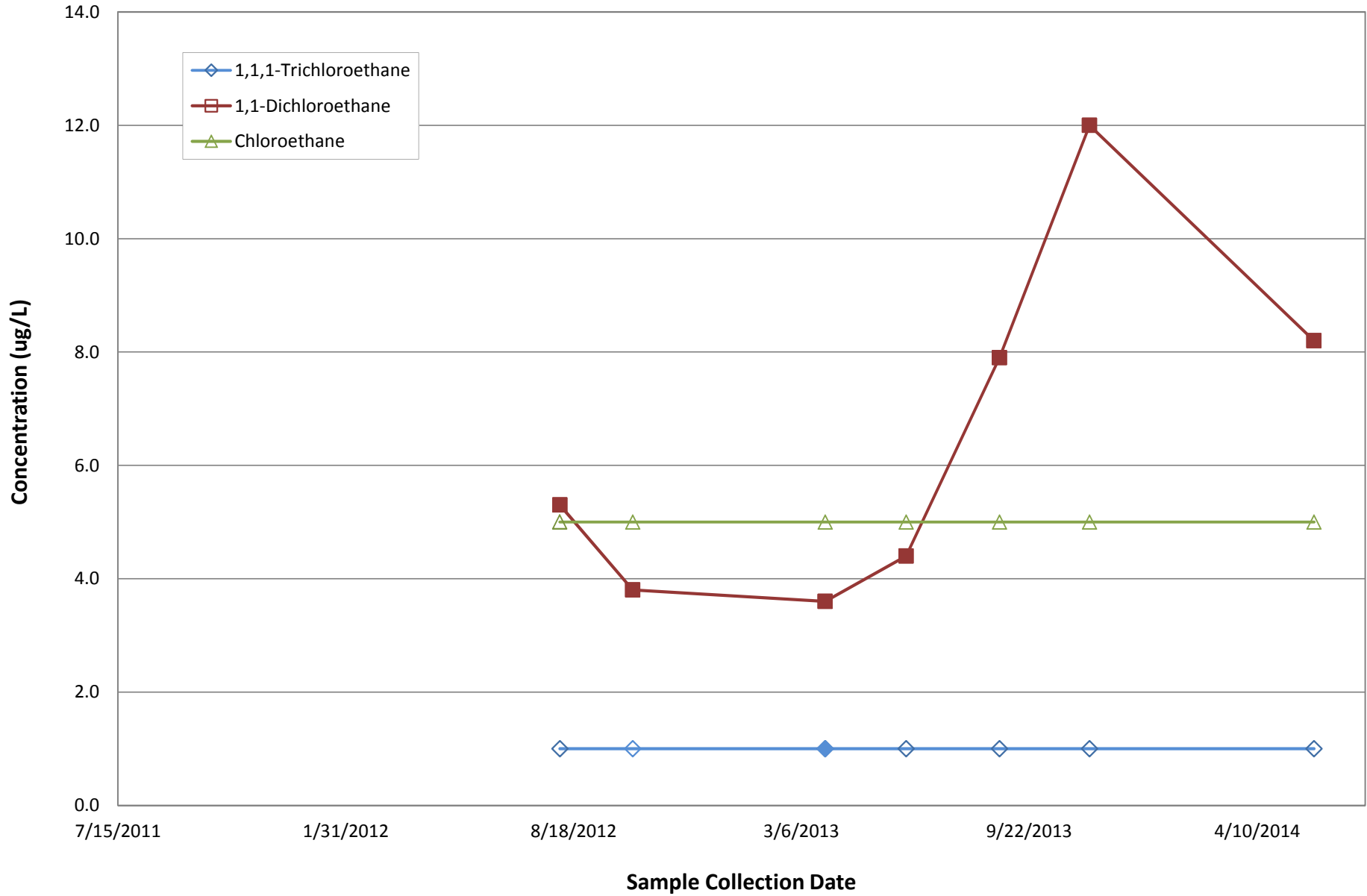
Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-15d



Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

PRB-16s



Note: Closed symbols indicate a detection of the specified compound. Open symbols indicate that the compound was not detected above the concentration specified (i.e. the reporting limit).

Technical Memorandum

Attachment 3
Supporting Tables for Isoconcentration Maps

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-01s (16-21') Depth to Groundwater Approx. 16 - 19'	3/13/2009	<100	<100	<20	<20	<20	<20	750	<20	2,700	<20	<20	
	4/20/2009	NA	<500	<100	<100	<100	<100	1,100	<100	2,200	NA	<100	
	12/9/2009	<100	<100	<20	<20	<20	<20	1,000	<20	3,400	<20	<20	
	3/17/2010	<100	<100	<20	<20	<20	<20	1,400	<20	2,500	<20	<20	
	5/18/2010	<100	<100	<20	<20	<20	<20	1,000	<20	2,700	<20	<20	
	9/10/2010	<100	<100	<20	<20	<20	<20	750	<20	2,400	<20	<20	
	12/28/2010	<100	<100	<20	<20	<20	<20	1,100	<20	2,500	<20	<20	
	2/25/2011	<50	<50	<10	<10	<10	<10	560	<10	1,300	<10	<10	
	5/11/2011 ⁽⁴⁾	<50	<50	<10	<10	<10	<10	860	<10	1,900	<10	<10	
	7/28/2011	<100	<100	<20	<20	<20	<20	500	<20	1,900	<20	<20	
	10/6/2011	<100	<100	<20	<20	<20	<20	540	<20	2,000	<20	<20	
	1/9/2012	<100	<100	<20	<20	31	<20	530	<20	2,000	<20	<20	
	4/4/2012	<100	<100	<20	<20	38	<20	480	<20	1,900	<20	<20	
	7/11/2012	<100	<100	<20	<20	<20	<20	560	<20	2,100	<20	<20	
	10/8/2012	<100	<100	<20	<20	<20	<20	650	<20	2,000	<20	<20	
6/11/2013	<100	<100	<20	<20	<20	<20	470	<20	1,400	<20	<20		
11/12/2013	<100	<100	<20	<20	<20	<20	660	<20	1,800	<20	<20		
5/21/2014	<50	<50	<10	<10	<10	<10	370	<10	1,500	<10	<10		
DUP-01 (MW-01s)	3/13/2009	<20	<20	<20	<20	<20	<20	720	<20	2,700	<20	<20	
MW-02s (23-28') Depth to Groundwater Approx. 22 - 24'	3/13/2009	<10	<10	<2.0	<2.0	2.4	<2.0	2.2	2.5	<2.0	280	<2.0	<2.0
	4/20/2009	NA	<50	<10	<10	<10	<10	<10	<10	130	NA	<10	
	12/9/2009	<10	<10	<2.0	<2.0	3.7	<2.0	2.7	2.9	<2.0	250	<2.0	<2.0
	3/17/2010	13	<10	<2.0	<2.0	4.1	<2.0	2.3	3.1	<2.0	290	<2.0	<2.0
	5/18/2010	<10	<10	<2.0	<2.0	2.3	<2.0	2.4	2.6	<2.0	210	<2.0	<2.0
	9/10/2010	<10	<10	<2.0	<2.0	2.3	<2.0	2.3	2.3	<2.0	220	<2.0	<2.0
	12/22/2010	<10	<10	<2.0	<2.0	2.4	<2.0	2.3	3.1	<2.0	240	<2.0	<2.0
	2/24/2011	<10	<10	<2.0	<2.0	2.0	<2.0	<2.0	2.6	<2.0	240	<2.0	<2.0
	5/10/2011 ⁽⁴⁾	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	250	<2.0	<2.0
	7/28/2011 ⁽⁵⁾	<10	<10	<2.0	<2.0	2.0	<2.0	2.2	2.4	<2.0	280	<2.0	<2.0
	10/7/2011	<10	<10	<2.0	<2.0	<2.0	<2.0	2.5	2.5	<2.0	220	<2.0	<2.0
	1/10/2012	<10	<10	<2.0	<2.0	<2.0	<2.0	2.8	2.5	<2.0	190	<2.0	<2.0
	4/5/2012	<10	<10	<2.0	<2.0	2.7	<2.0	3.5	3.4	<2.0	210	<2.0	<2.0
	7/11/2012	<10	<10	<2.0	<2.0	2.2	<2.0	2.5	3.5	<2.0	330	<2.0	<2.0
	10/25/2012	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	270	<2.0	<2.0
6/11/2013	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	300	<2.0	<2.0	
11/12/2013	<12	<12	<2.5	<2.5	2.8	<2.5	<2.5	4.4	<2.5	410	<2.5	<2.5	
5/19/2014	<12	<12	<2.5	<2.5	<2.5	<2.5	<2.5	3.1	<2.5	280	<2.5	<2.5	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-03s (9-14') Depth to Groundwater Approx. 8 - 10'	3/13/2009	<10	<10	9.1	<2.0	240	9.1	<2.0	<2.0	<2.0	<2.0	140
	4/20/2009	NA	<50	18	<10	490	18	<10	<10	<10	NA	210
	12/8/2009	<120	<120	46	<25	2,200	83	<25	<25	<25	<25	130
	3/17/2010	<25	<25	11	<5.0	460	17	<5.0	<5.0	<5.0	<5.0	42
	5/18/2010	<25	<25	14	<5.0	630	24	<5.0	<5.0	<5.0	<5.0	34
	9/10/2010	<50	<50	29	<10	1,600	63	<10	<10	<10	<10	83
	12/22/2010	<50	<50	32	<10	1,800	82	<10	<10	<10	<10	70
	2/25/2011	<100	<100	33	<20	2,200	110	<20	<20	<20	<20	75
	5/10/2011 ⁽⁴⁾	<100	<100	25	<20	1,600	77	<20	<20	<20	<20	52
	7/28/2011	<100	<100	23	<20	1,700	78	<20	<20	<20	<20	65
	10/6/2011	<100	<100	24	<20	2,100	100	<20	<20	<20	<20	91
	1/10/2012	<50	<50	22	<10	1,300	81	<10	<10	<10	<10	51
	4/4/2012	<100	<100	<20	<20	1,600	84	<20	<20	20	<20	170
	7/11/2012	<100	<100	23	<20	2,500	120	<20	<20	<20	<20	210
10/8/2012	<100	<100	<20	<20	1,700	93	<20	<20	<20	<20	100	
6/3/2013	<100	<100	24	<20	2,000	120	<20	<20	<20	<20	220	
11/11/2013	<100	<100	35	<20	2,500	150	<20	<20	<20	<20	350	
5/19/2014	<100	<100	<20	<20	1,500	99	<20	<20	<20	<20	150	
DUP-01 (MW-03s)	12/8/2009	<120	<120	42	<25	2,000	73	<25	<25	<25	<25	120
MW-04s (15-20') Depth to Groundwater Approx. 15 - 17'	3/13/2009	<120	<120	<25	<25	2,100	70	<25	<25	<25	5,000	460
	4/20/2009	NA	<500	<100	<100	1,700	<100	<100	<100	<100	4,000	520
	12/9/2009	<250	<250	<50	<50	2,500	90	<50	<50	<50	7,100	270
	3/17/2010	<250	<250	<50	<50	2,900	82	<50	<50	<50	7,500	520
	5/18/2010	<250	<250	<50	<50	2,100	58	<50	<50	<50	4,700	280
	9/17/2010	<250	<250	<50	<50	2,400	70	<50	<50	<50	5,200	200
	12/22/2010	<250	<250	<50	<50	2,700	91	<50	<50	<50	6,700	270
	2/25/2011	<250	<250	<50	<50	2,500	82	<50	<50	<50	5,900	280
	5/11/2011 ⁽⁴⁾	<250	<250	<50	<50	1,900	58	<50	<50	<50	4,600	270
	7/28/2011	<250	<250	<50	<50	1,700	50	<50	<50	<50	4,600	190
	10/6/2011	<250	<250	<50	<50	2,000	58	<50	<50	<50	4,600	190
	1/10/2012	<250	<250	<50	<50	1,800	72	<50	<50	<50	4,800	190
	4/4/2012	<250	<250	<50	<50	1,600	54	<50	<50	<50	4,300	170
	7/11/2012	<250	<250	<50	<50	2,100	65	<50	<50	<50	5,600	200
10/8/2012	<250	<250	<50	<50	2,200	66	<50	<50	<50	6,700	200	
6/3/2013	<250	<250	<50	<50	1,900	63	<50	<50	<50	5,700	140	
11/11/2013	<250	<250	<50	<50	1,900	66	<50	<50	<50	6,600	140	
5/19/2014	<250	<250	<50	<50	1,100	<50	<50	<50	<50	3,900	56	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green font denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011

4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate

5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.

6) Headspace present in the sample, results are approximate.

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Tecumseh, Michigan

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-04i (21.5-26.5') Depth to Groundwater Approx. 16-17'	4/3/2013	<250	<250	<50	<50	3,100	100	<50	<50	<50	5,000	<50	53
	6/3/2013	<250	<250	<50	<50	3,400	96	<50	<50	<50	4,900	<50	53
	8/29/2013	<250	<250	<50	<50	3,900	120	<50	<50	<50	5,600	<50	68
	11/11/2013	<250	<250	<50	<50	4,200	120	<50	<50	<50	5,400	<50	78
	3/27/2014	<250	<250	<50	<50	3,000	79	<50	<50	<50	4,000	<50	<50
5/19/2014	<250	<250	<50	<50	3,300	100	<50	<50	<50	4,600	<50	56	
MW-05s (25-30') Depth to Groundwater Approx. 25 - 27'	3/13/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.5	<1.0	<1.0	120	<1.0	<1.0
	4/20/2009	NA	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	140	NA	<5.0
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.3	<1.0	<1.0	190	<1.0	<1.0
	3/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	6.3	<1.0	<1.0	160	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.6	<1.0	<1.0	160	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.6	<1.0	<1.0	140	<1.0	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.9	<1.0	<1.0	160	<1.0	<1.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.4	<1.0	<1.0	130	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.9	<1.0	<1.0	160	<1.0	<1.0
	7/27/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.8	<1.0	<1.0	150	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.1	<1.0	<1.0	150	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.8	<1.0	<1.0	150	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.7	<1.0	<1.0	160	<1.0	<1.0
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.8	<1.0	<1.0	160	<1.0	<1.0	
10/25/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	130	<1.0	<1.0	
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	100	<1.0	<1.0	
MW-06s (24-29') Depth to Groundwater Approx. 23 - 26'	3/16/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<1.0	<1.0
	4/20/2009	NA	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23	NA	<1.0
	12/9/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	37	<1.0	<1.0
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	31	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	33	<1.0	<1.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	29	<1.0	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	34	<1.0	<1.0
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	35	<1.0	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	27	<1.0	<1.0
	7/27/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	27	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	30	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	31	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	32	<1.0	<1.0
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	32	<1.0	<1.0	
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	28	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	27	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-07s (23.5-28.5') Depth to Groundwater Approx. 24 - 26'	3/16/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	10	<1.0	<1.0
	4/20/2009	NA	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	11	NA	<1.0
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	14	<1.0	<1.0
	3/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	13	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	13	<1.0	<1.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	12	<1.0	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	16	<1.0	<1.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	12	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	12	<1.0	<1.0
	7/27/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	11	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	13	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	14	<1.0	<1.0
4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	12	<1.0	<1.0	
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	14	<1.0	<1.0	
10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	14	<1.0	<1.0	
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	13	<1.0	<1.0	
MW-08s (23.5-28.5') Depth to Groundwater 23 - 26'	3/16/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<1.0	<1.0
	4/20/2009	NA	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	NA	<1.0
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<1.0	<1.0
DUP-01 (MW-08s)	4/20/2009	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	NA	<1.0
MW-08d (40-45') Depth to Groundwater Approx. 26 - 27'	4/2/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/13/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-01 (MW-08d)	4/2/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-09s (7-12') Depth to Groundwater* Approx. 5 - 8'	3/16/2009	<100	<100	<20	<20	<20	<20	<20	160	<20	1,700	<20	<20
	4/20/2009	NA	<500	<100	<100	<100	<100	<100	220	<100	2,100	NA	<100
	12/9/2009	<100	<100	<20	<20	<20	<20	<20	150	<20	2,400	<20	<20
	3/18/2010	<100	<100	<20	<20	<20	<20	<20	120	<20	1,500	<20	<20
	5/18/2010	<100	<100	<20	<20	<20	<20	<20	120	<20	1,700	<20	<20
	9/17/2010	<100	<100	<20	<20	<20	<20	<20	120	<20	1,700	<20	<20
	2/25/2011	<50	<50	<10	<10	<10	<10	<10	84	<10	1,100	<10	<10
5/11/2011 ⁽⁴⁾	<50	<50	<10	<10	<10	<10	<10	83	<10	1,200	<10	<10	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-10s (8-13') Depth to Groundwater Approx. 7 - 9'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/9/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-02 (MW-10s)	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-10d (14-19') Depth to Groundwater Approx. 9 - 10'	12/9/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-11s (29-34') Depth to Groundwater Approx. 29 - 32'	5/14/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/13/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.

3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011

4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate

5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.

6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria		13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria		38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria		2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion		4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion		1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria		2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
DUP-02 (MW-11s)	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-01 (MW-11s)	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-12s (12-17') Depth to Groundwater Approx. 13 - 15'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0
	12/30/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-12d (33-38') Depth to Groundwater Approx. 13 - 15'	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/31/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

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- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
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- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
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Table 5
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Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-13s (13-18*) Depth to Groundwater Approx. 15 - 17'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/31/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-14s (4-9*) Depth to Perched Groundwater Approx. 3 - 7'	5/14/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/11/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-14d (37.5-42.5') Depth to Groundwater Approx. 30 - 31'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-01 (MW-14d)	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-02 (MW-14d)	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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Bold font denotes concentrations detected above laboratory reporting limits

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 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-15s (30-35') Depth to Groundwater Approx. 30 - 32'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/30/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-17s (3-8') Depth to Groundwater Approx. 6'	7/23/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/7/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/11/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
3/28/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

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Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-18s (26-31') Depth to Groundwater Approx. 25 - 27'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
MW-19s (25-30') Depth to Groundwater Approx. 24 - 26'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	31	<1.0	<1.0	
	1/13/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	2.3	36	<1.0	<1.0	
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.7	36	<1.0	<1.0	
	5/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	32	<1.0	<1.0	
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	1.8	33	<1.0	<1.0	
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	37	<1.0	<1.0	
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.8	41	<1.0	<1.0	
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	28	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	1.4	<1.0	27	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.7	<1.0	28	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	1.9	<1.0	34	<1.0	<1.0
4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.5	<1.0	32	<1.0	<1.0	
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	2.3	<1.0	32	<1.0	<1.0	
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	31	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	25	<1.0	<1.0	
DUP-03 (MW-19s)	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	1.7	<1.0	32	<1.0	<1.0

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
DUP-02 (MW-19s)	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.8	<1.0	39	<1.0	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	1.4	<1.0	29	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.4	<1.0	27	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.6	<1.0	28	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	1.8	<1.0	34	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.6	<1.0	32	<1.0	<1.0
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	2.3	<1.0	32	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	27	<1.0	<1.0
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	26	<1.0	<1.0	
MW-19d (40-45') Depth to Groundwater Approx. 24 - 26'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-01 (MW-19d)	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

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Bold font denotes concentrations detected above laboratory reporting limits

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- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-20s (8-13') Depth to Groundwater* Approx. 4 - 6'	12/30/2009	<5.0	<5.0	48	4.0	9.6	<1.0	<1.0	150	<1.0	71	2.9	<1.0
	1/13/2010	<5.0	<5.0	50	3.5	9.0	<1.0	<1.0	170	<1.0	70	2.8	<1.0
	3/17/2010	<5.0	<5.0	51	3.8	9.4	<1.0	<1.0	160	<1.0	64	3.2	<1.0
	5/18/2010	<10	<10	58	5.1	12	<2.0	<2.0	210	<2.0	94	3.4	<2.0
	9/10/2010	<10	<10	34	4.2	9.7	<2.0	<2.0	230	<2.0	110	3.8	<2.0
	12/21/2010	<10	<10	24	3.6	6.1	<2.0	<2.0	200	<2.0	89	3.6	<2.0
	2/18/2011	<10	<10	19	3.3	5.5	<2.0	<2.0	190	<2.0	93	3.5	<2.0
	5/13/2011	<10	<10	14	2.8	4.1	<2.0	<2.0	190	<2.0	91	2.9	<2.0
	7/25/2011	<10	<10	6.5	<2.0	2.4	<2.0	<2.0	190	<2.0	100	2.3	<2.0
	10/10/2011	<10	<10	5.8	<2.0	<2.0	<2.0	<2.0	190	<2.0	110	3.1	<2.0
	1/9/2012	<5.0	<5.0	6.0	1.4	1.9	<1.0	<1.0	190	<1.0	100	3.2	<1.0
	4/9/2012	<5.0	<5.0	11	1.1	2.0	<1.0	<1.0	180	<1.0	100	2.6	<1.0
	7/10/2012	<10	<10	17	<2.0	2.5	<2.0	<2.0	190	<2.0	100	2.3	<2.0
	10/19/2012	<10	<10	24	<2.0	3.8	<2.0	<2.0	190	<2.0	98	2.0	<2.0
	5/31/2013	<10	<10	18	2.6	6.7	<2.0	<2.0	240	<2.0	120	<2.0	<2.0
11/8/2013	<10	<10	6.1	<2.0	<2.0	<2.0	<2.0	250	<2.0	140	<2.0	<2.0	
5/15/2014	<10	<10	4.0	<2.0	<2.0	<2.0	<2.0	150	<2.0	110	<2.0	<2.0	
MW-20d (38.5-43.5') Depth to Groundwater Approx. 12 - 16'	12/30/2009	<5.0	<5.0	1.2	<1.0	86	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	3.5
	1/13/2010	<5.0	<5.0	<1.0	<1.0	94	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.7
	3/17/2010	<5.0	<5.0	<1.0	<1.0	85	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.4
	5/18/2010	<5.0	<5.0	<1.0	<1.0	120	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.7
	9/10/2010	<5.0	<5.0	<1.0	<1.0	95	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	200	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.5
	2/18/2011	<10	<10	<2.0	<2.0	190	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.2
	5/13/2011	<10	<10	<2.0	<2.0	170	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.6
	7/25/2011	<5.0	<5.0	<1.0	<1.0	170	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.6
	10/10/2011	<10	<10	<2.0	<2.0	200	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.5
	1/9/2012	<5.0	<5.0	<1.0	<1.0	140	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	190	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	10
	7/10/2012	<10	<10	<2.0	<2.0	230	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	14
	10/19/2012	<10	<10	<2.0	<2.0	180	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	43
	6/3/2013	<10	<10	<2.0	<2.0	250	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	67
11/8/2013	<10	<10	<2.0	<2.0	310	<2.0	<2.0	<2.0	<2.0	5.5	<2.0	110	
5/15/2014	<10	<10	<2.0	<2.0	380	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	110	
DUP-03 (MW-20d)	5/18/2010	<5.0	<5.0	<1.0	<1.0	120	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.7

Notes:
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ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-21 (28.5-33.5') Depth to Groundwater Approx. 29 - 30'	12/8/2009	<50	<50	31	<10	59	<10	<10	54	<10	840	<10	<10
	1/13/2010	<50	<50	28	<10	62	<10	<10	56	<10	730	<10	<10
	3/23/2010	<5.0	<5.0	33	2.2	81	7.5	<1.0	62	<1.0	850	<1.0	<1.0
	5/18/2010	<50	<50	35	<10	89	<10	<10	63	<10	830	<10	<10
	10/15/2010	<50	<50	26	<10	80	<10	<10	59	<10	810	<10	<10
	12/22/2010	<50	<50	25	<10	69	<10	<10	55	<10	730	<10	<10
	2/24/2011	<50	<50	25	<10	66	<10	<10	52	<10	730	<10	<10
	5/11/2011 ⁽⁴⁾	<50	<50	24	<10	65	<10	<10	49	<10	740	<10	<10
	7/28/2011	<50	<50	22	<10	77	<10	<10	54	<10	1,000	<10	<10
	10/6/2011	<50	<50	22	<10	74	<10	<10	55	<10	960	<10	<10
	1/10/2012	<50	<50	27	<10	79	<10	<10	64	<10	990	<10	<10
	4/4/2012	<50	<50	25	<10	81	<10	<10	55	<10	980	<10	<10
	7/11/2012	58	<50	25	<10	85	<10	<10	63	<10	1,000	<10	<10
	10/8/2012	<50	<50	22	<10	65	<10	<10	47	<10	850	<10	<10
	3/6/2013	<50	<50	26	<10	90	<10	<10	50	<10	760	<10	<10
	6/11/2013	<50	<50	26	<10	100	<10	<10	60	<10	1,100	<10	<10
	8/29/2013	<50	<50	28	<10	130	<10	<10	68	<10	1,500	<10	<10
11/12/2013	<50	<50	31	<10	130	<10	<10	76	<10	1,300	<10	<10	
3/27/2014	<50	<50	25	<10	150	<10	<10	64	<10	1,000	<10	<10	
5/19/2014	<50	<50	20	<10	170	<10	<10	62	<10	1,100	<10	<10	
DUP-01 (MW-21)	8/29/2013	<50	<50	28	<10	130	<10	<10	67	<10	1,500	<10	<10
	3/27/2014	<50	<50	26	<10	150	<10	<10	68	<10	1,100	<10	<10
DUP-02 (MW-21)	3/23/2010	<5.0	<5.0	33	2.2	79	7.8	<1.0	61	<1.0	810	<1.0	<1.0
DUP-03 (MW-21)	2/24/2011	<50	<50	24	<10	66	<10	<10	50	<10	740	<10	<10
	5/11/2011 ⁽⁴⁾	<50	<50	24	<10	66	<10	<10	49	<10	750	<10	<10
	7/28/2011	<50	<50	23	<10	78	<10	<10	57	<10	1,000	<10	<10
	10/6/2011	<50	<50	21	<10	73	<10	<10	52	<10	910	<10	<10
	1/10/2012	<50	<50	27	<10	85	<10	<10	66	<10	1,000	<10	<10
	4/4/2012	<50	<50	24	<10	81	<10	<10	61	<10	970	<10	<10
	7/11/2012	<50	<50	25	<10	80	<10	<10	59	<10	1,000	<10	<10
	6/11/2013	<50	<50	26	<10	110	<10	<10	76	<10	1,100	<10	<10
11/12/2013	<50	<50	32	<10	120	<10	<10	75	<10	1,300	<10	<10	
5/19/2014	<50	<50	19	<10	170	<10	<10	64	<10	1,100	<10	<10	

Notes:

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Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-22 (25-30') Depth to Groundwater Approx. 25 - 26'	12/7/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.5
	5/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.3
	12/22/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3
	5/11/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.2
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.4
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13
10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	18	
5/29/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	
3/28/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	29	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23	
MW-23 (17-22') Depth to Groundwater* Approx. 8 - 10'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2
	1/13/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.6
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.0
	5/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.1
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	18
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	25
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	56
	11/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	48
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	85
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	63
	10/8/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	47
5/31/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	88	
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	120	
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	90	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

MW-24s (18.5'-23.5')	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/19/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/29/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-24d (39-44')	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/19/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

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- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
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Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-25s (20-25') Depth to Groundwater Approx. 18 - 20'	12/10/2009	<5.0	<5.0	1.7	<1.0	8.8	<1.0	<1.0	4.8	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	17	<1.0	1.1	<1.0
	5/14/2010	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	18	<1.0	1.0	<1.0
	9/8/2010	<5.0	<5.0	1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	1.4	<1.0
	12/22/2010	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	26	<1.0	2.4	<1.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	2.2	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<1.0	2.2	<1.0
	7/28/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	2.5	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	2.8	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	3.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	3.6	<1.0
	7/11/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<1.0	4.2	<1.0
	10/25/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	4.6	<1.0
	6/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	6.1	<1.0
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	22	<1.0	7.0	<1.0	
5/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	7.6	<1.0	
DUP-01 (MW-25s)	3/16/2010	<5.0	<5.0	1.3	<1.0	<1.0	<1.0	<1.0	18	<1.0	1.0	<1.0
MW-26s (28-33') Depth to Groundwater Approx. 26 - 28'	4/6/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green shading Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-27s (7-12') Depth to Groundwater* Approx. 3 - 4'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	
DUP-02 (MW-27s)	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-27d (37.5-42.5') Depth to Groundwater Approx. 24 - 25'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic

Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

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Bold font denotes concentrations detected above laboratory reporting limits

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* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-28s (25-30') Depth to Groundwater Approx. 25 - 27'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-28d (49-54') Depth to Groundwater Approx. 25 - 27'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0		
DUP-03 (MW-28d)	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
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Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

MW-29s (13-18') Depth to Groundwater Approx. 15 - 16'	3/18/2010	<5.0	<5.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	<5.0	<5.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/6/2013	<5.0	<5.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-29d (58.5-63.5') Depth to Groundwater* Approx. 18 - 19'	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-30s (11-16') Depth to Groundwater* Approx. 9 - 11'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-30d (25.5-30.5') Depth to Groundwater* Approx. 9 - 11'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

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Denotes concentrations above one or more criteria

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- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-31 (33.3-38.3') Depth to Groundwater Approx. 32 - 33'	6/18/2010	<5.0	<5.0	14	<1.0	19	2.2	<1.0	20	<1.0	180	<1.0	<1.0
	9/17/2010	<10	<10	<2.0	<2.0	15	<2.0	<2.0	48	<2.0	220	<2.0	2.5
	12/22/2010 ⁽⁵⁾	<10	<10	16	<2.0	29	2.9	<2.0	27	<2.0	260	<2.0	<2.0
	2/24/2011	<10	<10	16	<2.0	31	3.1	<2.0	26	<2.0	300	<2.0	<2.0
	5/11/2011 ⁽⁴⁾	<10	<10	15	<2.0	24	3.0	<2.0	22	<2.0	250	<2.0	<2.0
	7/21/2011	<5.0	<5.0	7.4	<1.0	14	1.2	<1.0	11	<1.0	130	<1.0	<1.0
	10/4/2011	<5.0	<5.0	18	<1.0	40	3.4	<1.0	28	<1.0	340	<1.0	<1.0
	1/10/2012	<10	<10	17	<2.0	35	3.1	<2.0	24	<2.0	290	<2.0	<2.0
	4/5/2012	<10	<10	16	<2.0	36	3.1	<2.0	24	<2.0	290	<2.0	<2.0
	7/17/2012	<20	<20	16	<4.0	34	<4.0	<4.0	23	<4.0	310	<4.0	<4.0
	10/3/2012	16	<12	15	<2.5	40	3.4	<2.5	26	<2.5	340	<2.5	<2.5
	3/6/2013	<12	<12	13	<2.5	32	2.9	<2.5	23	<2.5	270	<2.5	<2.5
	5/29/2013	<12	<12	15	<2.5	39	2.9	<2.5	23	<2.5	300	<2.5	<2.5
8/29/2013	<12	<12	16	<2.5	47	2.6	<2.5	24	<2.5	320	<2.5	<2.5	
3/28/2014	<12	<12	16	<2.5	34	<2.5	<2.5	27	<2.5	300	<2.5	<2.5	
5/22/2014	<12	<12	16	<2.5	34	<2.5	<2.5	24	<2.5	280	<2.5	<2.5	
DUP-01 (MW-31)	6/18/2010	<5.0	<5.0	12	<1.0	19	2.3	<1.0	21	<1.0	170	<1.0	<1.0
MW-32s (23-28') Depth to Groundwater Approx. 23 - 25'	9/17/2010	<100	<100	150	<20	270	26	<20	220	<20	2,400	<20	<20
	11/18/2010	<100	<100	<20	<20	190	<20	<20	560	<20	2,800	<20	<20
	12/28/2010	<100	<100	<20	<20	200	<20	<20	510	<20	2,300	<20	<20
	2/25/2011	<100	<100	<20	<20	190	<20	<20	420	<20	2,300	<20	<20
	5/10/2011 ⁽⁴⁾	<100	<100	<20	<20	170	<20	<20	380	<20	2,300	<20	31
	7/28/2011	<100	<100	<20	<20	140	<20	<20	380	<20	2,400	<20	<20
	10/6/2011	<100	<100	<20	<20	160	<20	<20	350	<20	2,200	<20	<20
	1/10/2012	<100	<100	<20	<20	170	<20	<20	400	<20	2,300	<20	<20
	4/4/2012	<100	<100	<20	<20	130	<20	<20	340	<20	2,200	<20	<20
	7/11/2012	<100	<100	<20	<20	85	<20	<20	370	<20	2,200	<20	<20
	10/10/2012	<100	<100	<20	<20	89	<20	<20	280	<20	1,600	<20	<20
	5/20/2013	<100	<100	<20	<20	89	<20	<20	220	<20	1,400	<20	<20
	11/5/2013	<50	<50	<10	<10	71	<10	<10	190	<10	1,200	<10	<10
5/19/2014	<5.0	<5.0	<1.0	<1.0	7.7	<1.0	<1.0	20	<1.0	130	<1.0	<1.0	
MW-32d (35-40') Depth to Groundwater Approx. 23 - 24'	5/20/2013	<5.0	<5.0	<1.0	<1.0	2.0	3.2	<1.0	<1.0	<1.0	53	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	2.4	3.3	<1.0	<1.0	<1.0	53	<1.0	<1.0
	11/5/2013	<5.0	<5.0	<1.0	<1.0	1.9	3.2	<1.0	<1.0	<1.0	51	<1.0	<1.0
	3/27/2014	<5.0	<5.0	<1.0	<1.0	2.0	3.0	<1.0	<1.0	<1.0	56	<1.0	<1.0
DUP-01 (MW-32d)	5/19/2014	<5.0	<5.0	<1.0	<1.0	1.8	3.0	<1.0	<1.0	<1.0	49	<1.0	<1.0
	11/5/2013	<5.0	<5.0	<1.0	<1.0	1.7	3.1	<1.0	<1.0	<1.0	51	<1.0	<1.0
	5/19/2014	<5.0	<5.0	<1.0	<1.0	2.1	3.0	<1.0	<1.0	<1.0	51	<1.0	<1.0

Notes:

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- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
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- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-33s (21-26') Depth to Groundwater Approx. 20 - 22'	9/17/2010	<5.0	<5.0	12	<1.0	13	<1.0	<1.0	<1.0	<1.0	76	<1.0	64
	11/18/2010	<5.0	<5.0	14	<1.0	22	<1.0	<1.0	1.1	<1.0	150	<1.0	56
	12/22/2010	<5.0	<5.0	14	<1.0	22	<1.0	<1.0	1.0	<1.0	130	<1.0	57
	2/24/2011	<5.0	<5.0	12	<1.0	20	1.0	<1.0	<1.0	<1.0	110	<1.0	60
	5/10/2011 ⁽⁴⁾	<10	<10	11	<2.0	21	<2.0	<2.0	<2.0	<2.0	220	<2.0	55
	7/28/2011	<10	<10	8.9	<2.0	18	<2.0	<2.0	<2.0	<2.0	260	<2.0	22
	10/6/2011	<10	<10	11	<2.0	19	<2.0	<2.0	<2.0	<2.0	220	<2.0	48
	1/9/2012 ⁽⁶⁾	<5.0	8.9	15	<1.0	20	1.0	<1.0	1.3	<1.0	170	<1.0	51
	4/4/2012	<5.0	5.6	17	<1.0	21	<1.0	<1.0	1.2	<1.0	170	<1.0	48
	7/11/2012	<5.0	13	25	<1.0	32	1.3	<1.0	<1.0	<1.0	130	<1.0	52
	10/10/2012	<5.0	12	23	<1.0	31	1.2	<1.0	<1.0	<1.0	120	<1.0	57
5/20/2013	<5.0	9.4	16	<1.0	23	<1.0	<1.0	<1.0	<1.0	98	<1.0	100	
11/5/2013	<5.0	7.7	16	<1.0	28	<1.0	<1.0	<1.0	<1.0	77	<1.0	58	
5/19/2014	<5.0	7.4	12	<1.0	21	<1.0	<1.0	<1.0	<1.0	70	<1.0	63	
DUP-01 (MW-33s)	11/18/2010	<5.0	<5.0	14	<1.0	23	<1.0	<1.0	1.2	<1.0	150	<1.0	55
MW-34s (23-28') Depth to Groundwater Approx. 23 - 25'	9/17/2010	<100	<100	<20	<20	<20	<20	1,600	<20	1,100	<20	<20	
	11/18/2010	<100	<100	<20	<20	<20	<20	1,600	<20	1,200	<20	<20	
	12/28/2010	<50	<50	<10	13	<10	<10	1,400	<10	1,000	<10	<10	
	2/25/2011	<50	<50	<10	<10	<10	<10	1,100	<10	900	<10	<10	
	5/10/2011 ⁽⁴⁾	<50	<50	<10	<10	<10	<10	1,200	<10	970	<10	<10	
	7/28/2011	<50	<50	<10	<10	<10	<10	1,300	<10	1,100	<10	<10	
	10/6/2011	<50	<50	<10	<10	<10	<10	1,200	<10	1,000	<10	<10	
	1/10/2012	<50	<50	<10	14	<10	<10	1,500	<10	1,100	<10	<10	
	4/4/2012	<50	<50	<10	<10	<10	<10	1,400	<10	1,200	<10	<10	
	7/11/2012	<50	<50	<10	<10	<10	<10	1,400	<10	1,100	<10	<10	
	10/10/2012	<50	<50	<10	<10	<10	<10	1,400	<10	1,100	<10	<10	
5/20/2013	<50	<50	<10	<10	<10	<10	720	<10	730	<10	<10		
11/12/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	490	<5.0	450	<5.0	<5.0		
5/19/2014	<25	<25	<5.0	5.6	<5.0	<5.0	690	<5.0	730	<5.0	<5.0		
DUP-01 (MW-34s)	5/20/2013	<50	<50	<10	<10	<10	<10	730	<10	730	<10	<10	
MW-34d (45-50') Depth to Groundwater Approx. 23 - 24'	5/20/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	
	11/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-35i (20.5-22.5') Depth to Groundwater Approx. 16 - 17'	10/29/2012	<250	<250	<50	94	<50	<50	4,500	<50	3,000	<50	<50	
	3/27/2013	<250	<250	<50	110	<50	<50	4,500	<50	2,700	<50	<50	
	6/5/2013	<250	<250	<50	160	<50	<50	6,400	<50	4,300	<50	<50	
	8/29/2013	<250	<250	<50	160	<50	<50	6,600	<50	4,900	<50	<50	
	11/12/2013	<250	<250	<50	190	<50	<50	7,400	<50	5,100	<50	<50	
	3/28/2014	<250	<250	<50	170	<50	<50	6,300	<50	4,600	<50	<50	
MW-35d (42.5-44.5') Depth to Groundwater Approx. 15 - 16'	5/21/2014	<250	<250	<50	140	50	<50	5,300	<50	4,400	<50	<50	
	7/24/2012	<5.0	<5.0	<1.0	<1.0	180	53	1.5	<1.0	20	<1.0	22	
	10/25/2012	<5.0	<5.0	<1.0	<1.0	3.8	1.2	<1.0	<1.0	2.2	<1.0	19	
	3/6/2013	<5.0	<5.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	1.6	<1.0	24	
	6/11/2013	<5.0	<5.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	1.7	<1.0	23	
	8/28/2013	<5.0	<5.0	<1.0	<1.0	5.5	<1.0	<1.0	<1.0	1.5	<1.0	26	
	11/12/2013	<5.0	<5.0	<1.0	<1.0	9.1	1.1	<1.0	<1.0	<1.0	<1.0	33	
3/26/2014	<5.0	<5.0	<1.0	<1.0	24	3.2	<1.0	<1.0	1.1	<1.0	33		
5/20/2014	<5.0	<5.0	<1.0	<1.0	22	3.0	<1.0	<1.0	1.3	<1.0	30		
MW-36s (16.5-21.5') Depth to Groundwater Approx. 16 - 17'	4/3/2013	<12	19	15	2.7	140	18	<2.5	35	2.9	260	<2.5	12
	5/31/2013	<12	20	14	2.6	150	18	<2.5	29	<2.5	280	<2.5	11
	8/29/2013	<12	15	16	2.9	160	20	<2.5	30	<2.5	370	<2.5	11
	11/8/2013	<12	21	20	3.0	200	22	<2.5	32	<2.5	440	<2.5	20
	3/27/2014	<25	<25	15	<5.0	130	15	<5.0	21	<5.0	430	<5.0	15
	5/15/2014	<25	<25	15	<5.0	120	16	<5.0	22	<5.0	370	<5.0	16
MW-36d (31-36') Depth to Groundwater Approx. 16 - 17'	4/2/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	6/11/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	11/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
	5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-37s (25.5-30.5') Depth to Groundwater Approx. 25 - 26'	4/3/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	570	<5.0	<5.0
	6/3/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	580	<5.0	<5.0
	8/29/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	580	<5.0	<5.0
	11/11/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	5.6	<5.0	640	<5.0	<5.0
	3/27/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	550	<5.0	<5.0
	5/16/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	5.6	<5.0	610	<5.0	<5.0

Notes:

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- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-38s (9-14') Depth to Groundwater Approx. 9 - 10'	4/3/2013	<10	<10	13	<2.0	22	2.7	<2.0	18	<2.0	210	<2.0	16
	6/3/2013	<10	<10	15	<2.0	30	2.6	<2.0	18	<2.0	230	<2.0	16
	8/29/2013	<12	<12	20	<2.5	42	3.4	<2.5	22	<2.5	280	<2.5	17
	11/11/2013	<10	<10	21	<2.0	35	3.0	<2.0	28	<2.0	290	<2.0	19
	5/16/2014	<5.0	<5.0	7.5	<1.0	12	1.1	<1.0	13	<1.0	140	<1.0	6.7
MW-38d (29-34') Depth to Groundwater Approx. 30 - 32'	4/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
	8/29/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/27/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-39s (15.5-20.5') Depth to Groundwater Approx. 15 - 16'	4/3/2013	<50	<50	86	17	56	<10	<10	86	<10	810	<10	<10
	6/3/2013	<50	<50	90	18	71	<10	<10	84	<10	870	<10	<10
	8/29/2013	<25	<25	42	9.5	36	<5.0	<5.0	39	<5.0	460	<5.0	<5.0
	11/11/2013	<50	<50	97	24	67	<10	<10	99	<10	840	<10	<10
	3/28/2014	<25	<25	79	18	64	7.2	<5.0	96	<5.0	790	<5.0	<5.0
5/16/2014	<25	<25	79	21	50	5.6	<5.0	120	<5.0	960	<5.0	<5.0	
MW-39d (34-39') Depth to Groundwater Approx. 15 - 16'	4/2/2013	<5.0	<5.0	<1.0	<1.0	2.6	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<5.0	<5.0	<1.0	<1.0	3.2	2.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	3.4	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/12/2013	<5.0	<5.0	<1.0	<1.0	2.9	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	3.3	2.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/21/2014	<5.0	<5.0	<1.0	<1.0	3.3	2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-40s (20-25') Depth to Groundwater Approx. 22 - 23'	4/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/13/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-40d (37.5-42.5') Depth to Groundwater Approx. 21 - 22'	4/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/13/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte		2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria		13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria		38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria		2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion		4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion		1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria		2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units		ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
NS-18s (20-25') Depth to Groundwater Approx. 20 - 22'	7/25/2012	<50	<50	19	<10	58	<10	<10	11	<10	900	<10	<10
	5/20/2014	<50	<50	20	<10	120	11	<10	17	<10	790	<10	<10
NS-18i (30-35') Depth to Groundwater Approx. 20 - 22'	7/25/2012	<120	<120	<25	<25	600	140	<25	<25	<25	2,600	<25	26
	3/27/2014	<120	<120	<25	<25	630	140	<25	<25	<25	2,000	<25	44
	5/19/2014	<100	<100	<20	<20	560	110	<20	<20	<20	1,700	<20	37
NS-18d (39.1-44.1') Depth to Groundwater Approx. 20 - 22'	7/25/2012	<10	<10	<2.0	<2.0	200	30	<2.0	<2.0	<2.0	33	<2.0	<2.0
	5/20/2014	<10	<10	<2.0	<2.0	180	30	<2.0	<2.0	<2.0	20	<2.0	4.1
NS-19s (24-29') Depth to Groundwater Approx. 23 - 25'	7/27/2012	<50	<50	<10	<10	69	<10	<10	30	<10	900	<10	53
	5/20/2014	<10	<10	7.9	4.6	160	2.8	<2.0	4.9	<2.0	150	<2.0	140
NS-19i (34-39') Depth to Groundwater Approx. 23 - 25'	7/27/2012	<25	<25	<5.0	<5.0	91	26	<5.0	<5.0	<5.0	630	<5.0	<5.0
	5/20/2014	<25	<25	<5.0	<5.0	80	22	<5.0	<5.0	<5.0	490	<5.0	<5.0
NS-19d (43.5-48.5') Depth to Groundwater Approx. 23 - 25'	7/27/2012	<5.0	<5.0	<1.0	<1.0	<1.0	2.1	<1.0	<1.0	<1.0	27	<1.0	<1.0
	5/20/2014	<5.0	<5.0	<1.0	<1.0	1.3	2.4	<1.0	<1.0	<1.0	23	<1.0	<1.0
NS-20s (23-28') Depth to Groundwater Approx. 23 - 25'	7/31/2012	<120	<120	<25	<25	120	<25	<25	830	<25	2,600	<25	<25
	5/20/2014	<100	<100	<20	<20	160	<20	<20	500	<20	1,900	<20	36
NS-20i (29-34') Depth to Groundwater Approx. 23 - 25'	7/31/2012	<5.0	<5.0	22	2.3	17	1.5	<1.0	<1.0	<1.0	18	<1.0	130
	5/20/2014	<5.0	<5.0	12	1.6	12	1.3	<1.0	<1.0	<1.0	10	<1.0	42
SS-09s (23-28') Depth to Groundwater Approx. 23 - 25'	8/2/2012	<50	<50	<10	<10	<10	<10	11	790	<10	560	<10	<10
	5/20/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	13	370	<5.0	330	<5.0	<5.0
DUP-04 (SS-09s)	5/20/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	13	380	<5.0	330	<5.0	<5.0
SS-09i (34-39') Depth to Groundwater Approx. 23 - 25'	8/2/2012	<50	<5.0	8.0	<1.0	37	5.4	<1.0	2.6	<1.0	<1.0	<1.0	<1.0
	5/20/2014	<5.0	<5.0	7.1	<1.0	32	5.3	<1.0	2.2	<1.0	<1.0	<1.0	<1.0
SS-10s (22.5-27.5') Depth to Groundwater Approx. '	8/2/2012	<50	<50	<10	<10	<10	<10	<10	160	<10	770	<10	<10
	5/21/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	80	<5.0	570	<5.0	<5.0
SS-10i (33-38') Depth to Groundwater Approx. 23 - 25'	8/2/2012	<5.0	<5.0	8.2	<1.0	24	1.7	<1.0	<1.0	<1.0	78	<1.0	<1.0
	5/21/2014	<5.0	<5.0	7.2	<1.0	25	1.9	<1.0	<1.0	<1.0	54	<1.0	<1.0
SS-10d (50-55') Depth to Groundwater Approx. 23 - 25'	8/3/2012	<5.0	<5.0	<1.0	<1.0	15	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/21/2014	<5.0	<5.0	<1.0	<1.0	17	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 2
Summary of Detected Volatile Organic Compounds at Source Area Grab Groundwater Sample Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	Benzene ⁽¹⁾	n-Butylbenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Naphthalene	n-Propylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Tri-chloroethane	1,1,2-Tri-chloroethane	Trichloroethene	1,2,4-Trimethylbenzene ⁽¹⁾	1,3,5-Trimethylbenzene ⁽¹⁾	Vinyl Chloride	Total Xylenes
Health-Based Residential DW Criteria	5.0	80	430	80	880	7.0	70	100	700	520	80	5.0	1,000	200	5.0	5.0	1,000	1,000	2.0	10,000
Health-Based Non-Residential DW Criteria	5.0	230	1,700	80	2,500	7.0	70	100	700	1,500	230	5.0	1,000	200	5.0	5.0	2,900	2,900	2.0	10,000
Residential GWSL for Vapor Intrusion	NC	NC	NC	NC	130	390	440	330	NC	NC	NC	11	NC	15,000	NC	9.9	NC	NC	5.0	NC
Non-Residential GWSL for Vapor Intrusion	NC	NC	NC	NC	670	1,600	1,800	1,400	NC	NC	NC	55	NC	63,000	NC	42	NC	NC	50	NC
GSI Criteria	200 ⁽²⁾	NC	1,100 ⁽²⁾	350	740	130	620	1,500 ⁽²⁾	18	11	NC	60 ⁽²⁾	270	89	330 ⁽²⁾	200 ⁽²⁾	17	45	13 ⁽²⁾	41
Groundwater Contact Criteria	11,000	5,900	4.4E+05	1.5E+05	2.4E+06	11,000	2.0E+05	2.2E+05	1.7E+05	31,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽⁴⁾	56,000	61,000	1,000	1.90E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft) ⁽³⁾	Benzene ⁽¹⁾	n-Butylbenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Naphthalene	n-Propylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Tri-chloroethane	1,1,2-Tri-chloroethane	Trichloroethene	1,2,4-Trimethylbenzene ⁽¹⁾	1,3,5-Trimethylbenzene ⁽¹⁾	Vinyl Chloride	Total Xylenes
GP-01 (26-30')	12/15/2008	25.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3
GP-02 (20-24')	12/15/2008	23.0	<1	<1	<1	<1	11	17	210	4	<1	<5	<1	2	<1	16	<1	920	<1	<1	<1	<3
GP-03 (20-24')	12/15/2008	23.0	<1	<1	43	<1	25	2	760	27	<1	<5	<1	<1	<1	<1	510	<1	<1	<1	<1	<3
GP-04 (25-29')	12/15/2008	23.0	<1	<1	9	<1	18	4	240	22	<1	<5	<1	<1	<1	<1	320	<1	<1	<1	<1	<3
GP-05 (25-29')	12/15/2008	23.0	<1	<1	23	<1	160	10	510	12	<1	<5	<1	<1	<1	<1	660	<1	<1	<1	<1	<3
GP-06 (25-29')	12/15/2008	23.0	3	<1	11	<1	84	70	120	1	<1	<5	<1	<1	<1	60	<1	550	<1	<1	<1	<3
GP-07 (25-29')	12/16/2008	23.0	<1	<1	5	<1	<1	3	4	<1	<1	<5	<1	<1	<1	3	<1	300	<1	<1	<1	<3
GP-08 (26-30')	12/16/2008	27.0	<1	<1	<1	<1	9	<1	160	11	<1	<5	<1	<1	<1	<1	49	<1	<1	<1	<1	<3
GP-09 (25-29')	12/16/2008	27.0	<1	<1	<1	<1	89	26	9	2	<1	<5	<1	<1	<1	31	<1	540	<1	<1	<1	<3
GP-10 (20-24')	12/16/2008	19.0	<1	<1	<1	1	3	76	36	<1	<1	<5	<1	<1	<1	34	4	370	<1	<1	<1	<3
GP-11 (20-24')	12/16/2008	20.0	<1	3	<1	<1	<1	3	15	<1	3	<5	7	<1	<1	4	<1	100	64	35	<1	<3
GP-12 (20-24')	12/16/2008	19.0	<1	<1	<1	3	3	320	7	<1	<1	<5	<1	<1	<1	390	<1	530	<1	<1	<1	<3
GP-13 (25-29')	12/16/2008	25.0	<1	<1	<1	<1	<1	6	1	<1	<1	<5	<1	<1	<1	6	<1	210	<1	<1	<1	<3
GP-14 (25-29')	12/22/2008	24.0	<1	<1	<1	<1	8	31	<1	<1	<1	<5	<1	12	<1	260	1	190	<1	<1	<1	<3
GP-15 (20-24')	12/22/2008	23.0	<1	<1	<1	<1	31	12	120	3	<1	<5	<1	3	<1	150	<1	450	<1	<1	<1	<3
GP-16 (25-29')	12/22/2008	24.0	9	<1	<1	<1	30	2	3	1	3	<5	<1	<1	3	16	2	8	4	1	<1	10
GP-17 (25-29')	12/22/2008	23.5	<1	<1	<1	<1	47	18	<1	<1	<1	<5	<1	1	<1	200	<1	200	<1	<1	<1	<3
GP-18 (20-24')	12/22/2008	22.0	<1	<1	<1	<1	<1	<1	1	<1	<1	<5	<1	1	<1	3	<1	190	<1	<1	<1	<3
GP-19 (25-29')	12/22/2008	22.0	<1	<1	<1	<1	<1	11	<1	<1	<1	<5	<1	<1	<1	71	<1	86	<1	<1	<1	<3
GP-21 (20-24')	1/14/2009	23.0	<20	<20	<20	<20	47	920	<20	<20	<20	<5	<20	<20	<20	8,500	<20	1,700	<20	<20	<20	<60
GP-22 (22-26')	1/14/2009	22.0	<20	<20	<20	<20	160	210	160	<20	<20	<5	<20	<20	<20	3,500	<20	1,600	<20	<20	<20	<30
GP-22 (41-45')	1/14/2009	22.0	<1	<1	<1	<1	6	10	81	21	<1	<5	<1	<1	<1	38	<1	560	<1	<1	<1	<3
GP-23 (22-26')	1/14/2009	19.0	<1	<1	<1	<1	32	<1	430	27	<1	<5	<1	<1	<1	<1	<1	300	<1	<1	<1	<3
GP-23 (31-35')	1/14/2009	19.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3
GP-24 (10-14')	1/14/2009	8.0*	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	48	<1	<1	<1	<3
GP-25 (25-29')	1/15/2009	22.0	<1	<1	<1	<1	87	<1	170	10	<1	<5	<1	<1	<1	<1	<1	240	<1	<1	<1	<3
GP-26 (25-29')	1/15/2009	25.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3
GP-27 (25-29')	1/15/2009	24.0	<1	<1	<1	<1	<1	14	<1	<1	<1	<5	<1	<1	<1	120	<1	170	<1	<1	<1	<3
GP-28 (22-26')	1/15/2009	23.0	<1	<1	<1	<1	23	36	<1	<1	<1	<5	<1	5	<1	540	<1	110	<1	<1	<1	<3
GP-28 (41-45')	1/15/2009	23.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<3
GP-29 (22-26')	1/15/2009	23.0	<1	<1	<1	<1	<1	<1	<1	<1	<1	<5	<1	<1	<1	<1	<1	34	<1	<1	<1	<3

Notes:
Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, Groundwater/Surface Water Interface (GSI) Criteria and Groundwater Contact Criteria from MDEQ RRD Op Memo 1 Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, March 25, 2011. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were calculated in accordance with the MDEQ Remediation and Redevelopment Division Program Redesign 2009 document titled Background Document: Draft Proposed Vapor Intrusion Indoor Air Criteria (IAC), Soil Gas Criteria (SGC), and Groundwater Screening Levels (GW_vSLs) for Vapor Intrusion using both residential and non-residential exposure scenarios and the most recent chemical specific toxicity values accepted and/or published by the United States Environmental Protection Agency (USEPA) as of February 1, 2012.

ug/L = micrograms per liter
NC = No criteria
-- = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits
Denotes concentrations above one or more criteria

- * An asterisk indicates that the observed depth to groundwater intersects or near an overlying clay unit that may act as a localized confining unit. The true piezometric surface may have a depth less than the recorded depth to groundwater.
- 1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21
- 2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 3) The approximate depth to groundwater is taken from soil boring logs. For sample locations with no soil boring log, approximate depth to groundwater is estimated using depth to groundwater data from nearby monitoring well and soil boring locations. Perched water, if present, is designated with a "p".
- 4) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.

Table 2
 Summary of Detected Volatile Organic Compounds at Source Area Grab Groundwater Sample Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Benzene ⁽¹⁾	n-Butylbenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Naphthalene	n-Propylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene ⁽¹⁾	1,3,5-Trimethylbenzene ⁽¹⁾	Vinyl Chloride	Total Xylenes
Health-Based Residential DW Criteria	5.0	80	430	80	880	7.0	70	100	700	520	80	5.0	1,000	200	5.0	5.0	1,000	1,000	2.0	10,000
Health-Based Non-Residential DW Criteria	5.0	230	1,700	80	2,500	7.0	70	100	700	1,500	230	5.0	1,000	200	5.0	5.0	2,900	2,900	2.0	10,000
Residential GWSL for Vapor Intrusion	NC	NC	NC	NC	130	390	440	330	NC	NC	NC	11	NC	15,000	NC	9.9	NC	NC	5.0	NC
Non-Residential GWSL for Vapor Intrusion	NC	NC	NC	NC	670	1,600	1,800	1,400	NC	NC	NC	55	NC	63,000	NC	42	NC	NC	50	NC
GSI Criteria	200 ⁽²⁾	NC	1,100 ⁽²⁾	350	740	130	620	1,500 ⁽²⁾	18	11	NC	60 ⁽²⁾	270	89	330 ⁽²⁾	200 ⁽²⁾	17	45	13 ⁽²⁾	41
Groundwater Contact Criteria	11,000	5,900	4.4E+05	1.5E+05	2.4E+06	11,000	2.0E+05	2.2E+05	1.7E+05	31,000	15,000	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽⁴⁾	56,000	61,000	1,000	1.90E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft)	Benzene	n-Butylbenzene	Chloroethane	Chloroform	1,1-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene	Naphthalene	n-Propylbenzene	Tetra-chloroethene	Toluene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	Vinyl Chloride	Total Xylenes
SS-1 (24-28')	4/15/2009	23.5	<200	<200	<1,000	<200	<200	<200	<200	<200	<200	<1,000	<200	<200	<200	1,500	<200	1,500	<200	<200	<200	<400
SS-1 (45-49')	4/15/2009	23.5	<1.0	<1.0	<5.0	<1.0	2.5	<1.0	9.9	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	2.7	<1.0	5.8	<1.0	<1.0	<1.0	<2.0
SS-2 (20-24')	4/16/2009	20.5	<100	<100	<500	<100	<100	<100	<100	<100	<100	<500	<100	<100	<100	2,200	<100	1,000	<100	<100	<100	<200
SS-2 (42-46')	4/16/2009	20.5	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	4.5	<1.0	5.3	<1.0	<1.0	<1.0	<2.0
SS-3 (20-24')	4/16/2009	19.75	<50	<50	<250	<50	<50	<50	<50	<50	<50	<250	<50	120	<50	600	<50	430	<50	<50	<50	<100
SS-4 (22-24')	4/17/2009	22.0	<100	<100	<500	<100	<100	<100	<100	<100	<100	<500	<100	<100	<100	2,500	<100	1,100	<100	<100	<100	<200
SS-5 (22-26')	4/17/2009	22.0	<100	<100	<500	<100	<100	<100	<100	<100	<100	<500	<100	<100	<100	2,200	<100	1,300	<100	<100	<100	<200
SS-6 (23-27')	4/17/2009	23.5	<200	<200	<1,000	<200	<200	<200	<200	<200	<200	<1,000	<200	<200	<200	2,600	<200	1,100	<200	<200	<200	<400
SS-7 (22-26')	4/20/2009	22.0	<100	<100	<500	<100	<100	<100	<100	<100	<100	<500	<100	<100	<100	1,300	<100	1,400	<100	<100	<100	<200
SS-8 (23-27')	4/21/2009	23.5	<100	<100	<500	<100	<100	<100	<100	<100	<100	<500	<100	<100	<100	4,100	<100	2,300	<100	<100	<100	<200
SS-9 (23-28')	8/2/2012	24.0	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<10	11	<10	790	<10	560	<10	<10	<10	<30
SS-9 (34-39')	8/2/2012	24.0	<1.0	<1.0	<5.0	<1.0	8.0	<1.0	37	5.4	<1.0	<5.0	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
SS-9 (45-50')	8/2/2012	24.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
SS-10 (22.5-27.5')	8/2/2012	23.5	<10	<10	<50	<10	<10	<10	<10	<10	<10	<50	<10	<10	<10	160	<10	770	<10	<10	<10	<30
SS-10 (33-38')	8/2/2012	23.5	<1.0	<1.0	<5.0	<1.0	8.2	<1.0	24	1.7	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	78	<1.0	<1.0	<1.0	<3.0
SS-10 (50-55')	8/3/2012	23.5	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	15	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, Groundwater/Surface Water Interface (GSI) Criteria and Groundwater Contact Criteria from MDEQ RRD Op Memo 1 Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, March 25, 2011. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were calculated in accordance with the MDEQ Remediation and Redevelopment Division Program Redesign 2009 document titled Background Document: Draft Proposed Vapor Intrusion Indoor Air Criteria (IAC), Soil Gas Criteria (SGC), and Groundwater Screening Levels (GW_vSLs) for Vapor Intrusion using both residential and non-residential exposure scenarios and the most recent chemical specific toxicity values accepted and/or published by the United States Environmental Protection Agency (USEPA) as of February 1, 2012.
 ug/L = micrograms per liter
 NC = No criteria
 -- = Not analyzed
Bold font denotes concentrations detected above laboratory reporting limits
 Denotes concentrations above one or more criteria

* An asterisk indicates that the observed depth to groundwater intersects or is near an overlying clay unit that may act as a localized confining unit. The true piezometric surface may have a depth less than the recorded depth to groundwater.
 1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21
 2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
 3) The approximate depth to groundwater is taken from soil boring logs. For sample locations with no soil boring log, approximate depth to groundwater is estimated using depth to groundwater data from nearby monitoring well and soil boring locations. Perched water, if present, is designated with a "p".
 4) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.

Table 4
 Summary of Detected Volatile Organic Compounds at Perimeter and Off-Site Grab Groundwater Sample Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
Residential DW Criteria	800	1,700	880	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Non-Residential DW Criteria	2,300	4,800	2,500	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Residential GWSL for Vapor Intrusion	NC	NC	130	47	390	440	330	NC	11	NC	15,000	NC	9.9	5.0	NC
Non-Residential GWSL for Vapor Intrusion	NC	NC	670	240	1,600	1,800	1,400	NC	55	NC	63,000	NC	42	50	NC
GSI Criteria	NC	NC	740	360 ⁽²⁾	130	620	1,500 ⁽²⁾	18	60 ⁽²⁾	270	89	330 ⁽²⁾	200 ⁽²⁾	13 ⁽²⁾	41
Groundwater Contact Criteria	1.2E+06	3.0E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽⁴⁾	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft) ⁽³⁾	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
B-01 (26-30')	3/9/2009	16.5	<1.0	<1.0	26	1.0	5.9	120	12	<1.0	<1.0	5.3	<1.0	<1.0	200	<1.0	<3.0
B-01 (46-50')	3/9/2009	16.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.2	<1.0	<1.0	6.8	5.0	<3.0
B-02 (22-26')	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	27	<3.0
B-02 (33-37')	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.0	16	<3.0
B-03 (26-30')	3/9/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.6	<1.0	<1.0	<1.0	1.4	<3.0
B-03 (38-42')	3/9/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0	<3.0
B-04 (19-23')	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12	<3.0
B-04 (19-23') DUP-01	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12	<3.0
B-04 (29-33')	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-05 (14-18')	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<3.0
B-05 (22-26')	3/10/2009	7.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.7	<3.0
B-06 (44-48')	3/13/2009	23.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.5	<1.0	<1.0	<1.0	<1.0	<3.0
B-07 (44-48')	3/16/2009	24.0	3.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-08 (44-48')	3/13/2009	24.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-10 (24-28')	4/16/2009	26.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	57	<2.0
B-11 (29-33')	4/16/2009	26.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-12 (24-28')	4/16/2009	26.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.5	<2.0
B-12 (24-28') DUP-05	4/16/2009	26.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.2	<2.0
B-13 (29-33')	4/17/2009	28.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-13 (46-50')	4/16/2009	28.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-14 (16-20')	4/14/2009	16.0	--	--	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	1,100	<200
B-14 (36-40')	4/14/2009	16.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.4	<2.0
B-15 (24-28')	4/20/2009	24.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	9.9	<1.0	2.8	<1.0	<2.0
B-15 (44-48')	4/20/2009	24.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.7	<2.0
B-17 (24-28')	4/20/2009	26.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-18 (22-26')	4/14/2009	21.5	--	--	<1.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<2.0
B-18 (32-36')	4/14/2009	21.5	--	--	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<2.0
B-19 (12-16')	4/15/2009	5.5 p, 12.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<2.0
B-19 (29-33')	4/15/2009	5.5 p, 12.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	10	<2.0
B-20 (8-12')	4/15/2009	5.0 p, 9.5*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-20 (18-22')	4/15/2009	5.0 p, 9.5*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-21 (6-10')	4/15/2009	6.0	--	--	3.3	<1.0	<1.0	3.6	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.9	1.0	<2.0

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, Groundwater/Surface Water Interface (GSI) Criteria and Groundwater Contact Criteria from MDEQ RRD Op Memo 1 Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, March 25, 2011. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were calculated in accordance with the MDEQ Remediation and Redevelopment Division Program Redesign 2009 document titled Background Document: Draft Proposed Vapor Intrusion Indoor Air Criteria (IAC), Soil Gas Criteria (SGC), and Groundwater Screening Levels (GWSLs) for Vapor Intrusion using both residential and non-residential exposure scenarios and the most recent chemical specific toxicity values accepted and/or published by the United States Environmental Protection Agency (USEPA) as of February 1, 2012.

ug/L = micrograms per liter

NC = No criteria

-- = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the observed depth to groundwater intersects or is near an overlying clay unit that may act as a localized confining unit. The true piezometric surface may have a depth less than the recorded depth to groundwater.

1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

3) The approximate depth to groundwater is taken from soil boring logs. For sample locations with no soil boring log, approximate depth to groundwater is estimated using depth to groundwater data from nearby monitoring well and soil boring locations. Perched water, if present, is designated with a "p".

4) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.

5) Sample locations designated with a "b" following the boring location number, for example B-27b, were collected from the utility corridor.

Table 4
 Summary of Detected Volatile Organic Compounds at Perimeter and Off-Site Grab Groundwater Sample Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
Residential DW Criteria	800	1,700	880	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Non-Residential DW Criteria	2,300	4,800	2,500	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Residential GWSL for Vapor Intrusion	NC	NC	130	47	390	440	330	NC	11	NC	15,000	NC	9.9	5.0	NC
Non-Residential GWSL for Vapor Intrusion	NC	NC	670	240	1,600	1,800	1,400	NC	55	NC	63,000	NC	42	50	NC
GSI Criteria	NC	NC	740	360 ⁽²⁾	130	620	1,500 ⁽²⁾	18	60 ⁽²⁾	270	89	330 ⁽²⁾	200 ⁽²⁾	13 ⁽²⁾	41
Groundwater Contact Criteria	1.2E+06	3.0E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽⁴⁾	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft) ⁽³⁾	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
B-21 (13-17')	4/15/2009	6.0	--	--	8.1	<1.0	<1.0	13	2.2	<1.0	<1.0	<1.0	3.6	<1.0	30	58	<2.0
B-22 (18-23')	4/14/2009	19.0	--	--	<20	<20	<20	<20	<20	<20	<20	<20	53	<20	190	<20	<40
B-22 (40-44')	4/14/2009	19.0	--	--	<1.0	<1.0	<1.0	13	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	3.0	<1.0	<2.0
B-23 (14-18')	4/13/2009	13.0	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.8	<2.0	<2.0	23	<2.0	<6.0
B-23 (14-18') DUP 01	4/13/2009	13.0	--	--	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	5.0	<2.0	<2.0	26	<2.0	<6.0
B-23 (30-34')	4/13/2009	13.0	--	--	<250	<250	<250	5,500	<250	<250	<250	<250	<250	<250	1,700	<250	<750
B-23b (14-16') ⁽⁵⁾	4/15/2009	14.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	8.9	<1.0	<2.0
B-24 (6-10')	4/13/2009	6.0*	--	--	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	150	<5.0	<15
B-24 (28-32')	4/13/2009	6.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	6.7	<2.0
B-24b (5-7') ⁽⁵⁾	4/16/2009	5.0*	--	--	<20	<20	<20	<20	<20	<20	<20	<20	29	<20	740	<20	<40
B-24b (5-7') DUP-04	4/16/2009	5.0*	--	--	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	770	<50	<100
B-25 (7-11')	4/17/2009	8.0 p, 14.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-25 (7-11') DUP-06	4/17/2009	8.0 p, 14.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-25 (31-35')	4/17/2009	8.0 p, 14.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-26 (16-20')	4/14/2009	15.0	--	--	<1.0	<1.0	<1.0	3.2	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	3.1	<2.0
B-26 (29-33')	4/14/2009	15.0	--	--	<1.0	<1.0	<1.0	7.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	140	<2.0
B-27b (8-10') ⁽⁵⁾	4/15/2009	7.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.2	<1.0	<2.0
B-28b (16-18') ⁽⁵⁾	4/16/2009	16.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<2.0
B-29 (8-12')	4/13/2009	5.0 p, 8.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-29 (38-42')	4/13/2009	5.0 p, 8.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	1.1
B-29b ⁽⁵⁾	11/24/2009	5.0 p, 8.0*	<2.0	<10	27	<2.0	<2.0	6.2	<2.0	<2.0	210	<2.0	77	<2.0	76	<2.0	<6.0
B-30 (6-11')	4/14/2009	6.5*	--	--	2.4	<1.0	<1.0	36	4.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-30 (30-34')	4/14/2009	6.5*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
B-30 (30-34') DUP-02	4/14/2009	6.5*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-31 (10-14')	4/13/2009	7.5 p, 10.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.4	<1.0	<1.0	<1.0	8.1	<2.0
B-31 (25-29')	4/13/2009	7.5 p, 10.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	390	<2.0
B-32 (10-14')	4/14/2009	8.0*	--	--	<1.0	<1.0	<1.0	13	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	430	<2.0
B-32 (25-29')	4/14/2009	8.0*	--	--	<100	<100	<100	1,200	<100	<100	<100	<100	<100	<100	<100	360	<200
B-32b (8.5-10.5') ⁽⁵⁾	4/15/2009	8.0*	--	--	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	1.7	<1.0	2.1	<1.0	13	1.6	<2.0
B-33 (4-8')	4/15/2009	3.5 p, 7.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-33 (4-8') DUP-03	4/15/2009	3.5 p, 7.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-33 (17-21')	4/15/2009	3.5 p, 7.0*	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, Groundwater/Surface Water Interface (GSI) Criteria and Groundwater Contact Criteria from MDEQ RRD Op Memo 1 Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, March 25, 2011. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were calculated in accordance with the MDEQ Remediation and Redevelopment Division Program Redesign 2009 document titled Background Document: Draft Proposed Vapor Intrusion Indoor Air Criteria (IAC), Soil Gas Criteria (SGC), and Groundwater Screening Levels (GW_vSLs) for Vapor Intrusion using both residential and non-residential exposure scenarios and the most recent chemical specific toxicity values accepted and/or published by the United States Environmental Protection Agency (USEPA) as of February 1, 2012.

ug/L = micrograms per liter

NC = No criteria

-- = Not analyzed/Not recorded

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the observed depth to groundwater intersects or is near an overlying clay unit that may act as a localized confining unit. The true piezometric surface may have a depth less than the recorded depth to groundwater.

1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

3) The approximate depth to groundwater is taken from soil boring logs. For sample locations with no soil boring log, approximate depth to groundwater is estimated using depth to groundwater data from nearby monitoring well and soil boring locations. Perched water, if present, is designated with a "p".

4) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.

5) Sample locations designated with a "b" following the boring location number, for example B-27b, were collected from the utility corridor.

Table 4
 Summary of Detected Volatile Organic Compounds at Perimeter and Off-Site Grab Groundwater Sample Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
Residential DW Criteria	800	1,700	880	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Non-Residential DW Criteria	2,300	4,800	2,500	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Residential GWSL for Vapor Intrusion	NC	NC	130	47	390	440	330	NC	11	NC	15,000	NC	9.9	5.0	NC
Non-Residential GWSL for Vapor Intrusion	NC	NC	670	240	1,600	1,800	1,400	NC	55	NC	63,000	NC	42	50	NC
GSI Criteria	NC	NC	740	360 ⁽²⁾	130	620	1,500 ⁽²⁾	18	60 ⁽²⁾	270	89	330 ⁽²⁾	200 ⁽²⁾	13 ⁽²⁾	41
Groundwater Contact Criteria	1.2E+06	3.0E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽⁴⁾	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft) ⁽³⁾	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾	
B-33b ⁽⁵⁾	11/24/2009	3.5 p, 7.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.7	<1.0	<3.0
B-34 (14-18')	4/20/2009	12.5	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-34 (41-45')	4/20/2009	12.5	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0
B-35 (5-9')	4/20/2009	6.0 p, 13.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<2.0
B-35 (5-9') DUP-07	4/20/2009	6.0 p, 13.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<2.0
B-35 (11-16')	9/17/2010	6.0 p, 13.0	<1.0	<5.0	1.1	<1.0	<1.0	69	5.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-35 (30-34')	4/20/2009	6.0 p, 13.0	--	--	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	450	<20
B-36 (12-16')	5/13/2009	6.0 p, 12.0*	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-36 (16-20')	5/13/2009	6.0 p, 12.0*	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-36 (16-20') DUP-01	5/13/2009	6.0 p, 12.0*	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-37 (38.5-42.5')	5/12/2009	6.0 p, 12.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-38 (15-19')	5/13/2009	6.0 p, 16.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-38 (36-40')	5/13/2009	6.0 p, 16.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-39 (15-19')	5/13/2009	6.0 p, 16.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-40 (16-20')	5/15/2009	5.5 p, 16.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-40 (42-46')	5/15/2009	5.5 p, 16.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-45 (10-12')	2/22/2011	10.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-45 (14-16')	2/22/2011	10.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	33	<3.0
B-45 (22-24')	2/22/2011	10.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<3.0
B-46 (8-10')	2/22/2011	8.0*	<1.0	<5.0	<1.0	<1.0	<1.0	8.2	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-46 (14-16')	2/22/2011	8.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<3.0
B-46 (21-23')	2/22/2011	8.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<3.0
B-47 (7.75-9.75')	2/22/2011	7.75*	<1.0	<5.0	15	<1.0	1.1	73	6.7	<1.0	<1.0	<1.0	<1.0	6.4	100	<1.0	2.3	
B-47 (7.75-9.75') DUP-01	2/22/2011	7.75*	<1.0	<5.0	14	<1.0	<1.0	71	6.9	<1.0	<1.0	<1.0	<1.0	6.8	97	<1.0	<3.0	
B-47 (14-16')	2/22/2011	7.75*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23	<3.0
B-47 (21-23')	2/22/2011	7.75*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	28	<3.0
B-48 (7-9')	2/22/2011	7.0*	<1.0	<5.0	6.2	<1.0	<1.0	34	2.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-48 (13-15')	2/22/2011	7.0*	<1.0	<5.0	16	<1.0	2.1	110	11	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	32	<3.0
B-48 (19.5-21.5')	2/22/2011	7.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	47	<3.0
B-49 (13-15')	2/22/2011	7.0*	<5.0	<25	8.2	<5.0	<5.0	33	<5.0	<5.0	<5.0	9.0	<5.0	760	<5.0	<5.0	<15	
B-49 (19.5-21.5')	2/22/2011	7.0*	<10	<50	<10	<10	<10	31	<10	<10	<10	49	<10	1,600	<10	<30		
B-50 (7-9')	2/23/2011	7.0*	<5.0	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	33	<5.0	710	<5.0	<15		

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Residential DW Criteria	800	1,700	880	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Non-Residential DW Criteria	2,300	4,800	2,500	5.0	7.0	70	100	700	5.0	1,000	200	5.0	5.0	2.0	10,000
Residential GWSL for Vapor Intrusion	NC	NC	130	47	390	440	330	NC	11	NC	15,000	NC	9.9	5.0	NC
Non-Residential GWSL for Vapor Intrusion	NC	NC	670	240	1,600	1,800	1,400	NC	55	NC	63,000	NC	42	50	NC
GSI Criteria	NC	NC	740	360 ⁽²⁾	130	620	1,500 ⁽²⁾	18	60 ⁽²⁾	270	89	330 ⁽²⁾	200 ⁽²⁾	13 ⁽²⁾	41
Groundwater Contact Criteria	1.2E+06	3.0E+05	2.4E+06	19,000	11,000	2.0E+05	2.2E+05	1.7E+05	12,000	5.3E+05	1.3E+06	21,000	13,000 ⁽⁴⁾	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft) ⁽³⁾	Carbon Disulfide	Dichloro-difluoromethane	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Tetra-chloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
B-50 (13-15')	2/23/2011	7.0*	<50	<250	<50	<50	<50	<50	<50	<50	<50	<50	100	<50	5,400	<50	<150
B-50 (20-22')	2/23/2011	7.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	6.5	<3.0
B-50 (20-22') DUP-02	2/23/2011	7.0*	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	7.0	<3.0
B-51 (7-9')	2/23/2011	7.0*	<5.0	<25	<5.0	<5.0	<5.0	13	<5.0	<5.0	<5.0	<5.0	25	<5.0	580	<5.0	<15
B-51 (13-15')	2/23/2011	7.0*	<10	<50	36	<10	140	87	<10	<10	<10	<10	260	<10	1,600	<10	<30
B-51 (20-22')	2/23/2011	7.0*	<10	<50	<10	<10	<10	23	24	<10	<10	<10	<10	<10	970	62	<30
B-52 (7-9')	2/23/2011	7.0*	<500	<2,500	930	<500	<500	520	<500	4,400	<500	85,000	2,900	<500	2,900	<500	43,000
B-52 (13-15')	2/23/2011	7.0*	<10	<50	57	<10	<10	71	<10	430	<10	120	<10	<10	30	270	1,326
B-52 (20-22')	2/23/2011	7.0*	<5.0	<25	<5.0	<5.0	<5.0	140	16	<5.0	<5.0	<5.0	<5.0	<5.0	440	<5.0	<15
B-53 (18-20')	2/23/2011	17.5	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	120	<1.0	<3.0
B-53 (24-26')	2/23/2011	17.5	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-54 (18-20')	2/23/2011	18.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<3.0
B-54 (26-28')	2/23/2011	18.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0
B-58 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	620	--	16	--	--	--	--	5,300
B-59 (7-12')	4/1/2011	7.25*	--	--	--	--	--	--	--	2,500	--	41,000	--	--	--	--	24,000
B-60 (7-12')	4/1/2011	7.25*	--	--	--	--	--	--	--	4,700	--	55,000	--	--	--	--	48,000
B-61 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	5,200	--	61,000	--	--	--	--	41,000
B-62 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	1.4	--	<1.0	--	--	--	--	<3.0
B-63 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	3,800	--	21,000	--	--	--	--	30,000
B-63 (7-12') DUP-01	4/1/2011	7.0*	--	--	--	--	--	--	--	3,800	--	21,000	--	--	--	--	31,000
B-64 (7-12')	4/1/2011	7.25*	--	--	--	--	--	--	--	9,300	--	18,000	--	--	--	--	59,000
B-65 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	3,200	--	90	--	--	--	--	23,000
B-66 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	2,500	--	<50	--	--	--	--	28,000
B-67 (7-12')	4/1/2011	7.0*	--	--	--	--	--	--	--	140	--	<5.0	--	--	--	--	1,300
B-68 (14.5-16.5')	7/24/2012	15.0	<20	<100	<20	<20	<20	28	<20	<20	<20	<20	1,200	<20	1,900	<20	<60
B-68 (20.7-22.7')	7/24/2012	15.0	<50	<250	<50	<50	130	<50	<50	<50	<50	<50	5,300	<50	4,200	<50	<150
B-68 (27.7-29.7')	7/24/2012	15.0	<25	<125	<25	<25	<25	51	89	<25	<25	<25	<25	<25	2,800	<25	<75
MW-25 (46-51')	12/1/2009	19.0	<1.0	<5.0	<1.0	<1.0	<1.0	37	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<3.0

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, Groundwater/Surface Water Interface (GSI) Criteria and Groundwater Contact Criteria from MDEQ RRD Op Memo 1 Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, March 25, 2011. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were calculated in accordance with the MDEQ Remediation and Redevelopment Division Program Redesign 2009 document titled Background Document: Draft Proposed Vapor Intrusion Indoor Air Criteria (IAC), Soil Gas Criteria (SGC), and Groundwater Screening Levels (GW_vSLs) for Vapor Intrusion using both residential and non-residential exposure scenarios and the most recent chemical specific toxicity values accepted and/or published by the United States Environmental Protection Agency (USEPA) as of February 1, 2012.

ug/L = micrograms per liter

NC = No criteria

-- = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

* An asterisk indicates that the observed depth to groundwater intersects or is near an overlying clay unit that may act as a localized confining unit. The true piezometric surface may have a depth less than the recorded depth to groundwater.

Green background Denotes concentrations above one or more criteria

1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

3) The approximate depth to groundwater is taken from soil boring logs. For sample locations with no soil boring log, approximate depth to groundwater is estimated using depth to groundwater data from nearby monitoring well and soil boring locations. Perched water, if present, is designated with a "p".

4) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.

5) Sample locations designated with a "b" following the boring location number, for example B-27b, were collected from the utility corridor.

Appendix B
Summary of the Third Quarter 2014
Groundwater Monitoring Event

Technical Memorandum

To: Jason Smith, Tecumseh Products Company

From: Stacy Metz and Graham Crockford, TRC

Subject: Summary of the Third Quarter 2014 Groundwater Monitoring Event:
Former Tecumseh Products Company Site in Tecumseh, Michigan
(RCRA-05-2010-0012)

Date: October 7, 2014

cc: Chris DeWetter, Tecumseh Products Company
Douglas McClure, Conlin, McKenney & Philbrick, PC

Project No.: 004304.0001.0000, Phase 2

Tecumseh Products Company (TPC) retained TRC Environmental Corporation (TRC), to investigate soil and groundwater conditions at the former TPC site located in Tecumseh, Michigan. TRC is assisting TPC with investigative activities for the site in accordance with the RCRA Administrative Order on Consent (“AOC”)(RCRA 05-2010-0012).

Extensive investigation activities have been conducted to define the nature and extent of groundwater contamination in the vicinity of the site. Results of previous investigation activities were documented as they became available in a series of technical memoranda and reports. These investigation activities included the installation of 57 groundwater monitoring wells, and 13 temporary monitoring points. This Technical Memorandum documents groundwater sampling activities conducted during the third quarter of 2014, and summarizes the findings of those field activities.

Summary of Field Activities

Sampling activities are conducted in accordance with the Quality Assurance Project Plan (QAPP) which was submitted to the USEPA for review in August 2010 and the most recent Groundwater and Surface Water Monitoring Program, described in the July 10, 2014, Technical Memorandum titled *First and Second Quarter 2014 Groundwater Monitoring Events* and summarized in Table 1. The third quarter 2014 sampling event was a quarterly event.

Sample locations are shown on Figure 1. All groundwater samples are collected for volatile organic compound (VOC) analyses using low-flow sampling techniques. The following field parameters are measured during groundwater sample collection: pH, specific conductivity, redox potential,

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dissolved oxygen, turbidity and temperature. Groundwater and surface water samples are analyzed by TriMatrix Laboratories, Inc. (TriMatrix) using Level 4 data quality objectives.

Between July 14 and July 18, 2014, the third quarter sample event was conducted in accordance with the groundwater monitoring program which is described above and summarized in Table 1.

Monitoring activities conducted during the third quarter of 2014, including deviations from the monitoring program, are described below:

- Collection of groundwater samples in accordance with the sampling plan (Table 1);
- Collection of one additional groundwater sample at monitoring well MW-32s, which is not part of the regular quarterly monitoring program, to help assess anomalous data reported during the second quarter 2014 sample event;
- Measurement of field parameters at groundwater sample locations; and
- Analysis of all groundwater samples for VOCs.

Groundwater Elevation Data

In accordance with the quarterly sampling plan, groundwater elevation data were only collected at locations where a groundwater sample was collected during the third quarter 2014 sample event.

Groundwater elevation data collected in July 2014 are reported in Table 2.

The vertical hydraulic gradient in the upper sand/gravel aquifer was evaluated at the five of the seven nested well pairs where samples were collected at both locations (MW-20s/d, MW-35i/d, MW-36s/d, MW-39s/d, and MW-40s/d). The vertical gradient at nested well pair MW-38s/d was not evaluated because water at MW-38s is perched with an unsaturated zone between MW-38s and MW-38d. The vertical gradient was not calculated at well nest MW32s/d, because, due to limited building access and demolition activities, monitoring wells MW-32d and MW-34d have not yet been surveyed.

Table 3 summarizes the calculated vertical gradients. Consistent with previous observations, on-site nested pairs (MW-35i/d, MW-36s/d, and MW-39s/d) exhibit near neutral vertical gradients (ranging from -0.008 to 0.005). Downgradient (east/southeast) along the perimeter of the site, a downward hydraulic gradient was measured at MW-20s/d (-0.23 to -0.33). This significant vertical downward gradient in the upper sand/gravel aquifer east/southeast of the site, is the result of the presence of a higher hydraulic conductivity sand and gravel deposit that underlies the sand deposit, and a significant change in surface topography. At MW-40s/d, near the river, the vertical gradient returns to near neutral (-0.003 to 0.002). Vertical gradients observed during the third quarter 2014 are consistent with previous site observations.

As noted in previous reports, TRC staff have noted a downward trend in groundwater elevation data from the fourth quarter 2012 through the fourth quarter 2013. In order to evaluate this phenomenon further the average groundwater elevation and the standard deviation of the groundwater elevation data for each of the wells installed before 2012 (41 total) were calculated for the period from fourth quarter 2009 through third quarter 2012 (12 events). The number of wells installed prior to 2012 and

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sampled during the third quarter 2014 is limited; however available data suggest that groundwater elevations remain below average.

Summary of Groundwater Chemical Data

Field-collected data (pH, specific conductivity, redox potential, dissolved oxygen, turbidity and temperature) are provided in Table 4. Laboratory analytical data are provided in Attachment 1. Table 5 provides a summary of detected VOCs in groundwater. The constituents of concern at the site are chlorinated VOCs (CVOCs), specifically trichloroethene (TCE), 1,1,1-trichloroethane (TCA) and their breakdown products (cis-1,2-dichloroethene [cis-DCE] and vinyl chloride). CVOC concentrations were compared to Michigan Department of Environmental Quality (MDEQ) Part 201 criteria and groundwater screening levels (GWSLs) for vapor intrusion. The observed groundwater concentrations are generally consistent with those observed during previous sample events.

As documented in the January 10, 2014, Technical Memorandum which summarized the Fourth Quarter 2013 Groundwater Monitoring Event, TRC staff noted a potential correlation between groundwater elevations and groundwater concentrations. Groundwater elevation and VOC concentration data will continue to be collected so that this potential correlation may be evaluated further.

Data Quality Assurance

Follow-Up Regarding Second Quarter 2014 Sample Event

As described in the July 10, 2014, Technical Memorandum titled *First and Second Quarter 2014 Groundwater Monitoring Events*, the concentrations at monitoring well MW-32s were reported at an order of magnitude less than previous data, and less significantly the concentrations at monitoring well MW-38s were approximately half of those reported during previous sample events. Although the source of this apparently anomalous data was investigated and discussed with the laboratory, no discrepancies were identified. TRC identified a laboratory dilution error as the most likely culprit for these discrepancies.

These samples were both re-sampled during the regular third quarter 2014 sample event completed in July 2014. The anomalously low concentrations reported for the second quarter 2014 sample event were not confirmed. Therefore, those sample data are considered invalid, and have been eliminated from data tables and trend evaluations.

Third Quarter 2014 Sample Event

Field Data

Field data were reviewed in accordance with the QAPP. TRC field personnel collected water quality data (pH, specific conductivity, redox potential, dissolved oxygen, turbidity and temperature) consistent with the sampling plan described

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above. No problems were noted. The data quality objectives for the field data were met, and the data are usable.

Laboratory Data

Thirty-six water samples, including two field duplicates, were collected by TRC between July 14, 2014 and July 18, 2014. Samples were analyzed by TriMatrix, located in Grand Rapids, Michigan for VOCs by USEPA Method 8260B following protocols specified in the QAPP. TRC performed data validation on the VOC laboratory data. Overall, the data quality objectives and laboratory completeness goals for the project were met, and the data are usable. The procedures specified in the methods were implemented, and the data package contained all of the deliverables necessary for validation of the analytical data. The complete laboratory data validation report is included in Attachment 2.

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Tables

Table 1
 Groundwater and Surface Water Monitoring Program
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Groundwater Sample Location	Water Level				VOCs Analysis			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Groundwater Sample Locations								
MW-01s		√		√		√		√
MW-02s		√		√		√		√
MW-03s		√		√		√		√
MW-04s		√		√		√		√
MW-04i	√	√	√	√	√	√	√	√
MW-05s		√		√				√
MW-06s		√		√				√
MW-07s		√		√				√
MW-08s		√		√				
MW-08d	√	√	√	√	√	√	√	√
MW-09s	Well Decommissioned							
MW-10s		√		√		√		√
MW-10d		√		√				
MW-11s		√		√				√
MW-12s		√		√		√		√
MW-12d		√		√		√		√
MW-13s		√		√		√		√
MW-14s	Well Decommissioned							
MW-14d	√	√	√	√	√	√	√	√
MW-15s		√		√				√
MW-16s								
MW-17s		√		√		√		√
MW-18s		√		√				√
MW-19s		√		√				√
MW-19d		√		√				√
MW-20s	√	√	√	√	√	√	√	√
MW-20d	√	√	√	√	√	√	√	√
MW-21	√	√	√	√	√	√	√	√
MW-22	√	√	√	√	√	√	√	√
MW-23	√	√	√	√	√	√	√	√
MW-24s		√		√		√		√
MW-24d		√		√		√		√
MW-25s	√	√	√	√	√	√	√	√
MW-26s		√		√				√
MW-27s		√		√		√		√
MW-27d		√		√		√		√
MW-28s		√		√				√
MW-28d		√		√				√
MW-29s		√		√		√		√
MW-29d		√		√		√		√

Notes:

1. Water levels are monitored at PRB-01s and PRB-02s to facilitate preparation of a site-wide groundwater contour map. This table does not reflect sample requirements associated with routine PRB performance monitoring.

Table 1
 Groundwater and Surface Water Monitoring Program
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Groundwater Sample Location	Water Level				VOCs Analysis			
	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	1st Qtr	2nd Qtr	3rd Qtr	4th Qtr
Groundwater Sample Locations								
MW-30s		√		√		√		√
MW-30d		√		√		√		√
MW-31	√	√	√	√	√	√	√	√
MW-32s		√		√		√		√
MW-32d	√	√	√	√	√	√	√	√
MW-33s		√		√		√		√
MW-34s		√		√		√		√
MW-34d	√	√	√	√	√	√	√	√
MW-35i	√	√	√	√	√	√	√	√
MW-35d	√	√	√	√	√	√	√	√
MW-36s	√	√	√	√	√	√	√	√
MW-36d	√	√	√	√	√	√	√	√
MW-37s	√	√	√	√	√	√	√	√
MW-38s	√	√	√	√	√	√	√	√
MW-38d	√	√	√	√	√	√	√	√
MW-39s	√	√	√	√	√	√	√	√
MW-39d	√	√	√	√	√	√	√	√
MW-40s	√	√	√	√	√	√	√	√
MW-40d	√	√	√	√	√	√	√	√
NS-18s					√	√	√	√
NS-18i					√	√	√	√
NS-18d					√	√	√	√
NS-19s					√	√	√	√
NS-19i					√	√	√	√
NS-19d					√	√	√	√
NS-20s					√	√	√	√
NS-20i					√	√	√	√
SS-09s					√	√	√	√
SS-09i					√	√	√	√
SS-10s					√	√	√	√
SS-10i					√	√	√	√
SS-10d					√	√	√	√
PRB-01s ⁽¹⁾		√		√				
PRB-02s ⁽¹⁾		√		√				
Surface Water Sample Locations								
E. Chicago Blvd		√		√				
Russell Road		√		√				
WL-01						√		√
Seep						√		√

Notes:

1. Water levels are monitored at PRB-01s and PRB-02s to facilitate preparation of a site-wide groundwater contour map. This table does not reflect sample requirements associated with routine PRB performance monitoring.

Table 3
 Vertical Gradient Calculations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Well Pair Location	Measurement Date	Shallow Groundwater Elevation (ft MSL)	Deep Groundwater Elevation (ft MSL)	Vertical Gradient (ft/ft)
MW-4s/i	4/2/2013	777.31	777.33	0.003
	11/14/2013	777.41	777.35	-0.009
	5/13/2014	778.08	778.09	0.002
MW-8s/d	4/2/2013	778.14	778.04	-0.006
	11/14/2013	778.16	778.09	-0.004
	5/13/2014	778.99	778.88	-0.007
MW-10s/d	12/7/2009	777.08	776.30	-0.13
	3/23/2010	777.10	776.42	-0.11
	5/10/2010	777.45	776.80	-0.11
	9/2/2010	776.80	775.99	-0.13
	12/10/2010	776.50	775.72	-0.13
	2/14/2011	776.19	775.41	-0.13
	4/25/2011	777.56	776.92	-0.11
	7/19/2011	777.31	776.35	-0.16
	10/3/2011	777.11	776.10	-0.17
	1/3/2012	777.89	776.90	-0.17
	4/2/2012	778.05	776.83	-0.20
	7/2/2012	777.25	775.84	-0.23
	4/2/2013	776.08	775.29	-0.13
	11/14/2013	776.04	775.13	-0.15
	5/13/2014	777.07	776.07	-0.17
MW-12s/d	3/23/2010	776.84	776.55	-0.014
	5/10/2010	777.00	776.67	-0.016
	12/10/2010	776.56	776.25	-0.015
	2/14/2011	776.20	775.87	-0.016
	4/25/2011	776.95	776.58	-0.018
	7/19/2011	777.56	777.24	-0.015
	10/3/2011	777.29	776.99	-0.014
	1/3/2012	777.84	777.47	-0.018
	4/2/2012	778.15	777.82	-0.016
	7/2/2012	777.45	777.13	-0.015
	10/2/2012	776.41	776.14	-0.013
	4/2/2013	775.94	775.64	-0.014
	11/14/2013	776.31	775.76	-0.026
5/13/2014	777.05	776.45	-0.029	

Notes:

ft MSL - feet above mean sea level

* Anomalous, datum was not used.

Table 3
Vertical Gradient Calculations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Well Pair Location	Measurement Date	Shallow Groundwater Elevation (ft MSL)	Deep Groundwater Elevation (ft MSL)	Vertical Gradient (ft/ft)
MW-19s/d	12/7/2009	779.87	779.87	0.000
	3/23/2010	779.66	779.63	-0.002
	5/10/2010	779.67	779.69	0.001
	9/2/2010	779.67	779.64	-0.002
	12/10/2010	779.01	779.01	0.000
	2/14/2011	778.72	778.70	-0.001
	4/25/2011	779.54	779.54	0.000
	7/19/2011	780.34	780.34	0.000
	10/3/2011	779.84	779.86	0.001
	1/3/2012	780.49	780.50	0.001
	4/2/2012	780.76	780.81	0.003
	7/2/2012	780.20	780.15	-0.003
	10/2/2012	778.90	778.92	0.001
	4/2/2013	778.32	778.31	-0.001
11/14/2013	778.21	778.22	0.001	
5/13/2014	779.06	779.03	-0.002	
MW-20s/d	12/7/2009	778.31	771.31	-0.23
	3/23/2010	778.19	770.67	-0.25
	5/10/2010	778.36	770.49	-0.26
	9/2/2010	778.16	769.19	-0.29
	12/10/2010	777.63	768.38	-0.30
	2/14/2011	777.35	768.12	-0.30
	4/25/2011	778.30	768.74	-0.31
	7/19/2011	778.78	768.72	-0.33
	10/3/2011	778.43	772.01*	-0.21*
	1/3/2012	779.05	769.58	-0.31
	4/2/2012	779.20	769.61	-0.31
	7/2/2012	778.56	769.09	-0.31
	4/2/2013	776.75	768.16	-0.28
	11/14/2013	776.84	767.79	-0.30
5/13/2014	777.66	768.02	-0.32	
7/15/2014	777.56	767.82	-0.32	
MW-24s/d	12/7/2009	778.73	778.73	0.000
	3/23/2010	778.34	778.35	0.000
	5/10/2010	778.46	778.48	0.001
	9/2/2010	778.53	778.58	0.002
	12/10/2010	778.00	777.98	-0.001
	2/14/2011	777.59	777.62	0.001
	4/25/2011	778.40	778.41	0.000
	7/19/2011	779.10	779.08	-0.001
	10/3/2011	778.79	778.78	0.000
	1/3/2012	779.38	779.33	-0.002
	4/2/2012	779.80	779.79	0.000
	7/2/2012	778.99	778.97	-0.001
	4/2/2013	777.30	777.29	0.000
	11/14/2013	777.44	777.42	-0.001
5/13/2014	778.20	778.21	0.000	

Notes:

ft MSL - feet above mean sea level
* Anomalous, datum was not used.

Table 3
 Vertical Gradient Calculations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Well Pair Location	Measurement Date	Shallow Groundwater Elevation (ft MSL)	Deep Groundwater Elevation (ft MSL)	Vertical Gradient (ft/ft)
MW-27s/d	3/23/2010	778.27	757.77	-0.67
	5/10/2010	778.56	757.90	-0.68
	9/2/2010	778.24	757.75	-0.67
	12/10/2010	777.81	757.46	-0.67
	2/14/2011	777.62	757.32	-0.67
	4/25/2011	778.60	758.00	-0.68
	7/19/2011	778.94	758.18	-0.68
	10/3/2011	778.55	757.85	-0.68
	1/3/2012	779.08	758.29	-0.68
	4/2/2012	779.09	758.27	-0.68
	7/2/2012	778.56	757.90	-0.68
	10/2/2012	777.74	757.55	-0.66
	4/2/2013	777.22	757.99	-0.63
	11/14/2013	777.30	757.80	-0.64
5/13/2014	778.10	758.22	-0.65	
MW-28s/d	3/23/2010	779.15	779.11	-0.002
	5/10/2010	779.23	779.22	0.000
	9/2/2010	779.48	779.42	-0.002
	12/10/2010	778.82	778.82	0.000
	2/14/2011	778.38	778.38	0.000
	4/25/2011	779.21	779.17	-0.002
	7/19/2011	779.98	779.97	0.000
	10/3/2011	779.76	779.76	0.000
	1/3/2012	780.19	780.21	0.001
	4/2/2012	780.59	780.59	0.000
	7/2/2012	779.86	779.84	-0.001
	10/2/2012	778.62	778.62	0.000
	4/2/2013	777.97	777.95	-0.001
	11/14/2013	778.08	778.11	0.001
5/13/2014	778.93	778.89	-0.002	
MW-29s/d	3/23/2010	772.36	769.42	-0.065
	5/10/2010	772.66	769.56	-0.068
	9/2/2010	772.61	769.61	-0.066
	12/10/2010	771.98	769.88	-0.046
	2/14/2011	771.94	769.21	-0.060
	4/25/2011	772.76	769.26	-0.077
	7/19/2011	772.66	769.88	-0.061
	10/3/2011	772.68	769.93	-0.060
	4/2/2012	773.24	770.41	-0.062
	7/2/2012	772.76	769.73	-0.067
	10/2/2012	772.25	769.02	-0.071
	4/2/2013	771.79	768.87	-0.064
	11/14/2013	771.96	768.14	-0.084
	5/13/2014	772.66	769.26	-0.075

Notes:

ft MSL - feet above mean sea level
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Table 3
 Vertical Gradient Calculations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Well Pair Location	Measurement Date	Shallow Groundwater Elevation (ft MSL)	Deep Groundwater Elevation (ft MSL)	Vertical Gradient (ft/ft)
MW-30s/d	3/23/2010	777.80	777.81	0.001
	5/10/2010	777.94	777.98	0.003
	9/2/2010	777.79	777.86	0.005
	12/10/2010	777.33	777.39	0.004
	2/14/2011	776.95	777.03	0.006
	4/25/2011	778.11	778.41	0.021*
	7/19/2011	778.29	778.37	0.006
	10/3/2011	778.03	778.12	0.006
	1/3/2012	778.61	778.64	0.002
	4/2/2012	778.81	778.91	0.007
	7/2/2012	778.14	778.25	0.008
	10/2/2012	777.17	777.23	0.004
	4/2/2013	776.78	776.73	-0.003
	11/14/2013	776.83	776.86	0.002
5/13/2014	777.63	777.66	0.002	
MW-35i/d	8/28/2013	777.70	777.74	0.002
	11/14/2013	777.39	777.35	-0.002
	3/27/2014	777.94	777.99	0.002
	5/13/2014	778.33	778.15	-0.008
	7/15/2014	778.10	778.16	0.003
MW-36s/d	4/2/2013	777.42	777.44	0.001
	8/28/2013	777.75	777.80	0.003
	11/14/2013	777.43	777.48	0.003
	3/27/2014	777.93	777.81	-0.008
	5/13/2014	778.20	778.18	-0.001
	7/15/2014	778.18	778.22	0.003
MW-39s/d	4/2/2013	777.46	777.47	0.001
	8/28/2013	777.84	777.83	-0.001
	11/14/2013	777.50	777.47	-0.002
	3/27/2014	777.99	778.08	0.005
	5/13/2014	778.25	778.20	-0.003
	7/15/2014	778.22	778.28	0.003
MW-40s/d	4/2/2013	754.37	754.38	0.001
	8/28/2013	754.43	754.43	0.000
	11/14/2013	754.16	754.14	-0.001
	3/27/2014	753.44	754.41	0.055*
	5/13/2014	754.46	754.41	-0.003
	7/15/2014	754.25	754.28	0.002

Notes:

ft MSL - feet above mean sea level
 * Anomalous, datum was not used.

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-01s	12/9/2009	7.29	499	161	5.68	18.3	12.64
	3/17/2010	6.40	521	84	2.4	30.1	13.34
	5/18/2010	7.45	631	110	2.1	10	11.9
	9/10/2010	NM	678	29	3.4	38	15.96
	12/28/2010	6.85	603	140	4.54	29.4	13.08
	2/25/2011	7.67	603	-5	6.80	29.6	11.22
	5/11/2011	6.48	611	121	1.80	20.0	12.59
	7/28/2011	7.61	720	-74	0.20	21.8	15.40
	10/6/2011	7.16	692	33.1	41.3*	0.50	15.60
	1/9/2012	7.04	628	67	3.11	0.00	13.43
	4/4/2012	7.39	573	30	3.26	9.5	12.93
	7/11/2012	7.41	620	35	3.23	9.0	15.00
	10/8/2012	7.73	586	6	2.77	10.2	15.68
	6/11/2013	7.33	546	27	1.87	8.2	13.44
11/12/2013	7.11	695	24	4.29	25.9	13.78	
5/21/2014	7.46	750	46	4.36	30.1	11.67	
MW-02s	12/9/2009	6.67	1,238	192	3.92	79.1	14.78
	3/17/2010	7.31	859	55	0.80	18.7	14.81
	5/18/2010	7.41	1,379	156	1.2	84	13.9
	9/10/2010	NM	1,413	35	1.6	49	16.16
	12/22/2010	6.97	1,500	28	2.82	33.0	14.90
	2/24/2011	7.06	1,450	-25	2.41	32.7	14.50
	5/10/2011	7.61	1,094	17	2.00	22.9	15.22
	7/28/2011	7.66	1,380	54	1.50	19.1	16.55
	10/7/2011	7.30	1,602	116.9	46.2*	6.08	15.48
	1/10/2012	7.11	2,120	119	2.98	1.30	14.43
	4/5/2012	7.23	1,290	23	1.92	9.2	13.91
	7/11/2012	7.41	1,028	45	1.62	15.0	16.04
	10/25/2012	7.42	1,016	109	2.48	69.8	15.90
	6/11/2013	7.04	1,051	185	1.18	9.3	14.48
11/12/2013	6.88	1,160	140	2.09	26.9	13.58	
5/19/2014	7.51	1,146	21	1.07	25.0	13.61	

Notes:

S.U. = standard pH units

umhos/cm = micromhos per centimeter

mV = millivolts

mg/L = milligrams per liter

NTU = nephelometric turbidity units

°C = degrees Celsius

* = Dissolved oxygen measurement recorded in percent of saturation, not mg/L

NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-03s	12/8/2009	6.85	1,342	63	1.21	30.9	13.67
	3/17/2010	7.11	1,105	70	1.57	25.5	10.47
	5/18/2010	7.25	1,239	160	0.8	10	13.4
	9/10/2010	NM	1,320	11	0.5	39	18.70
	12/22/2010	6.96	1,298	24	0.44	31.9	13.42
	2/25/2011	6.82	1,466	38	0.80	25.2	8.84
	5/10/2011	7.15	1,199	39	1.55	21.5	11.00
	7/28/2011	7.14	1,347	50	0.93	19.5	17.83
	10/6/2011	6.80	1,294	63.0	28.8*	2.85	17.71
	1/10/2012	6.79	1,436	130	1.37	0.00	12.15
	4/4/2012	6.99	1,453	37	1.11	9.3	10.84
	7/11/2012	6.96	1,640	43	0.74	11.2	17.31
	10/8/2012	7.32	1,510	23	0.47	12.0	18.31
6/3/2013	7.09	1,054	31	0.88	13.0	12.17	
11/11/2013	6.90	1,428	75	0.67	26.9	15.88	
5/19/2014	6.99	972	133	2.24	24.0	10.21	
MW-04s	12/9/2009	6.87	970	68	7.17	4.70	15.47
	3/17/2010	6.57	763	78	0.22	16.7	15.69
	5/18/2010	7.20	928	168	0.4	5.0	13.6
	9/17/2010	7.03	817	49	0.4	33.3	18.14
	12/22/2010	6.99	838	-10	0.32	29.9	16.41
	2/25/2011	7.06	795	-9	0.60	24.5	14.15
	5/11/2011	6.84	815	50	0.93	20.2	13.75
	7/28/2011	7.26	777	-10	0.67	18.3	17.98
	10/6/2011	6.94	721	-20.0	13.8*	1.00	18.60
	1/10/2012	6.87	770	20	0.53	0.00	16.03
	4/4/2012	7.09	865	13	0.92	6.9	14.49
	7/11/2012	7.15	1,036	-2	0.28	9.7	17.73
	10/8/2012	7.39	926	-24	0.25	11.7	18.64
	6/3/2013	7.26	724	31	0.61	7.7	14.65
11/11/2013	7.09	943	-8	0.58	26.1	16.63	
5/19/2014	6.57	655	180	1.80	23.0	12.69	
MW-04i	4/3/2013	7.08	865	-19	0.32	5.4	14.87
	6/3/2013	7.28	923	-68	0.29	11.9	16.06
	8/29/2013	7.22	1,013	-76	0.25	21.0	17.53
	11/11/2013	7.17	1,141	-89	0.26	27.6	15.77
	3/27/2014	7.23	1,070	-40	0.12	22.0	14.00
	5/19/2014	7.23	868	-54	0.21	27.9	15.07
7/18/2014	6.69	944	31	0.30	28.0	14.82	

Notes:

S.U. = standard pH units

umhos/cm = micromhos per centimeter

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mg/L = milligrams per liter

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-05s	12/10/2009	7.41	765	131	7.19	NM	10.18
	3/17/2010	7.51	678	20	3.24	39.0	12.80
	5/17/2010	7.70	920	134	1.8	10	11.8
	9/9/2010	NM	886	46	3.5	56	13.80
	12/21/2010	7.28	852	25	4.52	33.6	11.77
	2/24/2011	6.94	857	65	4.32	28.0	11.78
	5/13/2011	7.53	810	45	7.92	29.3	13.12
	7/27/2011	7.47	880	136	4.80	25.8	13.00
	10/10/2011	7.13	999	74.4	7.19	3.35	13.06
	1/9/2012	6.64	999	192	5.62	6.84	11.74
	4/9/2012	7.43	972	47	5.94	11.0	12.73
	7/10/2012	7.48	993	71	3.91	13.5	13.31
10/25/2012	7.31	979	275	5.99	69.5	12.78	
11/8/2013	7.06	772	139	6.12	28.1	11.85	
MW-06s	12/9/2009	7.18	635	171	2.32	22.0	11.72
	3/18/2010	7.40	856	0	0.85	28.5	12.94
	5/17/2010	7.77	768	86	0.7	39	12.6
	9/10/2010	NM	1,254	116	0.9	47	12.70
	12/21/2010	7.13	979	-8	1.19	32.0	12.38
	2/18/2011	6.74	977	35	0.83	27.3	12.51
	5/10/2011	7.47	870	31	1.60	25.0	12.47
	7/27/2011	7.17	1,175	150	1.68	22.0	13.64
	10/5/2011	6.53	1,183	93.8	31.9*	0.50	13.60
	1/9/2012	7.01	988	193	1.53	5.66	11.95
	4/3/2012	7.36	1,220	30	1.95	9.0	12.69
	7/10/2012	7.26	1,560	73	2.10	14.0	13.45
	10/4/2012	6.69	805	-19.8	1.85	4.3	13.87
11/7/2013	7.26	1,038	66	1.40	26.1	12.90	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-07s	12/10/2009	7.27	822	95	3.41	NM	10.43
	3/17/2010	7.20	770	-2	1.69	22.9	11.91
	5/17/2010	7.73	930	151	1.5	10	11.80
	9/10/2010	NM	833	109	3.2	39	13.00
	12/21/2010	7.13	846	15	2.80	35.0	12.45
	2/24/2011	6.90	871	92	2.68	25.9	11.95
	5/13/2011	7.41	703	38	6.20	24.8	13.30
	7/27/2011	7.44	806	138	4.15	26.3	13.73
	10/10/2011	7.16	708	79.5	5.67	4.40	14.77
	1/9/2012	7.10	858	182	4.03	1.35	12.22
	4/9/2012	7.33	912	19	3.58	9.5	13.12
7/10/2012	7.30	1,090	65	2.25	12.0	13.69	
10/19/2012	7.58	969	-10	2.50	106	13.60	
11/8/2013	6.80	711	143	3.52	26.5	12.37	
MW-08s	12/10/2009	7.49	828	119	8.60	NM	10.91
MW-08d	4/2/2013	6.95	771	-5	0.31	1.9	11.40
	6/11/2013	7.20	1,230	-45	0.12	16.0	14.77
	8/28/2013	7.19	1,040	-56	0.22	18.9	14.57
	11/13/2013	7.06	1,019	-73	0.45	29.9	10.93
	3/26/2014	8.56	1,188	-126	0.25	31.3	10.89
	5/21/2014	7.22	1,214	-58	0.22	31.5	14.37
7/16/2014	7.15	825	-31	0.21	30.8	12.89	
MW-09s	12/9/2009	7.14	661	172	6.32	15.7	11.63
	3/18/2010	7.34	436	121	4.75	44.5	7.32
	5/18/2010	7.56	506	206	3.0	19	10.40
	9/17/2010	7.29	709	58	2.5	46.7	16.92
	2/25/2011	7.45	663	11	6.39	30.0	6.58
5/11/2011	7.57	395	87	12.13*	24.6	9.48	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-10s	12/9/2009	7.01	825	-1	6.16	144	9.99
	3/16/2010	7.28	816	-24	0.17	38.0	7.79
	5/12/2010	5.99	570	223	0.4	28	8.10
	9/3/2010	NM	925	-29	0.3	56	16.10
	12/16/2010	6.95	1,293	-53	0.18	49.5	10.40
	2/15/2011	6.85	1,251	-4	0.68	39.5	7.70
	5/9/2011	7.30	509	-20	0.22	38.6	7.71
	7/20/2011	7.24	878	-22	0.11	21.0	14.35
	10/4/2011	7.00	810	24.5	4.3*	2.00	14.88
	1/4/2012	6.77	754	109	0.21	24.9	9.65
	4/2/2012	7.20	785	-26	0.26	10.5	8.35
	7/5/2012	7.20	1,163	-21	0.16	16.0	13.14
	10/3/2012	6.73	806	-28.6	0.47	10.19	14.44
6/12/2013	7.38	402	-10	0.15	11.8	10.30	
11/14/2013	6.88	921	-17	0.31	34.5	13.05	
5/22/2014	7.46	573	60	0.48	48.9	8.50	
MW-10d	12/9/2009	6.98	1,150	6	1.69	0.88	10.05
MW-11s	12/9/2009	7.14	969	140	8.59	27.2	10.18
	3/15/2010	7.31	632	83	7.05	199	11.43
	5/14/2010	6.89	728	195	2.7	85	12.1
	9/3/2010	NM	828	109	5.4	98	14.50
	12/17/2010	6.71	1,093	108	3.51	51.9	11.00
	2/17/2011	7.04	863	104	5.18	49.5	11.86
	5/12/2011	7.28	691	57	9.48	45.5	12.63
	7/22/2011	7.06	878	96	6.62	29.0	13.52
	10/7/2011	7.11	1,021	109.6	51.6*	6.40	12.68
	1/4/2012	6.96	930	122	5.81	28.5	11.34
	4/5/2012	7.24	1,220	64	7.35	24.3	11.95
	7/6/2012	7.11	1,022	65	6.98	19.0	13.60
	10/12/2012	6.74	701	205	0.18	43.7	11.96
11/4/2013	7.20	782	86	10.28	33.0	12.17	

Notes:

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mg/L = milligrams per liter

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* = Dissolved oxygen measurement recorded in percent of saturation, not mg/L

NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-12s	12/10/2009	6.34	906	165	8.03	9.80	10.51
	3/15/2010	7.40	965	80	6.61	39.4	10.12
	5/14/2010	7.11	2,000	200	2.7	10	10.6
	9/3/2010	NM	1,650	108	5.4	46	16.30
	12/14/2010	6.97	1,371	34	6.61	35.3	11.70
	2/14/2011	NM	1,228	41	7.72	27.5	10.87
	5/12/2011	7.23	2,100	37	9.25	27.3	11.73
	7/20/2011	6.89	1,580	149	6.69	24.5	13.80
	10/7/2011	7.21	1,016	84.0	59.0*	5.35	15.60
	1/4/2012	6.94	1,201	123	4.35	21.6	12.01
	4/6/2012	6.97	1,142	40	6.06	9.3	10.43
	7/9/2012	7.26	1,103	48	6.20	13.0	13.85
	10/12/2012	8.33	867	14	6.06	185	15.55
	5/30/2013	7.27	1,490	82	5.84	14	12.32
11/7/2013	6.84	1,145	88	8.11	33	13.90	
5/14/2014	7.15	2,290	49	6.31	24.0	10.30	
MW-12d	3/18/2010	7.14	1,780	-94	0.23	59.2	12.07
	5/14/2010	7.19	1,880	-46	0.2	15	12.2
	9/3/2010	NM	2,200	-93	0.3	110	15.60
	12/14/2010	6.96	2,250	-91	0.30	32.8	7.60
	2/14/2011	6.84	2,370	-79	0.24	25.3	11.10
	5/12/2011	7.14	2,450	-96	0.95	25.5	14.78
	7/20/2011	6.97	2,450	-62	0.13	21.0	14.36
	10/7/2011	7.12	1,568	31.0	17.5*	6.50	14.89
	1/4/2012	6.94	2,040	-50	0.11	22.0	10.96
	4/6/2012	7.00	1,800	-75	0.70	9.7	11.77
	7/9/2012	7.19	1,620	-86	0.20	12.5	14.59
	10/12/2012	8.43	1,208	-141	0.26	199	12.91
	5/31/2013	7.22	1,650	-73	0.21	15	13.88
	11/7/2013	7.15	1,640	-61	0.28	28	11.86
5/15/2014	7.06	1,670	-34	0.45	29.0	12.04	

Notes:

S.U. = standard pH units

umhos/cm = micromhos per centimeter

mV = millivolts

mg/L = milligrams per liter

NTU = nephelometric turbidity units

°C = degrees Celsius

* = Dissolved oxygen measurement recorded in percent of saturation, not mg/L

NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-13s	12/10/2009	6.51	1,264	122	3.26	9.70	11.24
	3/15/2010	7.05	1,760	75	2.38	44.0	10.87
	5/14/2010	7.00	2,810	87	1.5	10	11.4
	9/3/2010	NM	2,170	71	2.6	44	15.70
	12/14/2010	6.85	2,050	18	4.70	45.2	11.30
	2/14/2011	6.80	1,870	8	9.32	261	8.86
	5/12/2011	7.23	2,010	20	8.30	37	12.68
	7/20/2011	6.91	2,610	77	4.79	22.6	15.59
	10/10/2011	6.78	1,976	114.9	3.49	4.79	14.74
	1/4/2012	6.74	2,160	50	3.04	23.4	12.10
	4/9/2012	6.93	2,240	164	6.52	9.0	10.30
	7/10/2012	6.69	1,980	117	3.00	19.0	13.85
	10/12/2012	8.32	1,323	-11	2.53	123	15.06
5/31/2013	7.01	2,570	85	3.40	11	13.12	
11/7/2013	6.84	3,000	94	2.75	30	13.75	
5/15/2014	6.96	2,840	46	4.35	37.8	10.57	
MW-14s	12/8/2009	7.04	1,251	52	1.26	9.4	11.69
	3/15/2010	7.39	610	-7	4.83	29.9	6.63
	5/12/2010	6.96	733	197	3.0	4.5	9.9
	9/3/2010	NM	1,338	57	0.5	35	19.50
	12/20/2010	6.56	2,020	54	0.70	30.2	9.25
	2/16/2011	7.02	1,373	146	4.15	25.9	6.62
	5/11/2011	7.39	844	45	6.49	24.0	11.80
	7/21/2011	7.11	912	48	0.80	18.0	19.55
	10/7/2011	6.94	1,215	124.8	14.7*	0.23	16.85
	1/4/2012	7.08	837	49	2.67	22.3	8.08
4/5/2012	7.25	667	14	3.46	9.5	9.13	
7/3/2012	6.99	897	22	0.99	14.4	17.98	

Notes:

S.U. = standard pH units

umhos/cm = micromhos per centimeter

mV = millivolts

mg/L = milligrams per liter

NTU = nephelometric turbidity units

°C = degrees Celsius

* = Dissolved oxygen measurement recorded in percent of saturation, not mg/L

NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-14d	3/23/2010	7.29	1,151	30	1.18	73.6	11.70
	5/14/2010	7.44	1,324	95	0.9	65	12.9
	9/3/2010	NM	1,371	81	1.2	58	14.30
	12/16/2010	6.91	1,397	45	0.88	57.9	10.90
	2/16/2011	7.01	1,403	114	0.94	32.3	11.06
	5/9/2011	7.15	1,278	46	2.56	39.9	12.32
	7/21/2011	7.24	1,264	75	1.55	37.5	14.84
	10/4/2011	7.18	974	145.7	12.0*	10.5	11.28
	1/4/2012	7.03	1,223	64	1.63	28.4	9.80
	4/2/2012	7.15	1,241	29	1.40	17.8	12.03
	7/3/2012	7.13	1,378	41	1.76	46.0	15.48
	10/4/2012	6.47	951	-4.1	2.11	4.99	11.86
	6/12/2013	7.23	982	77	1.87	17.2	13.02
11/14/2013	6.75	969	152	2.08	37.8	11.11	
5/22/2014	6.78	1,137	144	3.03	68.5	11.92	
7/16/2014	7.21	1,023	64	2.33	34.0	12.10	
MW-15s	12/10/2009	7.07	456	150	9.35	33.7	9.76
	3/15/2010	6.85	448	93	7.07	57.9	11.03
	5/14/2010	7.50	621	131	2.40	52.0	12.80
	9/8/2010	NM	895	129	5.50	59.0	12.54
	12/17/2010	7.14	743	82	4.18	44.0	10.69
	2/17/2011	7.01	662	98	4.71	39.0	11.26
	5/12/2011	7.20	720	48	5.83	25.0	11.95
	7/25/2011	7.04	1,043	123	4.92	20.0	13.24
	10/7/2011	6.95	622	129.4	48.7*	6.0	11.61
	1/5/2012	6.98	595	189	4.88	6.0	11.02
	4/5/2012	7.20	741	54	4.03	12.9	11.71
	7/9/2012	7.10	908	72	6.23	13.5	12.46
	10/2/2012	6.96	405	0	8.39	7.4	12.18
11/5/2013	7.10	666	88	6.10	28.2	11.77	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-17s	12/7/2009	7.32	810	124	8.06	8.5	8.82
	3/18/2010	7.47	847	28	3.27	29.2	5.19
	5/12/2010	7.35	870	218	3.10	10.0	9.10
	9/8/2010	NM	1,136	115	4.60	58.0	15.34
	12/16/2010	7.25	903	28	5.88	59.2	7.74
	2/15/2011	7.35	1,028	15	10.07	43.3	5.10
	5/11/2011	7.39	890	47	6.31	29.6	9.72
	7/21/2011	7.02	1,119	146	6.80	19.4	14.80
	10/4/2011	6.93	816	117.0	50.5*	NM	14.05
	1/5/2012	6.93	924	190	3.95	4.5	6.70
	4/2/2012	6.27	919	84	4.31	11.5	8.41
	7/3/2012	6.89	1,235	142	4.86	19.0	14.89
	10/3/2012	6.76	732	-4.6	5.84	10.0	13.97
	5/29/2013	7.07	897	81	3.92	15.0	11.65
MW-18s	3/28/2014	7.34	818	146	3.68	29.5	4.70
	5/22/2014	7.25	1,012	67	3.97	39.0	10.24
	12/8/2009	7.31	1,043	56	4.52	79.2	11.59
	3/16/2010	6.08	732	107	1.14	97.7	11.82
	5/12/2010	7.82	1,990	208	2.3	10	11.3
	9/8/2010	NM	1,308	91	3.1	50	13.95
	12/20/2010	6.77	1,259	44	4.28	41.5	11.77
	2/17/2011	7.03	1,236	136	3.14	32.0	11.77
	5/9/2011	7.25	2,620	53	5.63	33.5	12.68
	7/22/2011	7.29	1,820	47	4.92	28.1	13.60
	10/5/2011	NM	1,164	110.8	33.2*	6.00	13.23
	1/5/2012	7.04	1,590	203	4.21	7.58	11.78
	4/3/2012	7.29	1,840	38	5.65	32.0	11.56
	7/6/2012	7.33	1,428	35	5.09	15.0	13.93
10/4/2012	6.71	823	-5.9	3.92	7.6	13.03	
11/4/2013	7.28	1,298	64	6.71	32.5	12.88	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-19s	12/8/2009	6.82	1,065	53	2.73	15.6	12.37
	3/16/2010	7.15	895	6	1.95	20.2	12.66
	5/18/2010	6.63	971	150	0.6	10	11.6
	9/10/2010	NM	1,470	114	2.7	43	13.34
	12/20/2010	7.04	1,131	7	1.93	31.9	12.49
	2/18/2011	7.17	1,229	36	2.65	25.5	12.25
	5/10/2011	7.19	1,043	12	1.25	22.5	12.67
	7/25/2011	7.17	1,310	30	1.17	19.5	16.90
	10/5/2011	NM	990	-170.4	18.0*	0.50	14.10
	1/5/2012	6.89	1,302	194	2.53	1.50	11.89
	4/3/2012	7.12	1,173	25	1.22	9.3	12.75
	7/10/2012	7.05	1,446	76	2.44	12.0	13.61
10/4/2012	6.65	701	-36.9	1.13	7.2	14.35	
11/7/2013	7.14	809	50	0.73	26.2	12.70	
MW-19d	12/8/2009	6.86	1,067	-84	0.71	66.6	10.99
	3/16/2010	7.00	913	-76	0.31	96.2	11.89
	5/12/2010	7.91	1,185	-30	0.4	23	11.7
	9/8/2010	NM	1,219	-103	0.2	80	15.75
	12/20/2010	7.18	1,162	-117	0.24	38.0	9.95
	2/18/2011	6.30	1,257	17	0.49	35.3	11.57
	5/10/2011	7.14	1,256	-120	0.26	64.2	12.78
	7/25/2011	7.20	1,293	-116	0.12	22.0	16.20
	10/5/2011	NM	985	-220	2.8*	0.50	15.10
	1/5/2012	7.09	1,041	-72	0.26	7.49	10.78
	4/3/2012	7.22	1,143	-119	0.23	25.9	12.15
	7/10/2012	NM	1,172	85	0.20	29.5	14.02
	10/4/2012	6.68	901	-61.5	1.94	4.9	13.75
	11/7/2013	7.41	866	-110	0.29	30.9	11.90
5/20/2014	7.26	898	-86	0.29	42.0	14.31	

Notes:

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NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-20s	12/10/2009	7.48	418	15	2.93	8.30	9.75
	3/17/2010	7.15	411	125	2.08	43.0	6.34
	5/18/2010	6.94	488	177	1.4	47	10.7
	9/10/2010	NM	512	109	1.0	42	18.03
	12/21/2010	7.04	553	94	1.11	35.7	9.63
	2/18/2011	7.58	599	34	1.60	29.7	7.17
	5/13/2011	7.47	550	29	5.98	26.9	10.20
	7/25/2011	7.45	487	38	2.48	19.9	17.50
	10/10/2011	7.14	478	57.2	1.65	4.86	17.25
	1/9/2012	7.22	528	204	3.06	3.25	9.15
	4/9/2012	6.90	520	56	4.97	9.7	10.07
	7/10/2012	7.38	529	27	1.52	12.8	17.58
	10/19/2012	7.71	439	1	1.54	11.2	16.48
	5/31/2013	7.47	550	58	4.30	15.0	13.10
11/8/2013	7.49	477	35	2.60	26.3	15.17	
5/15/2014	7.33	613	50	5.05	26.9	9.88	
7/16/2014	7.14	527	94	2.10	31.0	15.60	
MW-20d	12/10/2009	6.87	1,006	-41	0.82	0.77	11.18
	3/17/2010	6.98	928	-89	0.82	22.2	10.85
	5/18/2010	6.92	1,183	27	0.3	10	10.4
	9/10/2010	NM	1,184	-30	0.3	49	15.89
	12/21/2010	6.98	1,205	-110	0.19	34.7	11.08
	2/18/2011	7.38	1,216	-135	0.52	33.5	11.61
	5/13/2011	7.28	1,165	-118	0.26	37.0	12.70
	7/25/2011	7.24	1,155	-135	0.24	19.0	16.69
	10/10/2011	7.01	1,057	-73.0	1.30	0.50	14.87
	1/9/2012	6.98	1,106	-167	0.23	0.00	11.55
	4/9/2012	7.21	1,127	-139	0.31	20.0	12.11
	7/10/2012	7.39	1,237	-236	0.19	9.3	15.25
	10/19/2012	7.66	982	-201	0.24	9.0	13.99
	6/3/2013	7.17	1,056	-151	0.30	11.1	11.83
11/8/2013	7.40	944	-128	0.35	26.1	12.78	
5/15/2014	7.27	976	-179	0.20	25.0	12.14	
7/16/2014	7.27	986	-110	0.16	28.5	14.24	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-21	12/8/2009	7.12	1,049	36	4.43	15.7	11.30
	3/23/2010	7.29	1,002	41	3.48	24.9	12.81
	5/18/2010	7.15	1,134	220	1.8	8.0	12.2
	10/15/2010	6.91	1,160	180	4.2	29.3	13.03
	12/22/2010	7.11	1,084	21	5.00	34.3	11.87
	2/24/2011	6.99	1,243	-10	5.02	28.5	12.03
	5/11/2011	7.23	965	92	6.71	23.2	13.08
	7/28/2011	7.32	1,141	60	3.21	18.0	13.42
	10/6/2011	6.95	971	65.3	65.0*	0.39	13.18
	1/10/2012	6.90	1,105	103	3.94	3.00	12.31
	4/4/2012	7.04	1,031	52	3.51	8.7	13.03
	7/11/2012	7.20	1,233	66	3.80	12.8	14.20
	10/8/2012	7.59	1,206	60	4.13	13.5	12.91
	3/7/2013	7.13	950	-74	1.77	1.82	12.32
	6/11/2013	7.06	943	79	0.28	9.5	13.47
	8/29/2013	7.12	1,001	41	0.88	17.6	13.49
	11/12/2013	6.98	1,183	83	2.52	26.1	12.13
3/27/2014	7.19	1,131	130	1.33	19.5	12.08	
5/19/2014	7.15	1,135	54	2.63	23.6	14.29	
7/18/2014	7.00	1,007	123	2.74	26.0	12.51	
MW-22	12/7/2009	5.73	1,220	190	1.75	4.9	9.62
	3/18/2010	7.37	1,010	-121	0.21	17.6	10.64
	5/18/2010	7.07	1,183	-7	0.3	9.2	9.20
	9/10/2010	NM	1,357	-114	0.2	41.0	11.12
	12/22/2010	7.00	1,304	-127	0.19	32.8	10.45
	2/24/2011	6.97	1,299	-139	0.38	33.2	10.03
	5/11/2011	7.24	1,066	-131	0.27	24.0	9.80
	7/21/2011	7.13	1,147	-107	0.16	22.7	11.25
	10/4/2011	6.72	981	-36.3	3.0*	4.0	10.90
	1/9/2012	6.95	1,163	-79	0.39	1.4	10.06
	4/5/2012	6.63	1,156	-60	0.30	9.3	9.50
	7/3/2012	7.09	1,365	-125	0.29	20.5	11.70
	10/3/2012	6.46	822	-76.6	0.76	2.6	10.90
	5/29/2013	7.23	1,164	-110	0.36	11.7	11.42
	3/28/2014	7.31	1,024	-93	0.23	29.0	8.97
5/22/2014	7.14	1,275	-76	0.22	39.0	9.95	
7/17/2014	7.29	1,063	-91	0.32	49.3	10.50	

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-23	12/8/2009	6.63	1,520	-29	0.68	49.0	12.91
	3/16/2010	6.84	1,280	-76	0.25	86.5	10.97
	5/18/2010	7.02	1,600	18	0.2	10.0	10.60
	9/10/2010	NM	1,550	-87	0.2	44.0	16.15
	12/21/2010	6.99	1,540	-110	0.65	33.0	12.64
	2/18/2011	6.95	1,540	-127	0.30	37.4	12.23
	5/10/2011	7.17	1,424	-102	0.16	39.7	11.78
	7/25/2011	7.17	1,424	-98	0.10	23.0	13.85
	10/5/2011	7.00	1,050	-48.3	12.8*	4.0	15.92
	11/4/2011	5.64	1,709	NM	NM	4.9	14.70
	1/9/2012	6.89	1,390	-77	0.24	3.0	13.12
	4/3/2012	7.10	1,413	-104	0.23	16.6	12.30
	7/10/2012	7.05	1,660	-92	0.15	13.8	14.66
	10/8/2012	6.27	1,630	49	0.16	29.2	15.53
	5/31/2013	7.16	1,305	-80	0.16	12.6	13.05
11/8/2013	7.20	1,174	-98	0.28	25.5	14.65	
5/15/2014	7.12	1,239	-30	0.61	25.0	10.61	
7/17/2014	7.16	1,268	-71	0.20	31.8	13.03	
MW-24s	12/8/2009	7.24	1,710	5	3.86	NM	13.10
	3/15/2010	7.49	1,142	-10	2.29	27.7	12.26
	5/12/2010	7.95	1,262	91	1.7	10.0	11.3
	9/8/2010	NM	1,495	54	3.2	43.0	16.10
	12/14/2010	6.76	1,308	152	2.04	32.5	10.85
	2/14/2011	NM	1,203	157	2.48	26.7	12.30
	5/9/2011	6.84	1,096	131	4.38	21.9	11.71
	7/19/2011	7.09	1,820	123	3.82	19.2	14.69
	10/4/2011	6.82	1,137	125.3	20.0*	1.0	14.66
	1/5/2012	7.10	1,087	70	3.81	3.8	13.33
	4/2/2012	7.08	1,498	77	2.95	12.6	11.79
	7/5/2012	7.32	1,950	49	4.24	15.0	14.95
	10/3/2012	6.93	582	-20.6	3.72	4.3	14.97
	5/29/2013	7.31	1,109	86	1.61	12.0	13.25
	11/4/2013	6.15	1,199	180	0.69	27.9	13.84
5/14/2014	6.99	941	129	2.24	26.0	11.68	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-24d	12/8/2009	6.89	3,760	-65	0.58	NM	11.89
	3/15/2010	7.16	2,900	-73	0.73	30.4	12.57
	5/12/2010	7.63	3,600	-9	0.3	9.0	11.9
	9/8/2010	NM	3,360	114	1.4	44	17.3
	12/14/2010	6.76	4,140	-78	0.40	34.8	7.92
	2/14/2011	NM	4,050	-72	0.32	25.5	11.79
	5/9/2011	6.89	3,730	-75	0.22	24.5	13.19
	7/19/2011	6.92	3,910	-56	0.16	19.2	18.85
	10/4/2011	6.84	3,163	-3.0	2.9*	5.8	14.65
	1/5/2012	6.80	3,560	-53	0.23	0.0	11.85
	4/2/2012	7.03	3,300	-76	0.39	15.0	11.96
	7/5/2012	7.14	3,640	-89	0.20	16.1	18.61
	10/3/2012	6.70	2,350	-39.7	0.70	3.8	13.59
	5/30/2013	7.18	2,910	-86	0.20	10.6	14.12
11/4/2013	7.10	2,590	-87	0.22	31.8	12.42	
5/14/2014	7.15	2,490	-42	0.42	29.5	13.25	
MW-25s	12/10/2009	7.08	743	71	0.93	31.3	11.01
	3/16/2010	7.09	830	38	1.49	23.8	11.69
	5/14/2010	7.72	1,066	118	0.8	52	11.8
	9/8/2010	NM	1,104	77	1.7	40	13.65
	12/22/2010	6.80	1,061	106	1.70	34.0	12.05
	2/24/2011	6.92	1,034	16	1.58	25.2	11.40
	5/13/2011	7.29	734	31	3.05	24.5	12.35
	7/28/2011	7.02	835	92	2.01	21.0	12.73
	10/10/2011	6.77	825	79.3	3.21	5.3	13.34
	1/5/2012	6.87	820	65	2.22	0.9	11.79
	4/9/2012	7.11	877	65	3.98	14.8	11.92
	7/11/2012	6.98	969	99	1.81	13.9	12.04
	10/25/2012	7.16	889	255	1.79	72.0	12.90
	6/3/2013	7.12	831	32	2.48	9.9	11.43
	11/8/2013	7.19	734	49	2.07	27.0	12.33
5/16/2014	7.11	744	111	2.65	25.0	10.04	
7/16/2014	7.14	849	84	1.99	29.0	11.60	

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 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-26s	4/6/2010	6.09	1,116	140	0.31	16.2	13.08
	5/14/2010	7.81	1,024	-22	0.2	22	14.3
	9/8/2010	NM	1,128	-64	0.2	49	15.08
	12/17/2010	7.22	938	-86	0.15	31.0	11.06
	2/17/2011	6.37	951	91	0.75	63.5	12.29
	5/12/2011	7.01	953	-72	0.27	55.0	12.78
	7/25/2011	7.16	917	-76	0.21	19.5	15.85
	10/7/2011	6.99	1,005	-8.7	13.7*	2.67	12.55
	1/5/2012	6.93	1,264	-27	0.48	0.55	11.68
	4/5/2012	5.96	942	88	0.23	11.5	12.60
	7/9/2012	7.02	1,156	-68	0.32	11.9	13.49
10/2/2012	6.93	680	-49.8	1.30	3.1	13.53	
11/5/2013	6.83	997	-9	0.68	26.1	12.81	
MW-27s	3/23/2010	7.38	1,198	-57	0.15	67.8	8.27
	5/17/2010	6.62	1,274	150	0.2	58	11.7
	9/9/2010	NM	1,660	-61	0.3	58	16.68
	12/20/2010	6.87	1,374	1	0.20	45.0	10.62
	2/16/2011	7.19	1,158	40	0.53	31.0	7.37
	5/9/2011	7.35	1,253	48	0.81	33.6	10.72
	7/21/2011	7.27	1,780	-34	0.16	29.0	18.90
	10/5/2011	6.10	1,268	8.4	2.3*	8.00	16.99
	1/6/2012	7.04	1,172	120	0.38	3.35	9.96
	4/3/2012	7.12	1,373	-31	0.24	12.6	9.71
	7/5/2012	7.01	1,459	-67	0.16	15.0	15.96
	10/4/2012	6.68	1,239	-44.6	0.94	1.03	16.99
	6/12/2013	7.27	1,228	86	0.16	16.5	14.26
11/14/2013	6.65	1,228	131	0.34	31.9	13.57	
5/22/2014	7.20	1,720	59	1.27	41.0	11.60	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-27d	3/23/2010	7.27	1,175	-108	0.21	23.9	12.79
	5/17/2010	6.90	1,429	127	0.3	3.0	12.7
	9/9/2010	NM	1,468	-12	0.4	35	12.89
	12/20/2010	7.01	1,510	-41	0.26	33.9	10.40
	2/16/2011	7.14	1,360	-102	0.29	30.4	12.45
	5/9/2011	7.26	1,363	-61	0.23	22.9	14.25
	7/22/2011	6.88	1,385	-41	0.36	20.0	15.10
	10/5/2011	6.23	1,231	3.0	3.3*	0.10	13.87
	1/6/2012	7.01	1,372	23	0.33	0.00	11.48
	4/3/2012	7.17	1,328	-20	0.84	9.6	12.03
	7/5/2012	7.11	1,500	-56	0.28	9.8	15.14
	10/4/2012	6.67	1,194	-38.8	0.78	1.11	13.49
	6/12/2013	6.90	1,185	96	0.25	12.9	15.75
11/14/2013	6.91	1,148	-46	0.28	26.5	11.78	
5/22/2014	7.27	1,475	60	0.31	35.5	15.50	
MW-28s	3/23/2010	7.30	778	-1	1.93	22.2	11.50
	5/17/2010	7.48	1,260	148	1.5	10	12.1
	9/9/2010	NM	779	42	1.5	41	12.85
	12/17/2010	6.92	736	130	1.19	35.0	10.10
	2/16/2011	7.18	916	26	1.67	26.0	11.99
	5/12/2011	7.72	1,165	51	3.37	23.5	12.86
	7/22/2011	7.08	880	57	1.87	20.0	12.81
	10/7/2011	7.26	688	88.7	28.3*	2.84	13.08
	1/6/2012	7.12	833	99	2.05	0.55	11.87
	4/6/2012	7.19	654	15	2.35	9.3	11.04
	7/6/2012	6.96	697	114	2.37	10.8	13.33
	10/12/2012	8.29	559	99	2.71	29.0	12.24
	11/4/2013	7.09	665	49	1.66	26.3	12.25

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-28d	3/23/2010	7.26	827	-81	0.31	31.9	11.41
	5/17/2010	7.38	926	148	0.5	16	13.2
	9/9/2010	NM	901	10	0.9	58	13.37
	12/17/2010	7.00	999	-129	0.15	34.9	10.20
	2/16/2011	7.26	936	-174	0.21	29.0	11.33
	5/12/2011	7.35	940	-144	0.24	39.5	14.75
	7/22/2011	7.10	967	-113	0.10	19.1	14.27
	10/7/2011	7.15	957	-53.3	11.8*	5.35	14.25
	1/6/2012	7.20	1,034	-101	0.32	8.68	10.85
	4/6/2012	7.23	1,029	-133	0.79	22.0	10.10
	7/6/2012	7.13	1,165	-131	0.21	16.0	15.36
10/19/2012	7.49	964	-152	0.22	142	11.84	
11/4/2013	7.18	940	-113	0.35	29.0	11.85	
MW-29s	3/18/2010	7.05	2,820	-59	0.37	24.8	12.71
	5/17/2010	6.98	3,270	-16	0.2	18	12.8
	9/9/2010	NM	4,410	-107	0.3	35	16.30
	12/15/2010	6.61	6,020	-121	0.42	39.5	12.91
	2/15/2011	6.78	4,910	-241	0.34	33.9	12.65
	5/12/2011	6.78	3,900	-121	0.22	24.7	13.45
	7/20/2011	6.75	4,680	-80	0.15	23.0	15.55
	10/10/2011	6.30	5,620	-19.1	1.40	4.47	15.73
	1/6/2012	6.63	4,290	-220	0.28	1.50	14.52
	4/5/2012	6.90	4,250	-97	0.39	9.0	11.58
	7/9/2012	NM	5,880	22	0.17	13.0	15.25
	10/12/2012	8.19	3,990	-164	0.20	200	17.25
	5/30/2013	6.77	4,470	-86	0.17	10	14.79
	11/6/2013	6.52	5,260	-65	0.45	28	15.67
5/15/2014	6.68	4,370	-46	0.45	27.0	11.52	

Notes:

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Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-29d	3/18/2010	7.24	1,182	-134	0.21	5,999	13.78
	5/17/2010	7.40	1,405	60	1.0	10	15.0
	9/9/2010	NM	1,437	6	0.6	35	19.35
	12/15/2010	6.99	1,570	-90	1.57	42.3	0.52
	2/15/2011	7.15	1,550	-202	0.30	1245	11.28
	5/12/2011	7.26	1,403	-54	6.65	40.5	21.01
	7/20/2011	7.03	1,482	-70	2.40	48.0	23.15
	10/10/2011	6.76	1,381	78.9	3.01	3.26	12.65
	1/6/2012	6.98	1,530	-42	1.30	0.00	11.76
	4/6/2012	7.13	1,560	-131	1.69	23.0	6.85
	7/9/2012	NM	1,780	87	0.78	20.3	23.82
	10/19/2012	6.08	1,510	86	0.51	83.5	11.77
	5/30/2013	6.38	1,750	-87	0.82	64.6	25.09
11/7/2013	7.02	1,590	-90	0.40	427	10.95	
5/15/2014	6.44	1,680	-90	0.54	34.4	12.88	
MW-30s	3/23/2010	7.03	2,120	-14	1.68	102	9.98
	5/17/2010	7.40	2,430	69	0.2	22	12.1
	9/9/2010	NM	1,840	-85	0.2	52	17.01
	12/16/2010	6.78	1,800	-95	0.34	51.0	13.60
	2/15/2011	7.01	1,740	-115	0.18	61.0	11.38
	5/13/2011	6.90	2,340	-34	0.40	30.0	11.25
	7/20/2011	6.94	1,780	-6	0.11	25.0	15.70
	10/10/2011	6.77	1,565	-8.3	1.21	5.74	16.60
	1/6/2012	6.82	2,450	5	0.28	5.00	13.58
	4/9/2012	6.89	2,040	-40	0.84	10.3	10.93
	7/9/2012	6.95	1,760	-55	0.14	13.3	14.79
	10/19/2012	7.22	1,338	-103	0.29	17.4	16.33
	5/30/2013	7.07	2,100	-21	0.14	9.3	12.88
11/5/2013	6.98	1,470	-63	0.29	29.5	16.03	
5/14/2014	6.97	2,480	8	0.28	27.8	10.80	

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 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-30d	3/23/2010	6.92	1,670	-94	0.36	36.0	12.10
	5/17/2010	7.48	1,910	-5	0.2	44	13.6
	9/9/2010	NM	1,870	-98	0.2	52	16.35
	12/16/2010	6.88	1,830	-94	0.22	44.5	11.70
	2/15/2011	7.11	1,800	-146	0.78	40.3	12.60
	5/13/2011	7.03	1,740	-103	0.48	30.0	13.25
	7/20/2011	7.12	1,680	-88	0.18	28.9	16.40
	10/10/2011	6.87	1,546	-46.8	1.15	7.18	15.00
	1/6/2012	6.87	1,560	-68	0.23	0.00	13.90
	4/9/2012	7.01	1,570	-106	0.46	14.9	12.79
	7/9/2012	7.09	1,700	-94	0.18	11.3	14.89
	10/19/2012	7.45	1,348	-132	0.32	8.6	14.10
	5/30/2013	7.20	1,355	-92	0.16	56.3	15.41
11/5/2013	7.12	1,251	-107	0.25	31.6	14.19	
5/14/2014	7.10	1,217	-69	0.34	58.5	12.82	
MW-31	6/18/2010	6.93	1,416	139	4.96	14.8	12.96
	9/17/2010	7.03	1,052	107	4.6	86.9	11.79
	12/22/2010	7.05	1,176	11	6.99	34.9	10.75
	2/24/2011	6.88	1,208	8	6.51	32.7	10.91
	5/11/2011	7.25	1,090	39	10.20	26.0	12.70
	7/21/2011	7.13	1,055	68	6.32	21.7	16.85
	10/4/2011	6.88	889	113.8	48.3*	4.08	12.10
	1/10/2012	6.91	1,102	128	5.95	0.00	11.36
	4/5/2012	7.08	1,052	47	5.73	9.3	11.00
	7/16/2012	7.04	1,137	65	5.98	20.6	12.78
	10/3/2012	6.61	783	8.6	7.56	9.3	12.21
	3/7/2013	7.09	964	-74	5.88	7.50	11.13
	5/29/2013	6.93	1,015	110	4.38	12.2	13.09
	8/29/2013	7.15	1,079	88	4.48	28.5	14.49
	3/28/2014	7.25	874	150	4.15	32.0	10.95
5/22/2014	7.25	1,115	86	4.97	39.0	12.67	
7/17/2014	7.20	938	66	3.99	33.3	12.76	

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Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-32s	9/17/2010	7.29	771	-20	0.31	46.8	17.52
	11/19/2010	7.08	800	-101	0.22	25.8	17.56
	12/28/2010	6.80	830	-62	0.24	31.5	17.20
	2/25/2011	7.14	868	-55	0.42	25.8	17.10
	5/10/2011	7.30	804	-85	0.64	21.7	17.22
	7/28/2011	7.40	804	-30	0.43	18.9	17.93
	10/6/2011	7.14	758	9.8	11.5*	1.00	17.32
	1/10/2012	7.02	819	-22	0.47	0.00	17.44
	4/4/2012	7.16	862	-20	0.42	15.0	16.66
	7/11/2012	7.14	990	27	0.30	14.0	17.38
	10/10/2012	NM	646	105	0.22	14.3	16.20
	5/20/2013	7.34	654	31	0.98	9.0	14.72
	11/5/2013	6.80	679	65	1.20	26.3	14.40
5/19/2014	7.37	721	14	0.94	23.9	12.69	
7/15/2014	7.12	825	15	0.49	28.9	13.43	
MW-32d	5/20/2013	7.30	999	-106	0.43	9.5	14.98
	8/28/2013	7.21	1,116	-82	0.49	21.0	15.60
	11/5/2013	7.15	980	-101	0.53	26.6	13.88
	3/27/2014	7.27	1,140	-158	0.23	22.0	11.94
	5/19/2014	7.25	959	-79	0.37	24.8	12.94
7/15/2014	7.20	989	-44	0.33	50.9	13.90	
MW-33s	9/17/2010	7.13	1,006	-95	0.48	39.2	16.55
	11/19/2010	6.79	1,059	-101	0.22	26.7	17.42
	12/22/2010	6.98	1,056	-128	0.30	33.4	17.55
	2/24/2011	7.00	991	-157	0.37	23.0	17.28
	5/10/2011	7.20	1,267	-100	1.31	24.4	16.23
	7/28/2011	7.26	1,188	-64	0.42	19.0	16.09
	10/6/2011	7.03	949	-51.3	12.0*	0.50	16.91
	1/9/2012	6.99	1,055	-70	0.28	0.50	17.91
	4/4/2012	7.06	1,005	-91	0.35	9.0	16.09
	7/11/2012	7.10	1,068	-97	0.25	16.9	16.03
	10/10/2012	NM	763	-80	0.20	11.9	16.64
	5/20/2013	7.17	766	-85	0.66	8.4	14.85
	11/5/2013	7.08	815	-109	0.47	26.2	15.11
5/19/2014	7.28	770	-96	0.52	23.7	13.40	

Notes:

S.U. = standard pH units

umhos/cm = micromhos per centimeter

mV = millivolts

mg/L = milligrams per liter

NTU = nephelometric turbidity units

°C = degrees Celsius

* = Dissolved oxygen measurement recorded in percent of saturation, not mg/L

NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature	
Units	S.U.	umhos/cm	mV	mg/L	NTU	°C	
MW-34s	9/17/2010	7.40	562	21	3.83	44.2	16.02
	11/19/2010	7.22	580	27	4.30	30.0	16.07
	12/28/2010	7.08	585	21	5.68	32.5	15.70
	2/25/2011	7.40	630	-15	5.31	25.5	15.55
	5/10/2011	7.53	677	10	7.19	21.7	15.52
	7/28/2011	7.61	600	48	3.90	19.0	16.16
	10/6/2011	7.24	564	78	69.0*	4.85	15.80
	1/10/2012	7.13	652	98	4.97	5.28	15.59
	4/4/2012	7.32	647	25	4.95	8.0	14.68
	7/11/2012	7.34	650	60	4.55	16.9	15.48
	10/10/2012	NM	474	128	5.46	11.4	14.68
MW-34d	5/20/2013	7.54	510	50	5.82	8.3	13.44
	11/12/2013	7.29	739	38	7.75	25.7	12.43
	5/19/2014	7.30	701	150	6.63	23.0	11.79
	5/20/2013	7.19	1,260	-122	0.42	9.3	13.31
	8/28/2013	7.22	1,298	-102	0.60	16.3	15.10
	11/12/2013	7.29	1,411	-128	0.29	26.2	11.11
MW-35i	3/26/2014	8.62	1,191	-171	0.29	28.6	10.40
	5/21/2014	7.30	1,262	-104	0.27	28.8	14.34
	7/16/2014	7.15	1,157	-69	0.27	25.1	13.03
	10/25/2012	7.46	785	121	0.89	18.0	16.28
	3/27/2013	8.86	694	-42	1.28	0.0	12.55
	6/5/2013	7.87	724	-181	0.40	1.2	13.92
	8/29/2013	7.26	919	-40	0.58	20.9	16.35
	11/12/2013	7.40	994	-61	0.61	26.0	13.26
MW-35d	3/27/2014	7.31	733	95	0.72	28.3	11.09
	5/21/2014	7.36	918	-38	0.91	30.5	13.44
	7/18/2014	7.29	931	13	0.55	26.0	14.37
	10/25/2012	7.28	1,262	-44	0.33	131	15.47
	3/7/2013	7.12	1,112	-230	0.70	8.7	8.85
	6/11/2013	7.25	1,142	-108	0.31	32.5	15.82
	8/28/2013	7.18	1,461	-108	0.65	21.9	18.11
MW-35d	11/12/2013	7.23	1,740	-133	0.38	31.2	11.98
	3/26/2014	8.52	1,466	-187	0.35	30.3	11.25
	5/20/2014	7.15	1,278	-98	0.38	24.0	13.40
	7/16/2014	7.00	1,288	-68	0.37	28.9	13.54

Notes:

- S.U. = standard pH units
- umhos/cm = micromhos per centimeter
- mV = millivolts
- mg/L = milligrams per liter
- NTU = nephelometric turbidity units
- °C = degrees Celsius
- * = Dissolved oxygen measurement recorded in percent of saturation, not mg/L
- NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-36s	4/3/2013	6.95	893	36	0.37	4.7	12.37
	5/31/2013	7.25	826	70	2.33	11.8	15.06
	8/29/2013	7.10	958	46	2.61	18.3	16.73
	11/8/2013	7.14	823	41	1.24	25.9	16.51
	3/27/2014	7.11	1,081	116	0.57	19.7	12.32
	5/15/2014	7.15	822	45	2.01	24.4	12.73
	7/18/2014	6.85	869	104	2.00	24.9	14.08
MW-36d	4/2/2013	6.79	1,780	-59	0.24	9.6	14.55
	6/11/2013	7.17	1,730	-83	0.12	22.9	16.39
	8/28/2013	7.00	2,050	-103	0.24	22.0	16.84
	11/12/2013	7.19	2,430	-123	0.24	34.0	13.99
	3/26/2014	8.32	2,120	-142	0.43	40.5	13.49
	5/21/2014	7.14	2,280	-87	0.28	58.0	15.99
	7/15/2014	7.12	1,850	-79	0.16	49.5	15.45
MW-37s	4/3/2013	6.93	995	87	0.45	6.9	12.27
	6/3/2013	7.21	978	55	0.57	9.7	13.07
	8/29/2013	7.15	1,128	61	0.59	18.0	14.86
	11/11/2013	7.02	1,342	136	0.57	26.7	13.19
	3/27/2014	7.17	1,166	60	0.32	23.0	11.70
	5/16/2014	7.15	1,052	108	0.59	27.0	12.14
	7/18/2014	7.16	1,059	64	0.51	26.0	13.60
MW-38s	4/3/2013	6.99	878	64	0.48	8.9	8.71
	6/3/2013	7.20	1,095	54	1.17	9.7	12.14
	8/29/2013	7.04	1,204	108	0.49	18.0	17.55
	11/11/2013	6.45	1,409	166	1.21	26.1	15.52
	5/16/2014	7.14	1,390	113	4.48	28.5	8.35
	7/17/2014	7.12	1,170	60	0.57	29.0	15.60
	7/17/2014	7.12	1,170	60	0.57	29.0	15.60
MW-38d	4/3/2013	6.94	981	71	1.65	5.4	12.50
	6/12/2013	7.09	983	93	0.96	9.9	14.83
	8/28/2013	6.93	1,136	118	1.81	18.0	14.75
	11/14/2013	6.67	958	150	2.37	26.9	11.72
	3/27/2014	7.09	1,147	179	1.51	20.9	11.89
	5/22/2014	7.13	1,147	49	1.54	29.0	13.38
	7/17/2014	6.91	983	140	1.57	26.5	12.48
MW-39s	4/3/2013	6.98	1,058	83	0.50	9.7	12.50
	6/3/2013	7.15	1,099	62	0.41	13.2	14.06
	8/29/2013	7.14	1,145	60	0.40	22.3	17.46
	11/11/2013	6.84	1,031	90	0.63	26.5	15.25
	3/28/2014	7.05	860	140	0.94	32.8	12.39
	5/16/2014	7.11	979	102	1.42	31.9	12.45
	7/18/2014	7.12	1,035	53	0.65	25.6	15.47

Notes:

- S.U. = standard pH units
- umhos/cm = micromhos per centimeter
- mV = millivolts
- mg/L = milligrams per liter
- NTU = nephelometric turbidity units
- °C = degrees Celsius
- * = Dissolved oxygen measurement recorded in percent of saturation, not mg/L
- NM = not measured

Table 4
 Summary of Field Parameters at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		pH	Conductivity	Redox Potential	Dissolved Oxygen	Turbidity	Temperature
Units		S.U.	umhos/cm	mV	mg/L	NTU	°C
MW-39d	4/2/2013	7.18	1,140	-105	0.22	5.9	13.90
	6/11/2013	7.27	1,129	-99	0.09	13.6	16.71
	8/28/2013	7.13	1,287	-99	0.22	18.0	17.50
	11/12/2013	7.32	1,378	-125	0.35	29.4	13.37
	3/26/2014	8.50	1,140	-134	0.28	32.0	12.00
	5/21/2014	7.26	1,273	-104	0.13	37.0	15.79
	7/15/2014	7.24	1,085	-92	0.12	27.2	15.93
MW-40s	4/3/2013	7.15	716	-27	0.46	10.0	7.28
	6/12/2013	7.24	785	-71	0.13	27.0	13.45
	8/28/2013	7.33	890	-110	0.40	69.0	16.80
	11/13/2013	6.90	977	-76	0.43	37.0	12.46
	3/26/2014	8.67	850	-165	0.34	59.3	8.90
	5/21/2014	7.37	977	-112	0.20	49.5	14.24
	7/16/2014	7.19	834	-78	0.16	40.8	12.82
MW-40d	4/3/2013	7.09	3,010	-88	0.31	9.9	11.05
	6/12/2013	7.24	3,120	-104	0.11	22.2	14.30
	8/28/2013	7.15	3,580	-103	0.52	28.5	15.15
	11/13/2013	7.22	4,000	-126	0.27	30.0	11.58
	3/26/2014	8.56	3,510	-182	0.22	42.0	11.40
	5/22/2014	7.27	3,730	-112	0.13	39.5	12.91
	7/16/2014	7.21	3,180	-90	0.13	34.9	13.20
NS-18s	5/20/2014	7.48	570	-5	3.49	24.0	13.64
	7/14/2014	7.53	638	59	2.67	22.0	14.49
NS-18i	3/26/2014	7.23	1,035	-103	0.66	25.6	13.70
	5/19/2014	7.21	854	-60	0.82	23.6	14.14
	7/14/2014	7.18	906	-48	0.59	24.2	15.27
NS-18d	5/20/2014	7.22	910	-80	0.49	48.0	15.37
	7/14/2014	7.17	943	-47	0.42	69.5	15.46
NS-19s	5/20/2014	7.36	799	-148	0.78	41.9	13.50
	7/14/2014	7.31	780	-123	0.68	24.1	14.77
NS-19i	5/20/2014	7.30	847	-86	0.61	45.5	13.72
	7/14/2014	7.23	929	-66	0.47	29.0	14.99
NS-19d	5/20/2014	7.26	898	-86	0.29	42.0	14.31
	7/14/2014	7.20	927	-57	0.30	34.2	15.33
NS-20s	5/20/2014	7.42	507	-76	2.80	46.0	12.56
	7/15/2014	7.28	545	-59	2.03	34.9	13.56
NS-20i	5/20/2014	7.50	755	-206	0.67	50.0	12.89
	7/15/2014	7.45	799	-189	0.43	26.1	13.67
SS-09s	5/20/2014	7.47	596	8	5.19	43.0	14.04
	7/17/2014	7.21	1,220	60	4.62	32.0	13.23
SS-09i	5/20/2014	7.35	989	-52	0.42	39.8	14.05
	7/17/2014	7.32	948	-17	0.65	29.5	13.44
SS-10s	5/21/2014	7.38	665	162	4.57	29.4	13.62
	7/17/2014	7.51	611	73	4.02	29.0	13.28
SS-10i	5/21/2014	7.24	1,103	-23	0.48	40.0	13.75
	7/17/2014	7.28	918	-55	0.80	32.7	13.95
SS-10d	5/21/2014	7.29	1,046	-108	0.19	41.8	13.25
	7/17/2014	7.27	912	-96	0.18	30.1	13.88

Notes:

S.U. = standard pH units
 umhos/cm = micromhos per centimeter
 mV = millivolts
 mg/L = milligrams per liter
 NTU = nephelometric turbidity units
 °C = degrees Celsius
 * = Dissolved oxygen measurement recorded in percent of saturation, not mg/L
 NM = not measured

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-01s (16-21') Depth to Groundwater Approx. 16 - 19'	3/13/2009	<100	<100	<20	<20	<20	<20	750	<20	2,700	<20	<20
	4/20/2009	NA	<500	<100	<100	<100	<100	1,100	<100	2,200	NA	<100
	12/9/2009	<100	<100	<20	<20	<20	<20	1,000	<20	3,400	<20	<20
	3/17/2010	<100	<100	<20	<20	<20	<20	1,400	<20	2,500	<20	<20
	5/18/2010	<100	<100	<20	<20	<20	<20	1,000	<20	2,700	<20	<20
	9/10/2010	<100	<100	<20	<20	<20	<20	750	<20	2,400	<20	<20
	12/28/2010	<100	<100	<20	<20	<20	<20	1,100	<20	2,500	<20	<20
	2/25/2011	<50	<50	<10	<10	<10	<10	560	<10	1,300	<10	<10
	5/11/2011 ⁽⁴⁾	<50	<50	<10	<10	<10	<10	860	<10	1,900	<10	<10
	7/28/2011	<100	<100	<20	<20	<20	<20	500	<20	1,900	<20	<20
	10/6/2011	<100	<100	<20	<20	<20	<20	540	<20	2,000	<20	<20
	1/9/2012	<100	<100	<20	<20	31	<20	530	<20	2,000	<20	<20
	4/4/2012	<100	<100	<20	<20	38	<20	480	<20	1,900	<20	<20
	7/11/2012	<100	<100	<20	<20	<20	<20	560	<20	2,100	<20	<20
	10/8/2012	<100	<100	<20	<20	<20	<20	650	<20	2,000	<20	<20
6/11/2013	<100	<100	<20	<20	<20	<20	470	<20	1,400	<20	<20	
11/12/2013	<100	<100	<20	<20	<20	<20	660	<20	1,800	<20	<20	
5/21/2014	<50	<50	<10	<10	<10	<10	370	<10	1,500	<10	<10	
DUP-01 (MW-01s)	3/13/2009	<20	<20	<20	<20	<20	<20	720	<20	2,700	<20	<20
MW-02s (23-28') Depth to Groundwater Approx. 22 - 24'	3/13/2009	<10	<10	<2.0	<2.0	2.4	<2.0	2.2	2.5	<2.0	280	<2.0
	4/20/2009	NA	<50	<10	<10	<10	<10	<10	<10	130	NA	<10
	12/9/2009	<10	<10	<2.0	<2.0	3.7	<2.0	2.7	2.9	<2.0	250	<2.0
	3/17/2010	13	<10	<2.0	<2.0	4.1	<2.0	2.3	3.1	<2.0	290	<2.0
	5/18/2010	<10	<10	<2.0	<2.0	2.3	<2.0	2.4	2.6	<2.0	210	<2.0
	9/10/2010	<10	<10	<2.0	<2.0	2.3	<2.0	2.3	2.3	<2.0	220	<2.0
	12/22/2010	<10	<10	<2.0	<2.0	2.4	<2.0	2.3	3.1	<2.0	240	<2.0
	2/24/2011	<10	<10	<2.0	<2.0	2.0	<2.0	<2.0	2.6	<2.0	240	<2.0
	5/10/2011 ⁽⁴⁾	<10	<10	<2.0	<2.0	<2.0	<2.0	<2.0	2.3	<2.0	250	<2.0
	7/28/2011 ⁽⁵⁾	<10	<10	<2.0	<2.0	2.0	<2.0	2.2	2.4	<2.0	280	<2.0
	10/7/2011	<10	<10	<2.0	<2.0	<2.0	<2.0	2.5	2.5	<2.0	220	<2.0
	1/10/2012	<10	<10	<2.0	<2.0	<2.0	<2.0	2.8	2.5	<2.0	190	<2.0
	4/5/2012	<10	<10	<2.0	<2.0	2.7	<2.0	3.5	3.4	<2.0	210	<2.0
	7/11/2012	<10	<10	<2.0	<2.0	2.2	<2.0	2.5	3.5	<2.0	330	<2.0
	10/25/2012	<10	<10	<2.0	<2.0	<2.0	<2.0	2.6	<2.0	270	<2.0	<2.0
6/11/2013	<10	<10	<2.0	<2.0	<2.0	<2.0	2.8	<2.0	300	<2.0	<2.0	
11/12/2013	<12	<12	<2.5	<2.5	2.8	<2.5	<2.5	4.4	<2.5	410	<2.5	
5/19/2014	<12	<12	<2.5	<2.5	<2.5	<2.5	<2.5	3.1	<2.5	280	<2.5	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-03s (9-14') Depth to Groundwater Approx. 8 - 10'	3/13/2009	<10	<10	9.1	<2.0	240	9.1	<2.0	<2.0	<2.0	<2.0	140	
	4/20/2009	NA	<50	18	<10	490	18	<10	<10	<10	NA	210	
	12/8/2009	<120	<120	46	<25	2,200	83	<25	<25	<25	<25	130	
	3/17/2010	<25	<25	11	<5.0	460	17	<5.0	<5.0	<5.0	<5.0	42	
	5/18/2010	<25	<25	14	<5.0	630	24	<5.0	<5.0	<5.0	<5.0	34	
	9/10/2010	<50	<50	29	<10	1,600	63	<10	<10	<10	<10	83	
	12/22/2010	<50	<50	32	<10	1,800	82	<10	<10	<10	<10	70	
	2/25/2011	<100	<100	33	<20	2,200	110	<20	<20	<20	<20	<20	75
	5/10/2011 ⁽⁴⁾	<100	<100	25	<20	1,600	77	<20	<20	<20	<20	<20	52
	7/28/2011	<100	<100	23	<20	1,700	78	<20	<20	<20	<20	<20	65
	10/6/2011	<100	<100	24	<20	2,100	100	<20	<20	<20	<20	<20	91
	1/10/2012	<50	<50	22	<10	1,300	81	<10	<10	<10	<10	<10	51
	4/4/2012	<100	<100	<20	<20	1,600	84	<20	<20	<20	20	<20	170
	7/11/2012	<100	<100	23	<20	2,500	120	<20	<20	<20	<20	<20	210
	10/8/2012	<100	<100	<20	<20	1,700	93	<20	<20	<20	<20	<20	100
6/3/2013	<100	<100	24	<20	2,000	120	<20	<20	<20	<20	<20	220	
11/11/2013	<100	<100	35	<20	2,500	150	<20	<20	<20	<20	<20	350	
5/19/2014	<100	<100	<20	<20	1,500	99	<20	<20	<20	<20	<20	150	
DUP-01 (MW-03s)	12/8/2009	<120	<120	42	<25	2,000	73	<25	<25	<25	<25	120	
MW-04s (15-20') Depth to Groundwater Approx. 15 - 17'	3/13/2009	<120	<120	<25	<25	2,100	70	<25	<25	<25	5,000	<25	460
	4/20/2009	NA	<500	<100	<100	1,700	<100	<100	<100	<100	4,000	NA	520
	12/9/2009	<250	<250	<50	<50	2,500	90	<50	<50	<50	7,100	<50	270
	3/17/2010	<250	<250	<50	<50	2,900	82	<50	<50	<50	7,500	<50	520
	5/18/2010	<250	<250	<50	<50	2,100	58	<50	<50	<50	4,700	<50	280
	9/17/2010	<250	<250	<50	<50	2,400	70	<50	<50	<50	5,200	<50	200
	12/22/2010	<250	<250	<50	<50	2,700	91	<50	<50	<50	6,700	<50	270
	2/25/2011	<250	<250	<50	<50	2,500	82	<50	<50	<50	5,900	<50	280
	5/11/2011 ⁽⁴⁾	<250	<250	<50	<50	1,900	58	<50	<50	<50	4,600	<50	270
	7/28/2011	<250	<250	<50	<50	1,700	50	<50	<50	<50	4,600	<50	190
	10/6/2011	<250	<250	<50	<50	2,000	58	<50	<50	<50	4,600	<50	190
	1/10/2012	<250	<250	<50	<50	1,800	72	<50	<50	<50	4,800	<50	190
	4/4/2012	<250	<250	<50	<50	1,600	54	<50	<50	<50	4,300	<50	170
	7/11/2012	<250	<250	<50	<50	2,100	65	<50	<50	<50	5,600	<50	200
	10/8/2012	<250	<250	<50	<50	2,200	66	<50	<50	<50	6,700	<50	200
6/3/2013	<250	<250	<50	<50	1,900	63	<50	<50	<50	5,700	<50	140	
11/11/2013	<250	<250	<50	<50	1,900	66	<50	<50	<50	6,600	<50	140	
5/19/2014	<250	<250	<50	<50	1,100	<50	<50	<50	<50	3,900	<50	56	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote {X} of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-04i (21.5-26.5') Depth to Groundwater Approx. 16-17'	4/3/2013	<250	<250	<50	<50	3,100	100	<50	<50	<50	5,000	<50	53
	6/3/2013	<250	<250	<50	<50	3,400	96	<50	<50	<50	4,900	<50	53
	8/29/2013	<250	<250	<50	<50	3,900	120	<50	<50	<50	5,600	<50	68
	11/11/2013	<250	<250	<50	<50	4,200	120	<50	<50	<50	5,400	<50	78
	3/27/2014	<250	<250	<50	<50	3,000	79	<50	<50	<50	4,000	<50	<50
	5/19/2014	<250	<250	<50	<50	3,300	100	<50	<50	<50	4,600	<50	56
7/18/2014	<250	<250	<50	<50	3,000	91	<50	<50	<50	4,100	<50	54	
MW-05s (25-30') Depth to Groundwater Approx. 25 - 27'	3/13/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.5	<1.0	<1.0	120	<1.0	<1.0
	4/20/2009	NA	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	140	NA	<5.0
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.3	<1.0	<1.0	190	<1.0	<1.0
	3/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	6.3	<1.0	<1.0	160	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.6	<1.0	<1.0	160	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.6	<1.0	<1.0	140	<1.0	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.9	<1.0	<1.0	160	<1.0	<1.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.4	<1.0	<1.0	130	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.9	<1.0	<1.0	160	<1.0	<1.0
	7/27/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	4.8	<1.0	<1.0	150	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.1	<1.0	<1.0	150	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.8	<1.0	<1.0	150	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.7	<1.0	<1.0	160	<1.0	<1.0
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	5.8	<1.0	<1.0	160	<1.0	<1.0
10/25/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	130	<1.0	<1.0	
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	100	<1.0	<1.0	
MW-06s (24-29') Depth to Groundwater Approx. 23 - 26'	3/16/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<1.0	<1.0
	4/20/2009	NA	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23	NA	<1.0
	12/9/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	37	<1.0	<1.0
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	31	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	33	<1.0	<1.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	29	<1.0	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	34	<1.0	<1.0
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	35	<1.0	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	27	<1.0	<1.0
	7/27/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	27	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	30	<1.0	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	31	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	32	<1.0	<1.0
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	32	<1.0	<1.0	
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	28	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	27	<1.0	<1.0	

Notes:

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ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-07s (23.5-28.5') Depth to Groundwater Approx. 24 - 26'	3/16/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	10	<1.0
	4/20/2009	NA	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	11	NA
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	14	<1.0
	3/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	13	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	13	<1.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	12	<1.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	<1.0	16	<1.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	12	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	12	<1.0
	7/27/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	11	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	13	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	14	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	12	<1.0
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	14	<1.0	
10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	14	<1.0	
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	13	<1.0	
MW-08s (23.5-28.5') Depth to Groundwater 23 - 26'	3/16/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<1.0
	4/20/2009	NA	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	NA
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<1.0
DUP-01 (MW-08s)	4/20/2009	NA	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10	NA
MW-08d (40-45') Depth to Groundwater Approx. 26 - 27'	4/2/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/13/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-01 (MW-08d)	7/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-09s (7-12') Depth to Groundwater* Approx. 5 - 8'	4/2/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/16/2009	<100	<100	<20	<20	<20	<20	<20	160	<20	1,700	<20
	4/20/2009	NA	<500	<100	<100	<100	<100	<100	220	<100	2,100	NA
	12/9/2009	<100	<100	<20	<20	<20	<20	<20	150	<20	2,400	<20
	3/18/2010	<100	<100	<20	<20	<20	<20	<20	120	<20	1,500	<20
	5/18/2010	<100	<100	<20	<20	<20	<20	<20	120	<20	1,700	<20
	9/17/2010	<100	<100	<20	<20	<20	<20	<20	120	<20	1,700	<20
2/25/2011	<50	<50	<10	<10	<10	<10	<10	84	<10	1,100	<10	
5/11/2011 ⁽⁴⁾	<50	<50	<10	<10	<10	<10	<10	83	<10	1,200	<10	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
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Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-10s (8-13') Depth to Groundwater Approx. 7 - 9'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/9/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-02 (MW-10s)	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-10d (14-19') Depth to Groundwater Approx. 9 -10'	12/9/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-11s (29-34') Depth to Groundwater Approx. 29 - 32'	5/14/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/13/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

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Table 5
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Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
DUP-02 (MW-11s)	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-01 (MW-11s)	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-12s (12-17') Depth to Groundwater Approx. 13 - 15'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
	12/30/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.9	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	2.2	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	
MW-12d (33-38') Depth to Groundwater Approx. 13 - 15'	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/31/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-13s (13-18') Depth to Groundwater Approx. 15 - 17'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/10/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/31/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-14s (4-9') Depth to Perched Groundwater Approx. 3 - 7'	5/14/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/11/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.
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* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-14d (37.5-42.5') Depth to Groundwater Approx. 30 - 31'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/3/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-01 (MW-14d)	7/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-02 (MW-14d)	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
DUP-02 (MW-14d)	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
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GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-15s (30-35') Depth to Groundwater Approx. 30 - 32'	5/15/2009	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/30/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-17s (3-8') Depth to Groundwater Approx. 6'	7/23/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/7/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/11/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
3/28/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

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- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
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- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-18s (26-31') Depth to Groundwater Approx. 25 - 27'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-19s (25-30') Depth to Groundwater Approx. 24 - 26'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	31	<1.0	<1.0
	1/13/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	2.3	<1.0	36	<1.0
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.7	<1.0	36	<1.0
	5/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	32	<1.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	1.8	<1.0	33	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	37	<1.0
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.8	<1.0	41	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	28	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	1.4	<1.0	27	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.7	<1.0	28	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	1.9	<1.0	34	<1.0
4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.5	<1.0	32	<1.0	
7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	2.3	<1.0	32	<1.0	
10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	31	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	25	<1.0	
DUP-03 (MW-19s)	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.0	1.7	<1.0	32	<1.0

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

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Bold font denotes concentrations detected above laboratory reporting limits

Green background Denotes concentrations above one or more criteria

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
DUP-02 (MW-19s)	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.8	<1.0	39	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	29	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.4	<1.0	27	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.6	<1.0	28	<1.0
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.2	1.8	<1.0	34	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.1	1.6	<1.0	32	<1.0
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	1.6	2.3	<1.0	32	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	27	<1.0
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	26	<1.0	
MW-19d (40-45') Depth to Groundwater Approx. 24 - 26'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
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	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-01 (MW-19d)	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-21 (28.5-33.5') Depth to Groundwater Approx. 29 - 30'	12/8/2009	<50	<50	31	<10	59	<10	<10	54	<10	840	<10
	1/13/2010	<50	<50	28	<10	62	<10	<10	56	<10	730	<10
	3/23/2010	<5.0	<5.0	33	2.2	81	7.5	<1.0	62	<1.0	850	<1.0
	5/18/2010	<50	<50	35	<10	89	<10	<10	63	<10	830	<10
	10/15/2010	<50	<50	26	<10	80	<10	<10	59	<10	810	<10
	12/22/2010	<50	<50	25	<10	69	<10	<10	55	<10	730	<10
	2/24/2011	<50	<50	25	<10	66	<10	<10	52	<10	730	<10
	5/11/2011 ⁽⁴⁾	<50	<50	24	<10	65	<10	<10	49	<10	740	<10
	7/28/2011	<50	<50	22	<10	77	<10	<10	54	<10	1,000	<10
	10/6/2011	<50	<50	22	<10	74	<10	<10	55	<10	960	<10
	1/10/2012	<50	<50	27	<10	79	<10	<10	64	<10	990	<10
	4/4/2012	<50	<50	25	<10	81	<10	<10	55	<10	980	<10
	7/11/2012	58	<50	25	<10	85	<10	<10	63	<10	1,000	<10
	10/8/2012	<50	<50	22	<10	65	<10	<10	47	<10	850	<10
	3/6/2013	<50	<50	26	<10	90	<10	<10	50	<10	760	<10
	6/11/2013	<50	<50	26	<10	100	<10	<10	60	<10	1,100	<10
	8/29/2013	<50	<50	28	<10	130	<10	<10	68	<10	1,500	<10
	11/12/2013	<50	<50	31	<10	130	<10	<10	76	<10	1,300	<10
3/27/2014	<50	<50	25	<10	150	<10	<10	64	<10	1,000	<10	
5/19/2014	<50	<50	20	<10	170	<10	<10	62	<10	1,100	<10	
7/18/2014	<50	<50	17	<10	170	<10	<10	63	<10	1,300	<10	
DUP-01 (MW-21)	8/29/2013	<50	<50	28	<10	130	<10	<10	67	<10	1,500	<10
	3/27/2014	<50	<50	26	<10	150	<10	<10	68	<10	1,100	<10
	7/18/2014	<50	<50	15	<10	150	<10	<10	54	<10	1,100	<10
DUP-02 (MW-21)	3/23/2010	<5.0	<5.0	33	2.2	79	7.8	<1.0	61	<1.0	810	<1.0
DUP-03 (MW-21)	2/24/2011	<50	<50	24	<10	66	<10	<10	50	<10	740	<10
	5/11/2011 ⁽⁴⁾	<50	<50	24	<10	66	<10	<10	49	<10	750	<10
	7/28/2011	<50	<50	23	<10	78	<10	<10	57	<10	1,000	<10
	10/6/2011	<50	<50	21	<10	73	<10	<10	52	<10	910	<10
	1/10/2012	<50	<50	27	<10	85	<10	<10	66	<10	1,000	<10
	4/4/2012	<50	<50	24	<10	81	<10	<10	61	<10	970	<10
	7/11/2012	<50	<50	25	<10	80	<10	<10	59	<10	1,000	<10
	6/11/2013	<50	<50	26	<10	110	<10	<10	76	<10	1,100	<10
11/12/2013	<50	<50	32	<10	120	<10	<10	75	<10	1,300	<10	
5/19/2014	<50	<50	19	<10	170	<10	<10	64	<10	1,100	<10	

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- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
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Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-22 (25-30') Depth to Groundwater Approx. 25 - 26'	12/7/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	10
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.5
	5/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.0
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.3
	12/22/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.3
	5/11/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2.8
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.2
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	8.4
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	12
	7/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	13
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	18
	5/29/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	21
3/28/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	29	
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23	
7/17/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	
MW-23 (17-22') Depth to Groundwater* Approx. 8 - 10'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.2
	1/13/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	7.6
	3/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.0
	5/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	6.1
	9/10/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	9.0
	12/21/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	17
	2/18/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	18
	5/10/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	25
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	23
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	56
	11/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11
	1/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	48
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	85
	7/10/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	63
	10/8/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	47
	5/31/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	88
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	120	
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	90	
7/17/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	90	

Notes:

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Bold font denotes concentrations detected above laboratory reporting limits

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Table 5
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Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-24s (18.5'-23.5') Depth to Groundwater Approx. 19 - 21'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/19/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/29/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-24d (39-44') Depth to Groundwater Approx. 19 - 21'	12/8/2009	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/14/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/19/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-25s (20-25') Depth to Groundwater Approx. 18 - 20'	12/10/2009	<5.0	<5.0	1.7	<1.0	8.8	<1.0	<1.0	4.8	<1.0	<1.0	<1.0
	3/16/2010	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	17	<1.0	1.1	<1.0
	5/14/2010	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	18	<1.0	1.0	<1.0
	9/8/2010	<5.0	<5.0	1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	1.4	<1.0
	12/22/2010	<5.0	<5.0	1.2	<1.0	<1.0	<1.0	<1.0	26	<1.0	2.4	<1.0
	2/24/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	2.2	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<1.0	2.2	<1.0
	7/28/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	2.5	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	2.8	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	3.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	3.6	<1.0
	7/11/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	21	<1.0	4.2	<1.0
	10/25/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	4.6	<1.0
6/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	19	<1.0	6.1	<1.0	
11/8/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	22	<1.0	7.0	<1.0	
5/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	20	<1.0	7.6	<1.0	
7/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	15	<1.0	7.1	<1.0	
DUP-01 (MW-25s)	3/16/2010	<5.0	<5.0	1.3	<1.0	<1.0	<1.0	<1.0	18	<1.0	1.0	<1.0
MW-26s (28-33') Depth to Groundwater Approx. 26 - 28'	4/6/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/14/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/8/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/17/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/25/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/2/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

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Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote {X} of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
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Table 5
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Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-27s (7-12') Depth to Groundwater* Approx. 3 - 4'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.4	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0
	7/21/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	
DUP-02 (MW-27s)	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-27d (37.5-42.5') Depth to Groundwater Approx. 24 - 25'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/20/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/9/2011 ⁽⁴⁾	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/5/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/3/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/4/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Green background Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote {X} of MDEQ Op Memo 1 Part 201, Attachment 1.
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- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-28s (25-30') Depth to Groundwater Approx. 25 - 27'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/12/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-28d (49-54') Depth to Groundwater Approx. 25 - 27'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/16/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/22/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/7/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/4/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
DUP-03 (MW-28d)	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
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Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-29s (13-18') Depth to Groundwater Approx. 15 - 16'	3/18/2010	<5.0	<5.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	<5.0	<5.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/5/2012	<5.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/12/2012	<5.0	<5.0	<1.0	<1.0	1.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-29d (58.5-63.5') Depth to Groundwater* Approx. 18 - 19'	5/30/2013	<5.0	<5.0	<1.0	<1.0	1.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/6/2013	<5.0	<5.0	<1.0	<1.0	1.3	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/18/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/15/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/12/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
4/5/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
11/7/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.
 ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-30s (11-16') Depth to Groundwater* Approx. 9 - 11'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-30d (25.5-30.5') Depth to Groundwater* Approx. 9 - 11'	3/23/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/17/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	9/9/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	12/16/2010	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	2/15/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/13/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/20/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/10/2011	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	1/6/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	4/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/9/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	10/19/2012	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/30/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
11/5/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
5/14/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	

Notes:
 Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.
 ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

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- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
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Table 5
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Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-31 (33.3-38.3') Depth to Groundwater Approx. 32 - 33'	6/18/2010	<5.0	<5.0	14	<1.0	19	2.2	<1.0	20	<1.0	180	<1.0
	9/17/2010	<10	<10	<2.0	<2.0	15	<2.0	<2.0	48	<2.0	220	2.5
	12/22/2010 ⁽⁶⁾	<10	<10	16	<2.0	29	2.9	<2.0	27	<2.0	260	<2.0
	2/24/2011	<10	<10	16	<2.0	31	3.1	<2.0	26	<2.0	300	<2.0
	5/11/2011 ⁽⁴⁾	<10	<10	15	<2.0	24	3.0	<2.0	22	<2.0	250	<2.0
	7/21/2011	<5.0	<5.0	7.4	<1.0	14	1.2	<1.0	11	<1.0	130	<1.0
	10/4/2011	<5.0	<5.0	18	<1.0	40	3.4	<1.0	28	<1.0	340	<1.0
	1/10/2012	<10	<10	17	<2.0	35	3.1	<2.0	24	<2.0	290	<2.0
	4/5/2012	<10	<10	16	<2.0	36	3.1	<2.0	24	<2.0	290	<2.0
	7/17/2012	<20	<20	16	<4.0	34	<4.0	<4.0	23	<4.0	310	<4.0
	10/3/2012	16	<12	15	<2.5	40	3.4	<2.5	26	<2.5	340	<2.5
	3/6/2013	<12	<12	13	<2.5	32	2.9	<2.5	23	<2.5	270	<2.5
5/29/2013	<12	<12	15	<2.5	39	2.9	<2.5	23	<2.5	300	<2.5	
8/29/2013	<12	<12	16	<2.5	47	2.6	<2.5	24	<2.5	320	<2.5	
3/28/2014	<12	<12	16	<2.5	34	<2.5	<2.5	27	<2.5	300	<2.5	
5/22/2014	<12	<12	16	<2.5	34	<2.5	<2.5	24	<2.5	280	<2.5	
7/17/2014	<12	<12	13	<2.5	33	<2.5	<2.5	20	<2.5	260	<2.5	
DUP-01 (MW-31)	6/18/2010	<5.0	<5.0	12	<1.0	19	2.3	<1.0	21	<1.0	170	<1.0
MW-32s (23-28') Depth to Groundwater Approx. 23 - 25'	9/17/2010	<100	<100	150	<20	270	26	<20	220	<20	2,400	<20
	11/18/2010	<100	<100	<20	<20	190	<20	<20	560	<20	2,800	<20
	12/28/2010	<100	<100	<20	<20	200	<20	<20	510	<20	2,300	<20
	2/25/2011	<100	<100	<20	<20	190	<20	<20	420	<20	2,300	<20
	5/10/2011 ⁽⁴⁾	<100	<100	<20	<20	170	<20	<20	380	<20	2,300	31
	7/28/2011	<100	<100	<20	<20	140	<20	<20	380	<20	2,400	<20
	10/6/2011	<100	<100	<20	<20	160	<20	<20	350	<20	2,200	<20
	1/10/2012	<100	<100	<20	<20	170	<20	<20	400	<20	2,300	<20
	4/4/2012	<100	<100	<20	<20	130	<20	<20	340	<20	2,200	<20
	7/11/2012	<100	<100	<20	<20	85	<20	<20	370	<20	2,200	<20
	10/10/2012	<100	<100	<20	<20	89	<20	<20	280	<20	1,600	<20
	5/20/2013	<100	<100	<20	<20	89	<20	<20	220	<20	1,400	<20
11/5/2013	<50	<50	<10	<10	71	<10	<10	190	<10	1,200	<10	
7/15/2014	<50	<50	<10	<10	48	<10	<10	160	<10	1,200	<10	
MW-32d (35-40') Depth to Groundwater Approx. 23 - 24'	5/20/2013	<5.0	<5.0	<1.0	<1.0	2.0	3.2	<1.0	<1.0	<1.0	53	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	2.4	3.3	<1.0	<1.0	<1.0	53	<1.0
	11/5/2013	<5.0	<5.0	<1.0	<1.0	1.9	3.2	<1.0	<1.0	<1.0	51	<1.0
	3/27/2014	<5.0	<5.0	<1.0	<1.0	2.0	3.0	<1.0	<1.0	<1.0	56	<1.0
	5/19/2014	<5.0	<5.0	<1.0	<1.0	1.8	3.0	<1.0	<1.0	<1.0	49	<1.0
7/15/2014	<5.0	<5.0	<1.0	<1.0	2.3	2.4	<1.0	<1.0	<1.0	51	<1.0	
DUP-01 (MW-32d)	11/5/2013	<5.0	<5.0	<1.0	<1.0	1.7	3.1	<1.0	<1.0	<1.0	51	<1.0
	5/19/2014	<5.0	<5.0	<1.0	<1.0	2.1	3.0	<1.0	<1.0	<1.0	51	<1.0

Notes:
Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.
ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits
Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- 1) Criterion is not protective for surface water used as a drinking water source as described in footnote [X] of MDEQ Op Memo 1 Part 201, Attachment 1.
- 2) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- 3) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- 4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- 5) Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- 6) Headspace present in the sample, results are approximate.

Table 5
 Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-33s (21-26') Depth to Groundwater Approx. 20 - 22'	9/17/2010	<5.0	<5.0	12	<1.0	13	<1.0	<1.0	<1.0	76	<1.0	64
	11/18/2010	<5.0	<5.0	14	<1.0	22	<1.0	<1.0	1.1	150	<1.0	56
	12/22/2010	<5.0	<5.0	14	<1.0	22	1.2	<1.0	1.0	130	<1.0	57
	2/24/2011	<5.0	<5.0	12	<1.0	20	1.0	<1.0	<1.0	110	<1.0	60
	5/10/2011 ⁽⁴⁾	<10	<10	11	<2.0	21	<2.0	<2.0	<2.0	220	<2.0	55
	7/28/2011	<10	<10	8.9	<2.0	18	<2.0	<2.0	<2.0	260	<2.0	22
	10/6/2011	<10	<10	11	<2.0	19	<2.0	<2.0	<2.0	220	<2.0	48
	1/9/2012 ⁽⁶⁾	<5.0	8.9	15	<1.0	20	1.0	<1.0	1.3	170	<1.0	51
	4/4/2012	<5.0	5.6	17	<1.0	21	<1.0	<1.0	1.2	170	<1.0	48
	7/11/2012	<5.0	13	25	<1.0	32	1.3	<1.0	<1.0	130	<1.0	52
	10/10/2012	<5.0	12	23	<1.0	31	1.2	<1.0	<1.0	120	<1.0	57
	5/20/2013	<5.0	9.4	16	<1.0	23	<1.0	<1.0	<1.0	98	<1.0	100
11/5/2013	<5.0	7.7	16	<1.0	28	<1.0	<1.0	<1.0	77	<1.0	58	
5/19/2014	<5.0	7.4	12	<1.0	21	<1.0	<1.0	<1.0	70	<1.0	63	
DUP-01 (MW-33s)	11/18/2010	<5.0	<5.0	14	<1.0	23	<1.0	<1.0	1.2	150	<1.0	55
MW-34s (23-28') Depth to Groundwater Approx. 23 - 25'	9/17/2010	<100	<100	<20	<20	<20	<20	1,600	<20	1,100	<20	<20
	11/18/2010	<100	<100	<20	<20	<20	<20	1,600	<20	1,200	<20	<20
	12/28/2010	<50	<50	<10	13	<10	<10	1,400	<10	1,000	<10	<10
	2/25/2011	<50	<50	<10	<10	<10	<10	1,100	<10	900	<10	<10
	5/10/2011 ⁽⁴⁾	<50	<50	<10	<10	<10	<10	1,200	<10	970	<10	<10
	7/28/2011	<50	<50	<10	<10	<10	<10	1,300	<10	1,100	<10	<10
	10/6/2011	<50	<50	<10	<10	<10	<10	1,200	<10	1,000	<10	<10
	1/10/2012	<50	<50	<10	14	<10	<10	1,500	<10	1,100	<10	<10
	4/4/2012	<50	<50	<10	<10	<10	<10	1,400	<10	1,200	<10	<10
	7/11/2012	<50	<50	<10	<10	<10	<10	1,400	<10	1,100	<10	<10
	10/10/2012	<50	<50	<10	<10	<10	<10	1,400	<10	1,100	<10	<10
	5/20/2013	<50	<50	<10	<10	<10	<10	720	<10	730	<10	<10
11/12/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	490	<5.0	450	<5.0	<5.0	
5/19/2014	<25	<25	<5.0	5.6	<5.0	<5.0	690	<5.0	730	<5.0	<5.0	
DUP-01 (MW-34s)	5/20/2013	<50	<50	<10	<10	<10	<10	730	<10	730	<10	<10
MW-34d (45-50') Depth to Groundwater Approx. 23 - 24'	5/20/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
	11/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0
	7/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0

Notes:

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1) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

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4) The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.

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Table 5
Summary of Detected Volatile Organic Compounds at Compliance Monitoring Well Locations
Former Tecumseh Products Company Site
Tecumseh, Michigan

Analyte	2-Butanone ⁽²⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽²⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	1,1,2-Trichloroethane	Trichloroethene	Trichloro-fluoromethane	Vinyl Chloride	
Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0	
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0	
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾	
Residential GWSLs for Vapor Intrusion	4.3E+06	44,000	4,300	370	83	360	94	17,000	96	10	28,000	2.8	
Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52	
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000	
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	
MW-35i (20.5-22.5') Depth to Groundwater Approx. 16 - 17'	10/29/2012	<250	<250	<50	94	<50	<50	4,500	<50	3,000	<50	<50	
	3/27/2013	<250	<250	<50	110	<50	<50	4,500	<50	2,700	<50	<50	
	6/5/2013	<250	<250	<50	160	<50	<50	6,400	<50	4,300	<50	<50	
	8/29/2013	<250	<250	<50	160	<50	<50	6,600	<50	4,900	<50	<50	
	11/12/2013	<250	<250	<50	190	<50	<50	7,400	<50	5,100	<50	<50	
	3/28/2014	<250	<250	<50	170	<50	<50	6,300	<50	4,600	<50	<50	
	5/21/2014	<250	<250	<50	140	50	<50	5,300	<50	4,400	<50	<50	
7/18/2014	<250	<250	<50	130	<50	<50	5,300	<50	4,600	<50	<50		
MW-35d (42.5-44.5') Depth to Groundwater Approx. 15 - 16'	7/24/2012	<5.0	<5.0	<1.0	<1.0	180	53	<1.0	1.5	<1.0	20	<1.0	22
	10/25/2012	<5.0	<5.0	<1.0	<1.0	3.8	1.2	<1.0	<1.0	<1.0	2.2	<1.0	19
	3/6/2013	<5.0	<5.0	<1.0	<1.0	1.6	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	24
	6/11/2013	<5.0	<5.0	<1.0	<1.0	2.3	<1.0	<1.0	<1.0	<1.0	1.7	<1.0	23
	8/28/2013	<5.0	<5.0	<1.0	<1.0	5.5	<1.0	<1.0	<1.0	<1.0	1.5	<1.0	26
	11/12/2013	<5.0	<5.0	<1.0	<1.0	9.1	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	33
	3/26/2014	<5.0	<5.0	<1.0	<1.0	24	3.2	<1.0	<1.0	<1.0	1.1	<1.0	33
5/20/2014	<5.0	<5.0	<1.0	<1.0	22	3	<1.0	<1.0	<1.0	1.3	<1.0	30	
7/16/2014	<5.0	<5.0	<1.0	<1.0	12	1.4	<1.0	<1.0	<1.0	1.2	<1.0	31	
MW-36s (16.5-21.5') Depth to Groundwater Approx. 16 - 17'	4/3/2013	<12	19	15	2.7	140	18	<2.5	35	2.9	260	<2.5	12
	5/31/2013	<12	20	14	2.6	150	18	<2.5	29	<2.5	280	<2.5	11
	8/29/2013	<12	15	16	2.9	160	20	<2.5	30	<2.5	370	<2.5	11
	11/8/2013	<12	21	20	3.0	200	22	<2.5	32	<2.5	440	<2.5	20
	3/27/2014	<25	<25	15	<5.0	130	15	<5.0	21	<5.0	430	<5.0	15
	5/15/2014	<25	<25	15	<5.0	120	16	<5.0	22	<5.0	370	<5.0	16
	7/18/2014	<25	<25	14	<5.0	120	15	<5.0	18	<5.0	410	<5.0	16
MW-36d (31-36') Depth to Groundwater Approx. 16 - 17'	4/2/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
7/15/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-37s (25.5-30.5') Depth to Groundwater Approx. 25 - 26'	4/3/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	570	<5.0	<5.0
	6/3/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	580	<5.0	<5.0
	8/29/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	580	<5.0	<5.0
	11/11/2013	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	5.6	<5.0	640	<5.0	<5.0
	3/27/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	550	<5.0	<5.0
	5/16/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	5.6	<5.0	610	<5.0	<5.0
7/18/2014	<25	<25	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	610	<5.0	<5.0	

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Residential DW Criteria	13,000	430	880	7.0	70	100	5.0	200	5.0	5.0	2,600	2.0
Non-Residential DW Criteria	38,000	1,700	2,500	7.0	70	100	5.0	200	5.0	5.0	7,300	2.0
GSI Criteria	2,200	1,100 ⁽¹⁾	740	130	620	1,500 ⁽¹⁾	60 ⁽¹⁾	89	330 ⁽¹⁾	200 ⁽¹⁾	NC	13 ⁽¹⁾
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Non-Residential GWSLs for Vapor Intrusion	1.8E+07	1.8E+05	18,000	1,600	350	1,500	460	71,000	480	41	1.2E+05	52
Groundwater Contact Criteria	2.4E+08	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	12,000	1.3E+06	21,000	13,000 ⁽³⁾	1.1E+06	1,000
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW-38s (9-14') Depth to Groundwater Approx. 9 - 10'	4/3/2013	<10	<10	13	<2.0	22	<2.0	18	<2.0	210	<2.0	16
	6/3/2013	<10	<10	15	<2.0	30	<2.0	18	<2.0	230	<2.0	16
	8/29/2013	<12	<12	20	<2.5	42	<2.5	22	<2.5	280	<2.5	17
	11/11/2013	<10	<10	21	<2.0	35	<2.0	28	<2.0	290	<2.0	19
	7/17/2014	<10	<10	13	<2.0	26	<2.0	21	<2.0	240	<2.0	11
MW-38d (29-34') Depth to Groundwater Approx. 30 - 32'	4/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	11	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.8	<1.0	<1.0
	8/29/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0
	11/14/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/27/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/17/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-39s (15.5-20.5') Depth to Groundwater Approx. 15 - 16'	4/3/2013	<50	<50	86	17	56	<10	<10	86	<10	810	<10
	6/3/2013	<50	<50	90	18	71	<10	<10	84	<10	870	<10
	8/29/2013	<25	<25	42	9.5	36	<5.0	<5.0	39	<5.0	460	<5.0
	11/11/2013	<50	<50	97	24	67	<10	<10	99	<10	840	<10
	3/28/2014	<25	<25	79	18	64	<5.0	<5.0	96	<5.0	790	<5.0
	5/16/2014	<25	<25	79	21	50	<5.0	<5.0	120	<5.0	960	<5.0
	7/18/2014	<25	<25	68	17	64	<5.0	<5.0	90	<5.0	840	<5.0
MW-39d (34-39') Depth to Groundwater Approx. 15 - 16'	4/2/2013	<5.0	<5.0	<1.0	<1.0	2.6	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
	6/11/2013	<5.0	<5.0	<1.0	<1.0	3.2	2.5	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	3.4	2.3	<1.0	<1.0	<1.0	<1.0	<1.0
	11/12/2013	<5.0	<5.0	<1.0	<1.0	2.9	2.3	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	3.3	2.3	<1.0	<1.0	<1.0	<1.0	<1.0
	5/21/2014	<5.0	<5.0	<1.0	<1.0	3.3	2.0	<1.0	<1.0	<1.0	<1.0	<1.0
7/15/2014	<5.0	<5.0	<1.0	<1.0	3.0	2.1	<1.0	<1.0	<1.0	<1.0	<1.0	
MW-40s (20-25') Depth to Groundwater Approx. 22 - 23'	4/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/13/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/21/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	7/16/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
MW-40d (37.5-42.5') Depth to Groundwater Approx. 21 - 22'	4/3/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	6/12/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	8/28/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	11/13/2013	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
	5/22/2014	<5.0	<5.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter; NC = No criteria; NA = Not analyzed

Bold font denotes concentrations detected above laboratory reporting limits

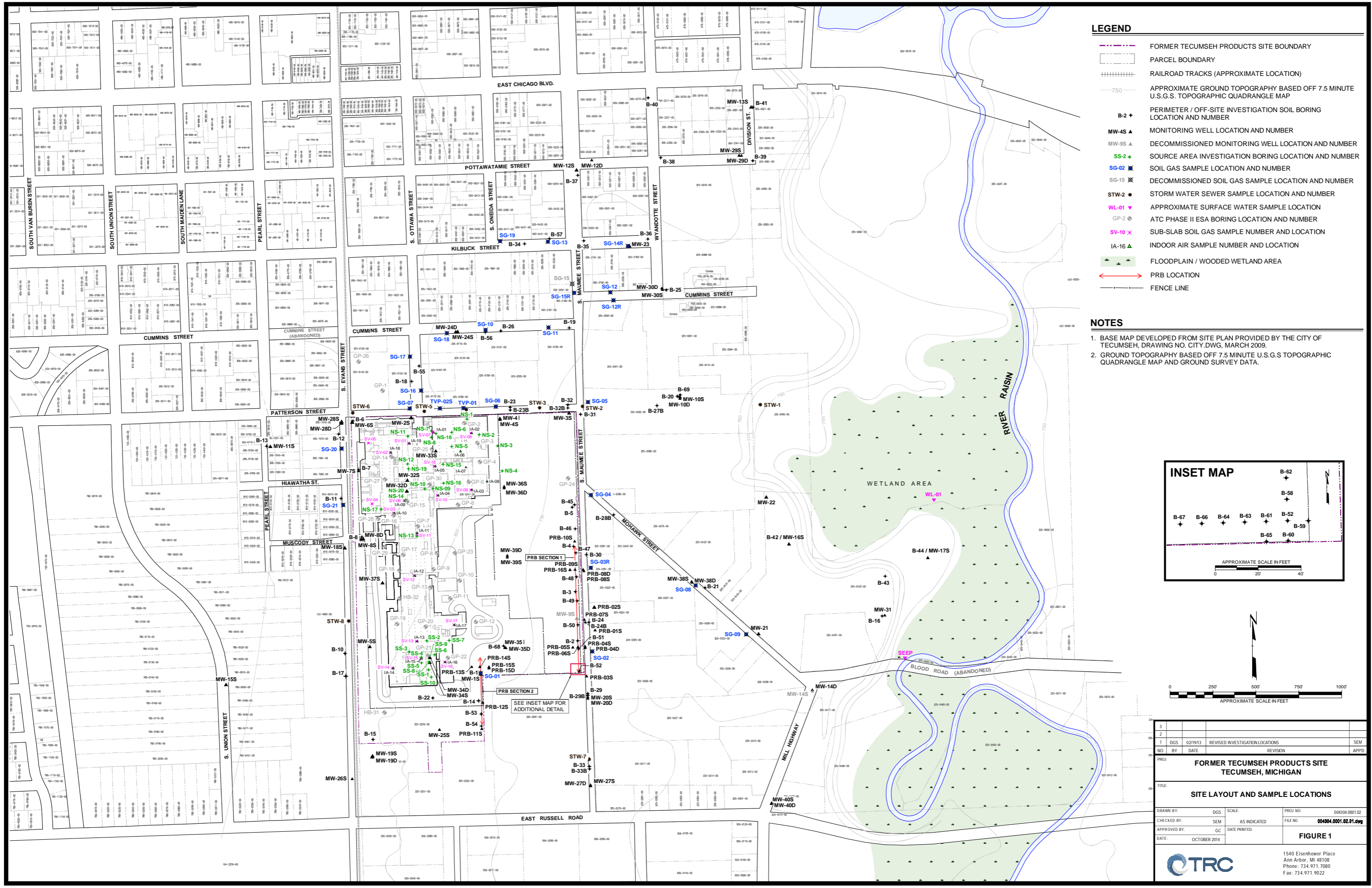
Denotes concentrations above one or more criteria

* An asterisk indicates that the depth to groundwater intersects or may periodically intersect an overlying clay unit. The depth to the bottom of the upper clay unit is approximately 7.0 feet below ground surface (ft bgs) at MW-09s, 8.0 ft bgs at MW-20s (based on boring log for nearby soil boring B-29), 15.0 ft bgs at MW-23, 9.0 ft bgs at MW-27s, 20.5 ft bgs at MW-29d, and 14.0 ft bgs at MW-30s and MW-30d.

- Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.
- Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21.
- At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which was published by USEPA on September 28, 2011.
- The average temperature in this sample shipment exceeded the recommended temperature range. Sample results are approximate.
- Quality control results for trichloroethene are outside the established control limits, the result is approximate.
- Headspace present in the sample, results are approximate.

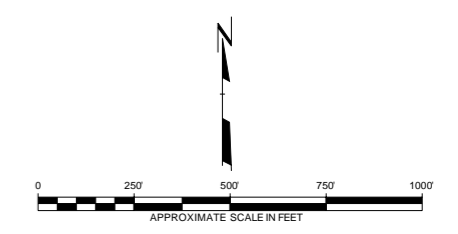
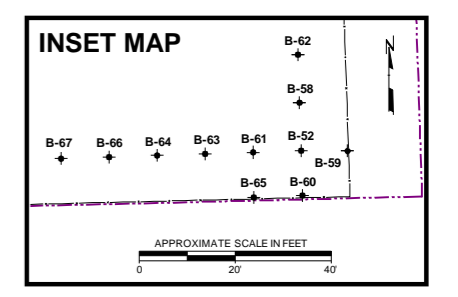
Technical Memorandum

Figure



- ### LEGEND
- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
 - PARCEL BOUNDARY
 - RAILROAD TRACKS (APPROXIMATE LOCATION)
 - APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
 - PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
 - ▲ MW-4S ▲ MONITORING WELL LOCATION AND NUMBER
 - ▲ MW-9S ▲ DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
 - ✦ SS-2 ✦ SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
 - ✦ SG-02 ✦ SOIL GAS SAMPLE LOCATION AND NUMBER
 - ✦ SG-15 ✦ DECOMMISSIONED SOIL GAS SAMPLE LOCATION AND NUMBER
 - ✦ STW-2 ✦ STORM WATER SEWER SAMPLE LOCATION AND NUMBER
 - ▼ WL-01 ▼ APPROXIMATE SURFACE WATER SAMPLE LOCATION
 - ⊙ GP-2 ⊙ ATC PHASE II ESA BORING LOCATION AND NUMBER
 - ✦ SV-10 ✦ SUB-SLAB SOIL GAS SAMPLE NUMBER AND LOCATION
 - ▲ IA-16 ▲ INDOOR AIR SAMPLE NUMBER AND LOCATION
 - FLOODPLAIN / WOODED WETLAND AREA
 - PRB LOCATION
 - FENCE LINE

- ### NOTES
1. BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
 2. GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.



NO.	BY	DATE	REVISION	SEM
3				
2	DGS	02/19/13	REVISED INVESTIGATION LOCATIONS	SEM
1				
FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN				
SITE LAYOUT AND SAMPLE LOCATIONS				
DRAWN BY: DGS		SCALE: AS INDICATED		PROJ. NO: 004304.0001.02
CHECKED BY: SEM		DATE PRINTED:		FILE NO: 004304.0001.02.01.dwg
APPROVED BY: GC		DATE: OCTOBER 2014		FIGURE 1
1540 Eisenhower Place Ann Arbor, MI 48108 Phone: 734.971.7080 Fax: 734.971.9022				

J:\TRC\Tecumseh Products\004304\0001\02\01.dwg
 Drawing Name: SITE LAYOUT AND SAMPLE LOCATIONS
 Operator Name: BTABLE: DVAH:
 Date: 10/20/14
 Plot Date: October 6, 2014
 Plot Time: 8:22 AM
 Plot Size: 11x17
 Plot Scale: 1:1
 Plot Orientation: Landscape
 Plot Title: 02.01.dwg

Technical Memorandum

Attachment 1 Analytical Data

August 01, 2014

TRC Companies. - Ann Arbor Office
Attn: Ms. Stacy Metz
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: Tecumseh Products Groundwater

Dear Ms. Stacy Metz,

Enclosed is a copy of the laboratory report for the following work order(s) received by TriMatrix Laboratories:

Work Order	Received	Description
1407336	07/18/2014	Laboratory Services

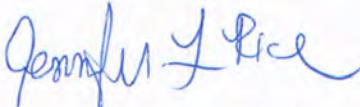
This report relates only to the sample(s) as received. Test results are in compliance with the requirements of the National Environmental Laboratory Accreditation Program (NELAP) and/or one of the following certification programs:

ACCLASS DoD-ELAP/ISO17025 (#ADE-1542); Arkansas DEP (#88-0730/13-049-0); Florida DEP (#E87622-24); Georgia EPD (#E87622-24); Illinois DEP (#200026/003329); Kansas DPH (#E-10302); Kentucky DEP (#0021); Louisiana DEP (#103068); Michigan DPH (#0034); Minnesota DPH (#491715); New York ELAP (#11776/48855); North Carolina DNRE (#659); Texas CEQ (#T104704495-14-4); Virginia DCLS (#460153/2592); Wisconsin DNR (#999472650); USDA Soil Import Permit (#P330-12-00236).

Any qualification or narration of results, including sample acceptance requirements and test exceptions to the above referenced programs, is presented in the Statement of Data Qualifications and Project Technical Narrative sections of this report. Estimates of analytical uncertainties and certification documents for the test results contained within this report are available upon request.

If you have any questions or require further information, please do not hesitate to contact me.

Sincerely,



Jennifer L. Rice
Project Chemist



PROJECT TECHNICAL NARRATIVE(s)

Volatile Organic Compounds by EPA Method 8260B

Narrative: Manual integration was required on the analytes listed below. All manual integrations were performed and reviewed in accordance with TriMatrix laboratory policy.

Analysis: USEPA-8260B

Sample/Analyte: 1407336-09 NS-20i

Chloroethane



STATEMENT OF DATA QUALIFICATIONS

All analyses have been validated and comply with our Quality Control Program.
No Qualification is required.

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	7/17/14 0:00
Lab Sample ID:	1407336-01	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	1	Analyzed:	7/24/14 12:20 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: TB-01	Sampled: 7/17/14 0:00
Lab Sample ID: 1407336-01	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 1	Analyzed: 7/24/14 12:20 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	TB-01	Sampled:	7/17/14 0:00
Lab Sample ID:	1407336-01	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	1	Analyzed:	7/24/14 12:20 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>103</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-18s	Sampled: 7/14/14 8:41
Lab Sample ID: 1407336-02	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 10	Analyzed: 7/24/14 18:32 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	18	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	100	10
156-60-5	trans-1,2-Dichloroethene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-18s	Sampled:	7/14/14 8:41
Lab Sample ID:	1407336-02	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	10	Analyzed:	7/24/14 18:32 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	11	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	760	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-18s	Sampled:	7/14/14 8:41
Lab Sample ID:	1407336-02	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	10	Analyzed:	7/24/14 18:32 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-18i	Sampled: 7/14/14 9:43
Lab Sample ID: 1407336-03	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 20	Analyzed: 7/24/14 19:01 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	580	20
156-60-5	trans-1,2-Dichloroethene	120	20

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-18i	Sampled: 7/14/14 9:43
Lab Sample ID: 1407336-03	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 20	Analyzed: 7/24/14 19:01 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	<20	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	1900	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-18i	Sampled:	7/14/14 9:43
Lab Sample ID:	1407336-03	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	20	Analyzed:	7/24/14 19:01 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	37	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-18d	Sampled: 7/14/14 11:27
Lab Sample ID: 1407336-04	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 2	Analyzed: 7/24/14 19:30 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<40	40
107-13-1	Acrylonitrile	<4.0	4.0
71-43-2	Benzene	<2.0	2.0
108-86-1	Bromobenzene	<2.0	2.0
74-97-5	Bromochloromethane	<2.0	2.0
75-27-4	Bromodichloromethane	<2.0	2.0
75-25-2	Bromoform	<2.0	2.0
74-83-9	Bromomethane	<10	10
104-51-8	n-Butylbenzene	<2.0	2.0
135-98-8	sec-Butylbenzene	<2.0	2.0
98-06-6	tert-Butylbenzene	<2.0	2.0
75-15-0	Carbon Disulfide	<2.0	2.0
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
75-00-3	Chloroethane	<10	10
67-66-3	Chloroform	<2.0	2.0
74-87-3	Chloromethane	<10	10
96-12-8	1,2-Dibromo-3-chloropropane	<10	10
124-48-1	Dibromochloromethane	<2.0	2.0
106-93-4	1,2-Dibromoethane	<2.0	2.0
74-95-3	Dibromomethane	<2.0	2.0
110-57-6	trans-1,4-Dichloro-2-butene	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
541-73-1	1,3-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-71-8	Dichlorodifluoromethane	<10	10
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	220	2.0
156-60-5	trans-1,2-Dichloroethene	38	2.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-18d	Sampled: 7/14/14 11:27
Lab Sample ID: 1407336-04	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 2	Analyzed: 7/24/14 19:30 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.0	2.0
10061-01-5	cis-1,3-Dichloropropene	<2.0	2.0
10061-02-6	trans-1,3-Dichloropropene	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
60-29-7	Ethyl Ether	<10	10
591-78-6	2-Hexanone	<10	10
74-88-4	Iodomethane	<2.0	2.0
98-82-8	Isopropylbenzene	<2.0	2.0
99-87-6	4-Isopropyltoluene	<10	10
1634-04-4	Methyl tert-Butyl Ether	<10	10
75-09-2	Methylene Chloride	<10	10
78-93-3	2-Butanone (MEK)	<10	10
91-57-6	2-Methylnaphthalene	<10	10
108-10-1	4-Methyl-2-pentanone (MIBK)	<10	10
91-20-3	Naphthalene	<10	10
103-65-1	n-Propylbenzene	<2.0	2.0
100-42-5	Styrene	<2.0	2.0
630-20-6	1,1,1,2-Tetrachloroethane	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.0	2.0
127-18-4	Tetrachloroethene	<2.0	2.0
109-99-9	Tetrahydrofuran	<10	10
108-88-3	Toluene	<2.0	2.0
87-61-6	1,2,3-Trichlorobenzene	<10	10
120-82-1	1,2,4-Trichlorobenzene	<10	10
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	17	2.0
75-69-4	Trichlorofluoromethane	<2.0	2.0
96-18-4	1,2,3-Trichloropropane	<2.0	2.0
95-63-6	1,2,4-Trimethylbenzene	<2.0	2.0
108-67-8	1,3,5-Trimethylbenzene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-18d	Sampled:	7/14/14 11:27
Lab Sample ID:	1407336-04	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	2	Analyzed:	7/24/14 19:30 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	5.7	2.0
179601-23-1	Xylene, Meta + Para	<4.0	4.0
95-47-6	Xylene, Ortho	<2.0	2.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-19s	Sampled: 7/14/14 12:25
Lab Sample ID: 1407336-05	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 2	Analyzed: 7/24/14 19:58 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<40	40
107-13-1	Acrylonitrile	<4.0	4.0
71-43-2	Benzene	<2.0	2.0
108-86-1	Bromobenzene	<2.0	2.0
74-97-5	Bromochloromethane	<2.0	2.0
75-27-4	Bromodichloromethane	<2.0	2.0
75-25-2	Bromoform	<2.0	2.0
74-83-9	Bromomethane	<10	10
104-51-8	n-Butylbenzene	<2.0	2.0
135-98-8	sec-Butylbenzene	<2.0	2.0
98-06-6	tert-Butylbenzene	<2.0	2.0
75-15-0	Carbon Disulfide	<2.0	2.0
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
75-00-3	Chloroethane	<10	10
67-66-3	Chloroform	<2.0	2.0
74-87-3	Chloromethane	<10	10
96-12-8	1,2-Dibromo-3-chloropropane	<10	10
124-48-1	Dibromochloromethane	<2.0	2.0
106-93-4	1,2-Dibromoethane	<2.0	2.0
74-95-3	Dibromomethane	<2.0	2.0
110-57-6	trans-1,4-Dichloro-2-butene	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
541-73-1	1,3-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-71-8	Dichlorodifluoromethane	<10	10
75-34-3	1,1-Dichloroethane	7.2	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	4.4	2.0
156-59-2	cis-1,2-Dichloroethene	150	2.0
156-60-5	trans-1,2-Dichloroethene	2.4	2.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-19s	Sampled: 7/14/14 12:25
Lab Sample ID: 1407336-05	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 2	Analyzed: 7/24/14 19:58 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.0	2.0
10061-01-5	cis-1,3-Dichloropropene	<2.0	2.0
10061-02-6	trans-1,3-Dichloropropene	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
60-29-7	Ethyl Ether	<10	10
591-78-6	2-Hexanone	<10	10
74-88-4	Iodomethane	<2.0	2.0
98-82-8	Isopropylbenzene	<2.0	2.0
99-87-6	4-Isopropyltoluene	<10	10
1634-04-4	Methyl tert-Butyl Ether	<10	10
75-09-2	Methylene Chloride	<10	10
78-93-3	2-Butanone (MEK)	<10	10
91-57-6	2-Methylnaphthalene	<10	10
108-10-1	4-Methyl-2-pentanone (MIBK)	<10	10
91-20-3	Naphthalene	<10	10
103-65-1	n-Propylbenzene	<2.0	2.0
100-42-5	Styrene	<2.0	2.0
630-20-6	1,1,1,2-Tetrachloroethane	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.0	2.0
127-18-4	Tetrachloroethene	<2.0	2.0
109-99-9	Tetrahydrofuran	<10	10
108-88-3	Toluene	<2.0	2.0
87-61-6	1,2,3-Trichlorobenzene	<10	10
120-82-1	1,2,4-Trichlorobenzene	<10	10
71-55-6	1,1,1-Trichloroethane	6.3	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	190	2.0
75-69-4	Trichlorofluoromethane	<2.0	2.0
96-18-4	1,2,3-Trichloropropane	<2.0	2.0
95-63-6	1,2,4-Trimethylbenzene	<2.0	2.0
108-67-8	1,3,5-Trimethylbenzene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-19s	Sampled:	7/14/14 12:25
Lab Sample ID:	1407336-05	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	2	Analyzed:	7/24/14 19:58 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	120	2.0
179601-23-1	Xylene, Meta + Para	<4.0	4.0
95-47-6	Xylene, Ortho	<2.0	2.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>102</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-19i	Sampled: 7/14/14 13:52
Lab Sample ID: 1407336-06	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 5	Analyzed: 7/24/14 20:27 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	76	5.0
156-60-5	trans-1,2-Dichloroethene	19	5.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-19i	Sampled: 7/14/14 13:52
Lab Sample ID: 1407336-06	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 9:00 By: DLV
Dilution Factor: 5	Analyzed: 7/24/14 20:27 By: LEW
QC Batch: 1407369	Analytical Batch: 4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	430	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-19i	Sampled:	7/14/14 13:52
Lab Sample ID:	1407336-06	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 9:00 By: DLV
Dilution Factor:	5	Analyzed:	7/24/14 20:27 By: LEW
QC Batch:	1407369	Analytical Batch:	4G25005

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>103</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	NS-19d	Sampled:	7/14/14 15:46	
Lab Sample ID:	1407336-07	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 1:13	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	1.9	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-19d	Sampled: 7/14/14 15:46
Lab Sample ID: 1407336-07	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 1:13 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	21	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	NS-19d	Sampled:	7/14/14 15:46	
Lab Sample ID:	1407336-07	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 1:13	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-20s	Sampled:	7/15/14 8:24
Lab Sample ID:	1407336-08	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	20	Analyzed:	7/25/14 1:42 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<400	400
107-13-1	Acrylonitrile	<40	40
71-43-2	Benzene	<20	20
108-86-1	Bromobenzene	<20	20
74-97-5	Bromochloromethane	<20	20
75-27-4	Bromodichloromethane	<20	20
75-25-2	Bromoform	<20	20
74-83-9	Bromomethane	<100	100
104-51-8	n-Butylbenzene	<20	20
135-98-8	sec-Butylbenzene	<20	20
98-06-6	tert-Butylbenzene	<20	20
75-15-0	Carbon Disulfide	<20	20
56-23-5	Carbon Tetrachloride	<20	20
108-90-7	Chlorobenzene	<20	20
75-00-3	Chloroethane	<100	100
67-66-3	Chloroform	<20	20
74-87-3	Chloromethane	<100	100
96-12-8	1,2-Dibromo-3-chloropropane	<100	100
124-48-1	Dibromochloromethane	<20	20
106-93-4	1,2-Dibromoethane	<20	20
74-95-3	Dibromomethane	<20	20
110-57-6	trans-1,4-Dichloro-2-butene	<20	20
95-50-1	1,2-Dichlorobenzene	<20	20
541-73-1	1,3-Dichlorobenzene	<20	20
106-46-7	1,4-Dichlorobenzene	<20	20
75-71-8	Dichlorodifluoromethane	<100	100
75-34-3	1,1-Dichloroethane	<20	20
107-06-2	1,2-Dichloroethane	<20	20
75-35-4	1,1-Dichloroethene	<20	20
156-59-2	cis-1,2-Dichloroethene	190	20
156-60-5	trans-1,2-Dichloroethene	<20	20

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-20s	Sampled:	7/15/14 8:24
Lab Sample ID:	1407336-08	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	20	Analyzed:	7/25/14 1:42 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<20	20
10061-01-5	cis-1,3-Dichloropropene	<20	20
10061-02-6	trans-1,3-Dichloropropene	<20	20
100-41-4	Ethylbenzene	<20	20
60-29-7	Ethyl Ether	<100	100
591-78-6	2-Hexanone	<100	100
74-88-4	Iodomethane	<20	20
98-82-8	Isopropylbenzene	<20	20
99-87-6	4-Isopropyltoluene	<100	100
1634-04-4	Methyl tert-Butyl Ether	<100	100
75-09-2	Methylene Chloride	<100	100
78-93-3	2-Butanone (MEK)	<100	100
91-57-6	2-Methylnaphthalene	<100	100
108-10-1	4-Methyl-2-pentanone (MIBK)	<100	100
91-20-3	Naphthalene	<100	100
103-65-1	n-Propylbenzene	<20	20
100-42-5	Styrene	<20	20
630-20-6	1,1,1,2-Tetrachloroethane	<20	20
79-34-5	1,1,2,2-Tetrachloroethane	<20	20
127-18-4	Tetrachloroethene	<20	20
109-99-9	Tetrahydrofuran	<100	100
108-88-3	Toluene	<20	20
87-61-6	1,2,3-Trichlorobenzene	<100	100
120-82-1	1,2,4-Trichlorobenzene	<100	100
71-55-6	1,1,1-Trichloroethane	490	20
79-00-5	1,1,2-Trichloroethane	<20	20
79-01-6	Trichloroethene	1800	20
75-69-4	Trichlorofluoromethane	<20	20
96-18-4	1,2,3-Trichloropropane	<20	20
95-63-6	1,2,4-Trimethylbenzene	<20	20
108-67-8	1,3,5-Trimethylbenzene	<20	20

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-20s	Sampled:	7/15/14 8:24
Lab Sample ID:	1407336-08	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	20	Analyzed:	7/25/14 1:42 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	38	20
179601-23-1	Xylene, Meta + Para	<40	40
95-47-6	Xylene, Ortho	<20	20
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-20i	Sampled: 7/15/14 9:26
Lab Sample ID: 1407336-09	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 2:10 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	11	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	1.5	1.0
156-59-2	cis-1,2-Dichloroethene	12	1.0
156-60-5	trans-1,2-Dichloroethene	1.4	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: NS-20i	Sampled: 7/15/14 9:26
Lab Sample ID: 1407336-09	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 2:10 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	14	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	NS-20i	Sampled:	7/15/14 9:26
Lab Sample ID:	1407336-09	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 2:10 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	55	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-32d	Sampled:	7/15/14 10:13
Lab Sample ID:	1407336-10	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 2:39 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	2.3	1.0
156-60-5	trans-1,2-Dichloroethene	2.4	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-32d	Sampled:	7/15/14 10:13
Lab Sample ID:	1407336-10	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 2:39 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	51	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-32d	Sampled:	7/15/14 10:13
Lab Sample ID:	1407336-10	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 2:39 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>103</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-32s	Sampled:	7/15/14 11:33
Lab Sample ID:	1407336-11	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	10	Analyzed:	7/28/14 10:47 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	<10	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	48	10
156-60-5	trans-1,2-Dichloroethene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-32s	Sampled:	7/15/14 11:33
Lab Sample ID:	1407336-11	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	10	Analyzed:	7/28/14 10:47 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	160	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1200	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-32s	Sampled:	7/15/14 11:33
Lab Sample ID:	1407336-11	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	10	Analyzed:	7/28/14 10:47 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-36d	Sampled:	7/15/14 13:46
Lab Sample ID:	1407336-12	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 11:16 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-36d	Sampled: 7/15/14 13:46
Lab Sample ID: 1407336-12	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 11:16 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-36d	Sampled:	7/15/14 13:46
Lab Sample ID:	1407336-12	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 11:16 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-39d	Sampled: 7/15/14 15:10
Lab Sample ID: 1407336-13	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 4:05 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	3.0	1.0
156-60-5	trans-1,2-Dichloroethene	2.1	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-39d	Sampled: 7/15/14 15:10
Lab Sample ID: 1407336-13	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 4:05 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-39d	Sampled:	7/15/14 15:10	
Lab Sample ID:	1407336-13	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 4:05	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-35d	Sampled: 7/16/14 6:51
Lab Sample ID: 1407336-14	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 4:33 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	12	1.0
156-60-5	trans-1,2-Dichloroethene	1.4	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-35d	Sampled:	7/16/14 6:51
Lab Sample ID:	1407336-14	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 4:33 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	1.2	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-35d	Sampled:	7/16/14 6:51
Lab Sample ID:	1407336-14	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 4:33 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	31	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-8d	Sampled:	7/16/14 7:56
Lab Sample ID:	1407336-15	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 5:02 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-8d	Sampled:	7/16/14 7:56
Lab Sample ID:	1407336-15	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 5:02 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-8d	Sampled:	7/16/14 7:56
Lab Sample ID:	1407336-15	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 5:02 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-34d	Sampled: 7/16/14 8:42
Lab Sample ID: 1407336-16	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 5:30 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-34d	Sampled: 7/16/14 8:42
Lab Sample ID: 1407336-16	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 5:30 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	1.2	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-34d	Sampled:	7/16/14 8:42
Lab Sample ID:	1407336-16	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 5:30 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-40s	Sampled: 7/16/14 10:45
Lab Sample ID: 1407336-17	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 5:59 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-40s	Sampled:	7/16/14 10:45	
Lab Sample ID:	1407336-17	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 5:59	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-40s	Sampled:	7/16/14 10:45	
Lab Sample ID:	1407336-17	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 5:59	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-40d	Sampled: 7/16/14 11:53
Lab Sample ID: 1407336-18	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 6:27 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-40d	Sampled:	7/16/14 11:53	
Lab Sample ID:	1407336-18	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 6:27	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-40d	Sampled:	7/16/14 11:53	
Lab Sample ID:	1407336-18	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 6:27	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-14d	Sampled: 7/16/14 13:19
Lab Sample ID: 1407336-19	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 6:56 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-14d	Sampled:	7/16/14 13:19	
Lab Sample ID:	1407336-19	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 6:56	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-14d	Sampled:	7/16/14 13:19	
Lab Sample ID:	1407336-19	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 6:56	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-25s	Sampled: 7/16/14 14:22
Lab Sample ID: 1407336-20	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 7:24 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-25s	Sampled:	7/16/14 14:22
Lab Sample ID:	1407336-20	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 7:24 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	15	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	7.1	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-25s	Sampled:	7/16/14 14:22
Lab Sample ID:	1407336-20	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 7:24 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>100</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-20s	Sampled: 7/16/14 15:42
Lab Sample ID: 1407336-21	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 11:44 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	3.9	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-20s	Sampled: 7/16/14 15:42
Lab Sample ID: 1407336-21	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 11:44 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	140	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	130	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-20s	Sampled:	7/16/14 15:42
Lab Sample ID:	1407336-21	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 11:44 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-20d	Sampled: 7/16/14 16:11
Lab Sample ID: 1407336-22	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 2	Analyzed: 7/25/14 8:21 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<40	40
107-13-1	Acrylonitrile	<4.0	4.0
71-43-2	Benzene	<2.0	2.0
108-86-1	Bromobenzene	<2.0	2.0
74-97-5	Bromochloromethane	<2.0	2.0
75-27-4	Bromodichloromethane	<2.0	2.0
75-25-2	Bromoform	<2.0	2.0
74-83-9	Bromomethane	<10	10
104-51-8	n-Butylbenzene	<2.0	2.0
135-98-8	sec-Butylbenzene	<2.0	2.0
98-06-6	tert-Butylbenzene	<2.0	2.0
75-15-0	Carbon Disulfide	<2.0	2.0
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
75-00-3	Chloroethane	<10	10
67-66-3	Chloroform	<2.0	2.0
74-87-3	Chloromethane	<10	10
96-12-8	1,2-Dibromo-3-chloropropane	<10	10
124-48-1	Dibromochloromethane	<2.0	2.0
106-93-4	1,2-Dibromoethane	<2.0	2.0
74-95-3	Dibromomethane	<2.0	2.0
110-57-6	trans-1,4-Dichloro-2-butene	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
541-73-1	1,3-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-71-8	Dichlorodifluoromethane	<10	10
75-34-3	1,1-Dichloroethane	<2.0	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	330	2.0
156-60-5	trans-1,2-Dichloroethene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-20d	Sampled:	7/16/14 16:11
Lab Sample ID:	1407336-22	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	2	Analyzed:	7/25/14 8:21 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.0	2.0
10061-01-5	cis-1,3-Dichloropropene	<2.0	2.0
10061-02-6	trans-1,3-Dichloropropene	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
60-29-7	Ethyl Ether	<10	10
591-78-6	2-Hexanone	<10	10
74-88-4	Iodomethane	<2.0	2.0
98-82-8	Isopropylbenzene	<2.0	2.0
99-87-6	4-Isopropyltoluene	<10	10
1634-04-4	Methyl tert-Butyl Ether	<10	10
75-09-2	Methylene Chloride	<10	10
78-93-3	2-Butanone (MEK)	<10	10
91-57-6	2-Methylnaphthalene	<10	10
108-10-1	4-Methyl-2-pentanone (MIBK)	<10	10
91-20-3	Naphthalene	<10	10
103-65-1	n-Propylbenzene	<2.0	2.0
100-42-5	Styrene	<2.0	2.0
630-20-6	1,1,1,2-Tetrachloroethane	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.0	2.0
127-18-4	Tetrachloroethene	<2.0	2.0
109-99-9	Tetrahydrofuran	<10	10
108-88-3	Toluene	<2.0	2.0
87-61-6	1,2,3-Trichlorobenzene	<10	10
120-82-1	1,2,4-Trichlorobenzene	<10	10
71-55-6	1,1,1-Trichloroethane	<2.0	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	<2.0	2.0
75-69-4	Trichlorofluoromethane	<2.0	2.0
96-18-4	1,2,3-Trichloropropane	<2.0	2.0
95-63-6	1,2,4-Trimethylbenzene	<2.0	2.0
108-67-8	1,3,5-Trimethylbenzene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-20d	Sampled:	7/16/14 16:11
Lab Sample ID:	1407336-22	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	2	Analyzed:	7/25/14 8:21 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	100	2.0
179601-23-1	Xylene, Meta + Para	<4.0	4.0
95-47-6	Xylene, Ortho	<2.0	2.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-38d	Sampled: 7/17/14 6:59
Lab Sample ID: 1407336-23	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 9:18 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-38d	Sampled: 7/17/14 6:59
Lab Sample ID: 1407336-23	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 9:18 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-38d	Sampled:	7/17/14 6:59
Lab Sample ID:	1407336-23	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 9:18 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>103</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: TB-02	Sampled: 7/17/14 0:00
Lab Sample ID: 1407336-24	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 0:45 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: TB-02	Sampled: 7/17/14 0:00
Lab Sample ID: 1407336-24	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 1	Analyzed: 7/25/14 0:45 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	TB-02	Sampled:	7/17/14 0:00
Lab Sample ID:	1407336-24	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/24/14 22:00 By: DLV
Dilution Factor:	1	Analyzed:	7/25/14 0:45 By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>98</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>101</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: SS-09i	Sampled: 7/17/14 8:24
Lab Sample ID: 1407336-25	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 16:28 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	6.6	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	30	1.0
156-60-5	trans-1,2-Dichloroethene	4.6	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-09i	Sampled:	7/17/14 8:24
Lab Sample ID:	1407336-25	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 16:28 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	3.8	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	2.5	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-09i	Sampled:	7/17/14 8:24
Lab Sample ID:	1407336-25	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 16:28 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>101</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: SS-09s	Sampled: 7/17/14 9:05
Lab Sample ID: 1407336-26	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 5	Analyzed: 7/28/14 16:57 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: SS-09s	Sampled: 7/17/14 9:05
Lab Sample ID: 1407336-26	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 5	Analyzed: 7/28/14 16:57 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	13	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	600	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	470	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-09s	Sampled:	7/17/14 9:05
Lab Sample ID:	1407336-26	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 16:57 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: Dup-02	Sampled: 7/17/14 0:00
Lab Sample ID: 1407336-27	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/29/14 8:00 By: LEW
Dilution Factor: 5	Analyzed: 7/29/14 11:20 By: LEW
QC Batch: 1407600	Analytical Batch: 4G30007

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: Dup-02	Sampled: 7/17/14 0:00
Lab Sample ID: 1407336-27	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/29/14 8:00 By: LEW
Dilution Factor: 5	Analyzed: 7/29/14 11:20 By: LEW
QC Batch: 1407600	Analytical Batch: 4G30007

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	13	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	550	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	430	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	Dup-02	Sampled:	7/17/14 0:00
Lab Sample ID:	1407336-27	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/29/14 8:00 By: LEW
Dilution Factor:	5	Analyzed:	7/29/14 11:20 By: LEW
QC Batch:	1407600	Analytical Batch:	4G30007

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>96</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>97</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-10s	Sampled:	7/17/14 10:01
Lab Sample ID:	1407336-28	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 17:25 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-10s	Sampled:	7/17/14 10:01
Lab Sample ID:	1407336-28	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 17:25 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	83	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	640	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-10s	Sampled:	7/17/14 10:01
Lab Sample ID:	1407336-28	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 17:25 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>97</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-10i	Sampled:	7/17/14 10:40
Lab Sample ID:	1407336-29	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 17:53 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	7.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	24	1.0
156-60-5	trans-1,2-Dichloroethene	1.7	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: SS-10i	Sampled: 7/17/14 10:40
Lab Sample ID: 1407336-29	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 17:53 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	52	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-10i	Sampled:	7/17/14 10:40
Lab Sample ID:	1407336-29	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 17:53 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: SS-10d	Sampled: 7/17/14 11:42
Lab Sample ID: 1407336-30	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 18:22 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	16	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: SS-10d	Sampled: 7/17/14 11:42
Lab Sample ID: 1407336-30	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 18:22 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	SS-10d	Sampled:	7/17/14 11:42
Lab Sample ID:	1407336-30	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 18:22 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-31	Sampled: 7/17/14 13:07
Lab Sample ID: 1407336-31	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 2.5	Analyzed: 7/25/14 8:50 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<50	50
107-13-1	Acrylonitrile	<5.0	5.0
71-43-2	Benzene	<2.5	2.5
108-86-1	Bromobenzene	<2.5	2.5
74-97-5	Bromochloromethane	<2.5	2.5
75-27-4	Bromodichloromethane	<2.5	2.5
75-25-2	Bromoform	<2.5	2.5
74-83-9	Bromomethane	<12	12
104-51-8	n-Butylbenzene	<2.5	2.5
135-98-8	sec-Butylbenzene	<2.5	2.5
98-06-6	tert-Butylbenzene	<2.5	2.5
75-15-0	Carbon Disulfide	<2.5	2.5
56-23-5	Carbon Tetrachloride	<2.5	2.5
108-90-7	Chlorobenzene	<2.5	2.5
75-00-3	Chloroethane	<12	12
67-66-3	Chloroform	<2.5	2.5
74-87-3	Chloromethane	<12	12
96-12-8	1,2-Dibromo-3-chloropropane	<12	12
124-48-1	Dibromochloromethane	<2.5	2.5
106-93-4	1,2-Dibromoethane	<2.5	2.5
74-95-3	Dibromomethane	<2.5	2.5
110-57-6	trans-1,4-Dichloro-2-butene	<2.5	2.5
95-50-1	1,2-Dichlorobenzene	<2.5	2.5
541-73-1	1,3-Dichlorobenzene	<2.5	2.5
106-46-7	1,4-Dichlorobenzene	<2.5	2.5
75-71-8	Dichlorodifluoromethane	<12	12
75-34-3	1,1-Dichloroethane	13	2.5
107-06-2	1,2-Dichloroethane	<2.5	2.5
75-35-4	1,1-Dichloroethene	<2.5	2.5
156-59-2	cis-1,2-Dichloroethene	33	2.5
156-60-5	trans-1,2-Dichloroethene	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-31	Sampled: 7/17/14 13:07
Lab Sample ID: 1407336-31	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/24/14 22:00 By: DLV
Dilution Factor: 2.5	Analyzed: 7/25/14 8:50 By: LEW
QC Batch: 1407370	Analytical Batch: 4G25006

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.5	2.5
10061-01-5	cis-1,3-Dichloropropene	<2.5	2.5
10061-02-6	trans-1,3-Dichloropropene	<2.5	2.5
100-41-4	Ethylbenzene	<2.5	2.5
60-29-7	Ethyl Ether	<12	12
591-78-6	2-Hexanone	<12	12
74-88-4	Iodomethane	<2.5	2.5
98-82-8	Isopropylbenzene	<2.5	2.5
99-87-6	4-Isopropyltoluene	<12	12
1634-04-4	Methyl tert-Butyl Ether	<12	12
75-09-2	Methylene Chloride	<12	12
78-93-3	2-Butanone (MEK)	<12	12
91-57-6	2-Methylnaphthalene	<12	12
108-10-1	4-Methyl-2-pentanone (MIBK)	<12	12
91-20-3	Naphthalene	<12	12
103-65-1	n-Propylbenzene	<2.5	2.5
100-42-5	Styrene	<2.5	2.5
630-20-6	1,1,1,2-Tetrachloroethane	<2.5	2.5
79-34-5	1,1,2,2-Tetrachloroethane	<2.5	2.5
127-18-4	Tetrachloroethene	<2.5	2.5
109-99-9	Tetrahydrofuran	<12	12
108-88-3	Toluene	<2.5	2.5
87-61-6	1,2,3-Trichlorobenzene	<12	12
120-82-1	1,2,4-Trichlorobenzene	<12	12
71-55-6	1,1,1-Trichloroethane	20	2.5
79-00-5	1,1,2-Trichloroethane	<2.5	2.5
79-01-6	Trichloroethene	260	2.5
75-69-4	Trichlorofluoromethane	<2.5	2.5
96-18-4	1,2,3-Trichloropropane	<2.5	2.5
95-63-6	1,2,4-Trimethylbenzene	<2.5	2.5
108-67-8	1,3,5-Trimethylbenzene	<2.5	2.5

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336	
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services	
Client Sample ID:	MW-31	Sampled:	7/17/14 13:07	
Lab Sample ID:	1407336-31	Sampled By:	J. Jasso	
Matrix:	Water	Received:	7/18/14 17:10	
Unit:	ug/L	Prepared:	7/24/14 22:00	By: DLV
Dilution Factor:	2.5	Analyzed:	7/25/14 8:50	By: LEW
QC Batch:	1407370	Analytical Batch:	4G25006	

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<2.5	2.5
179601-23-1	Xylene, Meta + Para	<5.0	5.0
95-47-6	Xylene, Ortho	<2.5	2.5
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>103</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>99</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>100</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-22	Sampled:	7/17/14 14:15
Lab Sample ID:	1407336-32	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 12:12 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-22	Sampled: 7/17/14 14:15
Lab Sample ID: 1407336-32	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 12:12 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-22	Sampled:	7/17/14 14:15
Lab Sample ID:	1407336-32	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 12:12 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	20	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>97</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-38s	Sampled: 7/17/14 15:24
Lab Sample ID: 1407336-33	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 2	Analyzed: 7/28/14 12:41 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<40	40
107-13-1	Acrylonitrile	<4.0	4.0
71-43-2	Benzene	<2.0	2.0
108-86-1	Bromobenzene	<2.0	2.0
74-97-5	Bromochloromethane	<2.0	2.0
75-27-4	Bromodichloromethane	<2.0	2.0
75-25-2	Bromoform	<2.0	2.0
74-83-9	Bromomethane	<10	10
104-51-8	n-Butylbenzene	<2.0	2.0
135-98-8	sec-Butylbenzene	<2.0	2.0
98-06-6	tert-Butylbenzene	<2.0	2.0
75-15-0	Carbon Disulfide	<2.0	2.0
56-23-5	Carbon Tetrachloride	<2.0	2.0
108-90-7	Chlorobenzene	<2.0	2.0
75-00-3	Chloroethane	<10	10
67-66-3	Chloroform	<2.0	2.0
74-87-3	Chloromethane	<10	10
96-12-8	1,2-Dibromo-3-chloropropane	<10	10
124-48-1	Dibromochloromethane	<2.0	2.0
106-93-4	1,2-Dibromoethane	<2.0	2.0
74-95-3	Dibromomethane	<2.0	2.0
110-57-6	trans-1,4-Dichloro-2-butene	<2.0	2.0
95-50-1	1,2-Dichlorobenzene	<2.0	2.0
541-73-1	1,3-Dichlorobenzene	<2.0	2.0
106-46-7	1,4-Dichlorobenzene	<2.0	2.0
75-71-8	Dichlorodifluoromethane	<10	10
75-34-3	1,1-Dichloroethane	13	2.0
107-06-2	1,2-Dichloroethane	<2.0	2.0
75-35-4	1,1-Dichloroethene	<2.0	2.0
156-59-2	cis-1,2-Dichloroethene	26	2.0
156-60-5	trans-1,2-Dichloroethene	2.5	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-38s	Sampled:	7/17/14 15:24
Lab Sample ID:	1407336-33	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	2	Analyzed:	7/28/14 12:41 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<2.0	2.0
10061-01-5	cis-1,3-Dichloropropene	<2.0	2.0
10061-02-6	trans-1,3-Dichloropropene	<2.0	2.0
100-41-4	Ethylbenzene	<2.0	2.0
60-29-7	Ethyl Ether	<10	10
591-78-6	2-Hexanone	<10	10
74-88-4	Iodomethane	<2.0	2.0
98-82-8	Isopropylbenzene	<2.0	2.0
99-87-6	4-Isopropyltoluene	<10	10
1634-04-4	Methyl tert-Butyl Ether	<10	10
75-09-2	Methylene Chloride	<10	10
78-93-3	2-Butanone (MEK)	<10	10
91-57-6	2-Methylnaphthalene	<10	10
108-10-1	4-Methyl-2-pentanone (MIBK)	<10	10
91-20-3	Naphthalene	<10	10
103-65-1	n-Propylbenzene	<2.0	2.0
100-42-5	Styrene	<2.0	2.0
630-20-6	1,1,1,2-Tetrachloroethane	<2.0	2.0
79-34-5	1,1,2,2-Tetrachloroethane	<2.0	2.0
127-18-4	Tetrachloroethene	<2.0	2.0
109-99-9	Tetrahydrofuran	<10	10
108-88-3	Toluene	<2.0	2.0
87-61-6	1,2,3-Trichlorobenzene	<10	10
120-82-1	1,2,4-Trichlorobenzene	<10	10
71-55-6	1,1,1-Trichloroethane	21	2.0
79-00-5	1,1,2-Trichloroethane	<2.0	2.0
79-01-6	Trichloroethene	240	2.0
75-69-4	Trichlorofluoromethane	<2.0	2.0
96-18-4	1,2,3-Trichloropropane	<2.0	2.0
95-63-6	1,2,4-Trimethylbenzene	<2.0	2.0
108-67-8	1,3,5-Trimethylbenzene	<2.0	2.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-38s	Sampled:	7/17/14 15:24
Lab Sample ID:	1407336-33	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	2	Analyzed:	7/28/14 12:41 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	11	2.0
179601-23-1	Xylene, Meta + Para	<4.0	4.0
95-47-6	Xylene, Ortho	<2.0	2.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-23	Sampled: 7/17/14 16:34
Lab Sample ID: 1407336-34	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 13:09 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-23	Sampled: 7/17/14 16:34
Lab Sample ID: 1407336-34	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 13:09 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-23	Sampled:	7/17/14 16:34
Lab Sample ID:	1407336-34	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 13:09 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	90	1.0
179601-23-1	Xylene, Meta + Para	<2.0	2.0
95-47-6	Xylene, Ortho	<1.0	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>82-110</i>

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-36s	Sampled:	7/18/14 6:54
Lab Sample ID:	1407336-35	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 13:37 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	14	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	120	5.0
156-60-5	trans-1,2-Dichloroethene	15	5.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-36s	Sampled: 7/18/14 6:54
Lab Sample ID: 1407336-35	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 5	Analyzed: 7/28/14 13:37 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	18	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	410	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-36s	Sampled:	7/18/14 6:54
Lab Sample ID:	1407336-35	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 13:37 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	16	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>100</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: Dup-01	Sampled: 7/18/14 0:00
Lab Sample ID: 1407336-36	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/29/14 8:00 By: LEW
Dilution Factor: 10	Analyzed: 7/29/14 19:52 By: LEW
QC Batch: 1407600	Analytical Batch: 4G30007

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	15	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	150	10
156-60-5	trans-1,2-Dichloroethene	<10	10

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: Dup-01	Sampled: 7/18/14 0:00
Lab Sample ID: 1407336-36	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/29/14 8:00 By: LEW
Dilution Factor: 10	Analyzed: 7/29/14 19:52 By: LEW
QC Batch: 1407600	Analytical Batch: 4G30007

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	54	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1100	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	Dup-01	Sampled:	7/18/14 0:00
Lab Sample ID:	1407336-36	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/29/14 8:00 By: LEW
Dilution Factor:	10	Analyzed:	7/29/14 19:52 By: LEW
QC Batch:	1407600	Analytical Batch:	4G30007

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:			
		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	96	85-118
	<i>1,2-Dichloroethane-d4</i>	95	87-122
	<i>Toluene-d8</i>	97	85-113
	<i>4-Bromofluorobenzene</i>	99	82-110

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-21	Sampled: 7/18/14 7:47
Lab Sample ID: 1407336-37	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 10	Analyzed: 7/28/14 14:06 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<200	200
107-13-1	Acrylonitrile	<20	20
71-43-2	Benzene	<10	10
108-86-1	Bromobenzene	<10	10
74-97-5	Bromochloromethane	<10	10
75-27-4	Bromodichloromethane	<10	10
75-25-2	Bromoform	<10	10
74-83-9	Bromomethane	<50	50
104-51-8	n-Butylbenzene	<10	10
135-98-8	sec-Butylbenzene	<10	10
98-06-6	tert-Butylbenzene	<10	10
75-15-0	Carbon Disulfide	<10	10
56-23-5	Carbon Tetrachloride	<10	10
108-90-7	Chlorobenzene	<10	10
75-00-3	Chloroethane	<50	50
67-66-3	Chloroform	<10	10
74-87-3	Chloromethane	<50	50
96-12-8	1,2-Dibromo-3-chloropropane	<50	50
124-48-1	Dibromochloromethane	<10	10
106-93-4	1,2-Dibromoethane	<10	10
74-95-3	Dibromomethane	<10	10
110-57-6	trans-1,4-Dichloro-2-butene	<10	10
95-50-1	1,2-Dichlorobenzene	<10	10
541-73-1	1,3-Dichlorobenzene	<10	10
106-46-7	1,4-Dichlorobenzene	<10	10
75-71-8	Dichlorodifluoromethane	<50	50
75-34-3	1,1-Dichloroethane	17	10
107-06-2	1,2-Dichloroethane	<10	10
75-35-4	1,1-Dichloroethene	<10	10
156-59-2	cis-1,2-Dichloroethene	170	10
156-60-5	trans-1,2-Dichloroethene	<10	10

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-21	Sampled: 7/18/14 7:47
Lab Sample ID: 1407336-37	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 10	Analyzed: 7/28/14 14:06 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<10	10
10061-01-5	cis-1,3-Dichloropropene	<10	10
10061-02-6	trans-1,3-Dichloropropene	<10	10
100-41-4	Ethylbenzene	<10	10
60-29-7	Ethyl Ether	<50	50
591-78-6	2-Hexanone	<50	50
74-88-4	Iodomethane	<10	10
98-82-8	Isopropylbenzene	<10	10
99-87-6	4-Isopropyltoluene	<50	50
1634-04-4	Methyl tert-Butyl Ether	<50	50
75-09-2	Methylene Chloride	<50	50
78-93-3	2-Butanone (MEK)	<50	50
91-57-6	2-Methylnaphthalene	<50	50
108-10-1	4-Methyl-2-pentanone (MIBK)	<50	50
91-20-3	Naphthalene	<50	50
103-65-1	n-Propylbenzene	<10	10
100-42-5	Styrene	<10	10
630-20-6	1,1,1,2-Tetrachloroethane	<10	10
79-34-5	1,1,2,2-Tetrachloroethane	<10	10
127-18-4	Tetrachloroethene	<10	10
109-99-9	Tetrahydrofuran	<50	50
108-88-3	Toluene	<10	10
87-61-6	1,2,3-Trichlorobenzene	<50	50
120-82-1	1,2,4-Trichlorobenzene	<50	50
71-55-6	1,1,1-Trichloroethane	63	10
79-00-5	1,1,2-Trichloroethane	<10	10
79-01-6	Trichloroethene	1300	10
75-69-4	Trichlorofluoromethane	<10	10
96-18-4	1,2,3-Trichloropropane	<10	10
95-63-6	1,2,4-Trimethylbenzene	<10	10
108-67-8	1,3,5-Trimethylbenzene	<10	10

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-21	Sampled:	7/18/14 7:47
Lab Sample ID:	1407336-37	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	10	Analyzed:	7/28/14 14:06 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<10	10
179601-23-1	Xylene, Meta + Para	<20	20
95-47-6	Xylene, Ortho	<10	10
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>98</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-4i	Sampled: 7/18/14 9:11
Lab Sample ID: 1407336-38	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 50	Analyzed: 7/28/14 14:34 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<1000	1000
107-13-1	Acrylonitrile	<100	100
71-43-2	Benzene	<50	50
108-86-1	Bromobenzene	<50	50
74-97-5	Bromochloromethane	<50	50
75-27-4	Bromodichloromethane	<50	50
75-25-2	Bromoform	<50	50
74-83-9	Bromomethane	<250	250
104-51-8	n-Butylbenzene	<50	50
135-98-8	sec-Butylbenzene	<50	50
98-06-6	tert-Butylbenzene	<50	50
75-15-0	Carbon Disulfide	<50	50
56-23-5	Carbon Tetrachloride	<50	50
108-90-7	Chlorobenzene	<50	50
75-00-3	Chloroethane	<250	250
67-66-3	Chloroform	<50	50
74-87-3	Chloromethane	<250	250
96-12-8	1,2-Dibromo-3-chloropropane	<250	250
124-48-1	Dibromochloromethane	<50	50
106-93-4	1,2-Dibromoethane	<50	50
74-95-3	Dibromomethane	<50	50
110-57-6	trans-1,4-Dichloro-2-butene	<50	50
95-50-1	1,2-Dichlorobenzene	<50	50
541-73-1	1,3-Dichlorobenzene	<50	50
106-46-7	1,4-Dichlorobenzene	<50	50
75-71-8	Dichlorodifluoromethane	<250	250
75-34-3	1,1-Dichloroethane	<50	50
107-06-2	1,2-Dichloroethane	<50	50
75-35-4	1,1-Dichloroethene	<50	50
156-59-2	cis-1,2-Dichloroethene	3000	50
156-60-5	trans-1,2-Dichloroethene	91	50

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ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-4i	Sampled: 7/18/14 9:11
Lab Sample ID: 1407336-38	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 50	Analyzed: 7/28/14 14:34 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<50	50
10061-01-5	cis-1,3-Dichloropropene	<50	50
10061-02-6	trans-1,3-Dichloropropene	<50	50
100-41-4	Ethylbenzene	<50	50
60-29-7	Ethyl Ether	<250	250
591-78-6	2-Hexanone	<250	250
74-88-4	Iodomethane	<50	50
98-82-8	Isopropylbenzene	<50	50
99-87-6	4-Isopropyltoluene	<250	250
1634-04-4	Methyl tert-Butyl Ether	<250	250
75-09-2	Methylene Chloride	<250	250
78-93-3	2-Butanone (MEK)	<250	250
91-57-6	2-Methylnaphthalene	<250	250
108-10-1	4-Methyl-2-pentanone (MIBK)	<250	250
91-20-3	Naphthalene	<250	250
103-65-1	n-Propylbenzene	<50	50
100-42-5	Styrene	<50	50
630-20-6	1,1,1,2-Tetrachloroethane	<50	50
79-34-5	1,1,2,2-Tetrachloroethane	<50	50
127-18-4	Tetrachloroethene	<50	50
109-99-9	Tetrahydrofuran	<250	250
108-88-3	Toluene	<50	50
87-61-6	1,2,3-Trichlorobenzene	<250	250
120-82-1	1,2,4-Trichlorobenzene	<250	250
71-55-6	1,1,1-Trichloroethane	<50	50
79-00-5	1,1,2-Trichloroethane	<50	50
79-01-6	Trichloroethene	4100	50
75-69-4	Trichlorofluoromethane	<50	50
96-18-4	1,2,3-Trichloropropane	<50	50
95-63-6	1,2,4-Trimethylbenzene	<50	50
108-67-8	1,3,5-Trimethylbenzene	<50	50

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-4i	Sampled:	7/18/14 9:11
Lab Sample ID:	1407336-38	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	50	Analyzed:	7/28/14 14:34 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	54	50
179601-23-1	Xylene, Meta + Para	<100	100
95-47-6	Xylene, Ortho	<50	50
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>100</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-37s	Sampled: 7/18/14 10:07
Lab Sample ID: 1407336-39	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 5	Analyzed: 7/28/14 15:03 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	<5.0	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	<5.0	5.0
156-59-2	cis-1,2-Dichloroethene	<5.0	5.0
156-60-5	trans-1,2-Dichloroethene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-37s	Sampled: 7/18/14 10:07
Lab Sample ID: 1407336-39	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 5	Analyzed: 7/28/14 15:03 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	<5.0	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	610	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

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ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-37s	Sampled:	7/18/14 10:07
Lab Sample ID:	1407336-39	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 15:03 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-35i	Sampled: 7/18/14 10:49
Lab Sample ID: 1407336-40	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 50	Analyzed: 7/28/14 15:31 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<1000	1000
107-13-1	Acrylonitrile	<100	100
71-43-2	Benzene	<50	50
108-86-1	Bromobenzene	<50	50
74-97-5	Bromochloromethane	<50	50
75-27-4	Bromodichloromethane	<50	50
75-25-2	Bromoform	<50	50
74-83-9	Bromomethane	<250	250
104-51-8	n-Butylbenzene	<50	50
135-98-8	sec-Butylbenzene	<50	50
98-06-6	tert-Butylbenzene	<50	50
75-15-0	Carbon Disulfide	<50	50
56-23-5	Carbon Tetrachloride	<50	50
108-90-7	Chlorobenzene	<50	50
75-00-3	Chloroethane	<250	250
67-66-3	Chloroform	<50	50
74-87-3	Chloromethane	<250	250
96-12-8	1,2-Dibromo-3-chloropropane	<250	250
124-48-1	Dibromochloromethane	<50	50
106-93-4	1,2-Dibromoethane	<50	50
74-95-3	Dibromomethane	<50	50
110-57-6	trans-1,4-Dichloro-2-butene	<50	50
95-50-1	1,2-Dichlorobenzene	<50	50
541-73-1	1,3-Dichlorobenzene	<50	50
106-46-7	1,4-Dichlorobenzene	<50	50
75-71-8	Dichlorodifluoromethane	<250	250
75-34-3	1,1-Dichloroethane	<50	50
107-06-2	1,2-Dichloroethane	<50	50
75-35-4	1,1-Dichloroethene	130	50
156-59-2	cis-1,2-Dichloroethene	<50	50
156-60-5	trans-1,2-Dichloroethene	<50	50

Continued on next page

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-35i	Sampled: 7/18/14 10:49
Lab Sample ID: 1407336-40	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 50	Analyzed: 7/28/14 15:31 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<50	50
10061-01-5	cis-1,3-Dichloropropene	<50	50
10061-02-6	trans-1,3-Dichloropropene	<50	50
100-41-4	Ethylbenzene	<50	50
60-29-7	Ethyl Ether	<250	250
591-78-6	2-Hexanone	<250	250
74-88-4	Iodomethane	<50	50
98-82-8	Isopropylbenzene	<50	50
99-87-6	4-Isopropyltoluene	<250	250
1634-04-4	Methyl tert-Butyl Ether	<250	250
75-09-2	Methylene Chloride	<250	250
78-93-3	2-Butanone (MEK)	<250	250
91-57-6	2-Methylnaphthalene	<250	250
108-10-1	4-Methyl-2-pentanone (MIBK)	<250	250
91-20-3	Naphthalene	<250	250
103-65-1	n-Propylbenzene	<50	50
100-42-5	Styrene	<50	50
630-20-6	1,1,1,2-Tetrachloroethane	<50	50
79-34-5	1,1,2,2-Tetrachloroethane	<50	50
127-18-4	Tetrachloroethene	<50	50
109-99-9	Tetrahydrofuran	<250	250
108-88-3	Toluene	<50	50
87-61-6	1,2,3-Trichlorobenzene	<250	250
120-82-1	1,2,4-Trichlorobenzene	<250	250
71-55-6	1,1,1-Trichloroethane	5300	50
79-00-5	1,1,2-Trichloroethane	<50	50
79-01-6	Trichloroethene	4600	50
75-69-4	Trichlorofluoromethane	<50	50
96-18-4	1,2,3-Trichloropropane	<50	50
95-63-6	1,2,4-Trimethylbenzene	<50	50
108-67-8	1,3,5-Trimethylbenzene	<50	50

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-35i	Sampled:	7/18/14 10:49
Lab Sample ID:	1407336-40	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	50	Analyzed:	7/28/14 15:31 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<50	50
179601-23-1	Xylene, Meta + Para	<100	100
95-47-6	Xylene, Ortho	<50	50
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: MW-39s	Sampled: 7/18/14 11:33
Lab Sample ID: 1407336-41	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 5	Analyzed: 7/28/14 16:00 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<100	100
107-13-1	Acrylonitrile	<10	10
71-43-2	Benzene	<5.0	5.0
108-86-1	Bromobenzene	<5.0	5.0
74-97-5	Bromochloromethane	<5.0	5.0
75-27-4	Bromodichloromethane	<5.0	5.0
75-25-2	Bromoform	<5.0	5.0
74-83-9	Bromomethane	<25	25
104-51-8	n-Butylbenzene	<5.0	5.0
135-98-8	sec-Butylbenzene	<5.0	5.0
98-06-6	tert-Butylbenzene	<5.0	5.0
75-15-0	Carbon Disulfide	<5.0	5.0
56-23-5	Carbon Tetrachloride	<5.0	5.0
108-90-7	Chlorobenzene	<5.0	5.0
75-00-3	Chloroethane	<25	25
67-66-3	Chloroform	<5.0	5.0
74-87-3	Chloromethane	<25	25
96-12-8	1,2-Dibromo-3-chloropropane	<25	25
124-48-1	Dibromochloromethane	<5.0	5.0
106-93-4	1,2-Dibromoethane	<5.0	5.0
74-95-3	Dibromomethane	<5.0	5.0
110-57-6	trans-1,4-Dichloro-2-butene	<5.0	5.0
95-50-1	1,2-Dichlorobenzene	<5.0	5.0
541-73-1	1,3-Dichlorobenzene	<5.0	5.0
106-46-7	1,4-Dichlorobenzene	<5.0	5.0
75-71-8	Dichlorodifluoromethane	<25	25
75-34-3	1,1-Dichloroethane	68	5.0
107-06-2	1,2-Dichloroethane	<5.0	5.0
75-35-4	1,1-Dichloroethene	17	5.0
156-59-2	cis-1,2-Dichloroethene	64	5.0
156-60-5	trans-1,2-Dichloroethene	7.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-39s	Sampled:	7/18/14 11:33
Lab Sample ID:	1407336-41	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 16:00 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<5.0	5.0
10061-01-5	cis-1,3-Dichloropropene	<5.0	5.0
10061-02-6	trans-1,3-Dichloropropene	<5.0	5.0
100-41-4	Ethylbenzene	<5.0	5.0
60-29-7	Ethyl Ether	<25	25
591-78-6	2-Hexanone	<25	25
74-88-4	Iodomethane	<5.0	5.0
98-82-8	Isopropylbenzene	<5.0	5.0
99-87-6	4-Isopropyltoluene	<25	25
1634-04-4	Methyl tert-Butyl Ether	<25	25
75-09-2	Methylene Chloride	<25	25
78-93-3	2-Butanone (MEK)	<25	25
91-57-6	2-Methylnaphthalene	<25	25
108-10-1	4-Methyl-2-pentanone (MIBK)	<25	25
91-20-3	Naphthalene	<25	25
103-65-1	n-Propylbenzene	<5.0	5.0
100-42-5	Styrene	<5.0	5.0
630-20-6	1,1,1,2-Tetrachloroethane	<5.0	5.0
79-34-5	1,1,2,2-Tetrachloroethane	<5.0	5.0
127-18-4	Tetrachloroethene	<5.0	5.0
109-99-9	Tetrahydrofuran	<25	25
108-88-3	Toluene	<5.0	5.0
87-61-6	1,2,3-Trichlorobenzene	<25	25
120-82-1	1,2,4-Trichlorobenzene	<25	25
71-55-6	1,1,1-Trichloroethane	90	5.0
79-00-5	1,1,2-Trichloroethane	<5.0	5.0
79-01-6	Trichloroethene	840	5.0
75-69-4	Trichlorofluoromethane	<5.0	5.0
96-18-4	1,2,3-Trichloropropane	<5.0	5.0
95-63-6	1,2,4-Trimethylbenzene	<5.0	5.0
108-67-8	1,3,5-Trimethylbenzene	<5.0	5.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	MW-39s	Sampled:	7/18/14 11:33
Lab Sample ID:	1407336-41	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	5	Analyzed:	7/28/14 16:00 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<5.0	5.0
179601-23-1	Xylene, Meta + Para	<10	10
95-47-6	Xylene, Ortho	<5.0	5.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>102</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>102</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

ANALYTICAL REPORT

Client: TRC Companies. - Ann Arbor Office	Work Order: 1407336
Project: Tecumseh Products Groundwater	Description: Laboratory Services
Client Sample ID: EB-01	Sampled: 7/18/14 11:40
Lab Sample ID: 1407336-42	Sampled By: J. Jasso
Matrix: Water	Received: 7/18/14 17:10
Unit: ug/L	Prepared: 7/28/14 7:00 By: DLV
Dilution Factor: 1	Analyzed: 7/28/14 9:50 By: DLV
QC Batch: 1407532	Analytical Batch: 4G29008

Volatile Organic Compounds by EPA Method 8260B

CAS Number	Analyte	Analytical Result	RL
67-64-1	Acetone	<20	20
107-13-1	Acrylonitrile	<2.0	2.0
71-43-2	Benzene	<1.0	1.0
108-86-1	Bromobenzene	<1.0	1.0
74-97-5	Bromochloromethane	<1.0	1.0
75-27-4	Bromodichloromethane	<1.0	1.0
75-25-2	Bromoform	<1.0	1.0
74-83-9	Bromomethane	<5.0	5.0
104-51-8	n-Butylbenzene	<1.0	1.0
135-98-8	sec-Butylbenzene	<1.0	1.0
98-06-6	tert-Butylbenzene	<1.0	1.0
75-15-0	Carbon Disulfide	<1.0	1.0
56-23-5	Carbon Tetrachloride	<1.0	1.0
108-90-7	Chlorobenzene	<1.0	1.0
75-00-3	Chloroethane	<5.0	5.0
67-66-3	Chloroform	<1.0	1.0
74-87-3	Chloromethane	<5.0	5.0
96-12-8	1,2-Dibromo-3-chloropropane	<5.0	5.0
124-48-1	Dibromochloromethane	<1.0	1.0
106-93-4	1,2-Dibromoethane	<1.0	1.0
74-95-3	Dibromomethane	<1.0	1.0
110-57-6	trans-1,4-Dichloro-2-butene	<1.0	1.0
95-50-1	1,2-Dichlorobenzene	<1.0	1.0
541-73-1	1,3-Dichlorobenzene	<1.0	1.0
106-46-7	1,4-Dichlorobenzene	<1.0	1.0
75-71-8	Dichlorodifluoromethane	<5.0	5.0
75-34-3	1,1-Dichloroethane	<1.0	1.0
107-06-2	1,2-Dichloroethane	<1.0	1.0
75-35-4	1,1-Dichloroethene	<1.0	1.0
156-59-2	cis-1,2-Dichloroethene	<1.0	1.0
156-60-5	trans-1,2-Dichloroethene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	EB-01	Sampled:	7/18/14 11:40
Lab Sample ID:	1407336-42	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 9:50 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
78-87-5	1,2-Dichloropropane	<1.0	1.0
10061-01-5	cis-1,3-Dichloropropene	<1.0	1.0
10061-02-6	trans-1,3-Dichloropropene	<1.0	1.0
100-41-4	Ethylbenzene	<1.0	1.0
60-29-7	Ethyl Ether	<5.0	5.0
591-78-6	2-Hexanone	<5.0	5.0
74-88-4	Iodomethane	<1.0	1.0
98-82-8	Isopropylbenzene	<1.0	1.0
99-87-6	4-Isopropyltoluene	<5.0	5.0
1634-04-4	Methyl tert-Butyl Ether	<5.0	5.0
75-09-2	Methylene Chloride	<5.0	5.0
78-93-3	2-Butanone (MEK)	<5.0	5.0
91-57-6	2-Methylnaphthalene	<5.0	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	<5.0	5.0
91-20-3	Naphthalene	<5.0	5.0
103-65-1	n-Propylbenzene	<1.0	1.0
100-42-5	Styrene	<1.0	1.0
630-20-6	1,1,1,2-Tetrachloroethane	<1.0	1.0
79-34-5	1,1,2,2-Tetrachloroethane	<1.0	1.0
127-18-4	Tetrachloroethene	<1.0	1.0
109-99-9	Tetrahydrofuran	<5.0	5.0
108-88-3	Toluene	<1.0	1.0
87-61-6	1,2,3-Trichlorobenzene	<5.0	5.0
120-82-1	1,2,4-Trichlorobenzene	<5.0	5.0
71-55-6	1,1,1-Trichloroethane	<1.0	1.0
79-00-5	1,1,2-Trichloroethane	<1.0	1.0
79-01-6	Trichloroethene	<1.0	1.0
75-69-4	Trichlorofluoromethane	<1.0	1.0
96-18-4	1,2,3-Trichloropropane	<1.0	1.0
95-63-6	1,2,4-Trimethylbenzene	<1.0	1.0
108-67-8	1,3,5-Trimethylbenzene	<1.0	1.0

Continued on next page

ANALYTICAL REPORT

Client:	TRC Companies. - Ann Arbor Office	Work Order:	1407336
Project:	Tecumseh Products Groundwater	Description:	Laboratory Services
Client Sample ID:	EB-01	Sampled:	7/18/14 11:40
Lab Sample ID:	1407336-42	Sampled By:	J. Jasso
Matrix:	Water	Received:	7/18/14 17:10
Unit:	ug/L	Prepared:	7/28/14 7:00 By: DLV
Dilution Factor:	1	Analyzed:	7/28/14 9:50 By: DLV
QC Batch:	1407532	Analytical Batch:	4G29008

Volatile Organic Compounds by EPA Method 8260B (Continued)

CAS Number	Analyte	Analytical Result	RL
75-01-4	Vinyl Chloride	<1.0	1.0
179601-23-1	Xylene, Meta + Para	3.3	2.0
95-47-6	Xylene, Ortho	1.7	1.0
Surrogates:		% Recovery	Control Limits
	<i>Dibromofluoromethane</i>	<i>99</i>	<i>85-118</i>
	<i>1,2-Dichloroethane-d4</i>	<i>101</i>	<i>87-122</i>
	<i>Toluene-d8</i>	<i>98</i>	<i>85-113</i>
	<i>4-Bromofluorobenzene</i>	<i>99</i>	<i>82-110</i>

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407369 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Unit: ug/L

 Analyzed: 07/24/2014 By: LEW
 Analytical Batch: 4G25005

Acetone	<20	--	20
Acrylonitrile	<2.0		2.0
Benzene	<1.0		1.0
Bromobenzene	<1.0		1.0
Bromochloromethane	<1.0		1.0
Bromodichloromethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<5.0	--	5.0
n-Butylbenzene	<1.0		1.0
sec-Butylbenzene	<1.0		1.0
tert-Butylbenzene	<1.0		1.0
Carbon Disulfide	<1.0		1.0
Carbon Tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<5.0		5.0
Chloroform	<1.0		1.0
Chloromethane	<5.0		5.0
1,2-Dibromo-3-chloropropane	<5.0		5.0
Dibromochloromethane	<1.0		1.0
1,2-Dibromoethane	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<1.0		1.0
1,2-Dichlorobenzene	<1.0		1.0
1,3-Dichlorobenzene	<1.0		1.0
1,4-Dichlorobenzene	<1.0		1.0
Dichlorodifluoromethane	<5.0		5.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl Ether	<5.0		5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407369 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 07/24/2014 By: LEW
 Analytical Batch: 4G25005

Unit: ug/L

2-Hexanone	<5.0	5.0
Iodomethane	<1.0	1.0
Isopropylbenzene	<1.0	1.0
4-Isopropyltoluene	<5.0	5.0
Methyl tert-Butyl Ether	<5.0	5.0
Methylene Chloride	<5.0	5.0
2-Butanone (MEK)	<5.0	5.0
2-Methylnaphthalene	<5.0	5.0
4-Methyl-2-pentanone (MIBK)	<5.0	5.0
Naphthalene	<5.0	5.0
n-Propylbenzene	<1.0	1.0
Styrene	<1.0	1.0
1,1,1,2-Tetrachloroethane	<1.0	1.0
1,1,2,2-Tetrachloroethane	<1.0	1.0
Tetrachloroethene	<1.0	1.0
Tetrahydrofuran	<5.0	5.0
Toluene	<1.0	1.0
1,2,3-Trichlorobenzene	<5.0	5.0
1,2,4-Trichlorobenzene	<5.0	5.0
1,1,1-Trichloroethane	<1.0	1.0
1,1,2-Trichloroethane	<1.0	1.0
Trichloroethene	<1.0	1.0
Trichlorofluoromethane	<1.0	1.0
1,2,3-Trichloropropane	<1.0	1.0
1,2,4-Trimethylbenzene	<1.0	1.0
1,3,5-Trimethylbenzene	<1.0	1.0
Vinyl Chloride	<1.0	1.0
Xylene, Meta + Para	<2.0	2.0
Xylene, Ortho	<1.0	1.0

Surrogates:

<i>Dibromofluoromethane</i>	100	85-118
<i>1,2-Dichloroethane-d4</i>	101	87-122
<i>Toluene-d8</i>	98	85-113

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407369 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 07/24/2014 By: LEW
Analytical Batch: 4G25005

Surrogates (Continued):

4-Bromofluorobenzene

100 82-110

Laboratory Control Sample

Unit: ug/L

Analyzed: 07/24/2014 By: LEW
Analytical Batch: 4G25005

Benzene	40.0	40.6	101	84-119	--	1.0
Chlorobenzene	40.0	39.8	99	84-118	--	1.0
1,1-Dichloroethene	40.0	40.3	101	77-123	--	1.0
Toluene	40.0	40.4	101	85-118	--	1.0
Trichloroethene	40.0	39.2	98	82-119	--	1.0

Surrogates:

Dibromofluoromethane

100 85-118

1,2-Dichloroethane-d4

100 87-122

Toluene-d8

100 85-113

4-Bromofluorobenzene

101 82-110

QC Batch: 1407370 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Unit: ug/L

Analyzed: 07/25/2014 By: LEW
Analytical Batch: 4G25006

Acetone	<20				--	20
Acrylonitrile	<2.0					2.0
Benzene	<1.0					1.0
Bromobenzene	<1.0					1.0
Bromochloromethane	<1.0					1.0
Bromodichloromethane	<1.0					1.0
Bromoform	<1.0					1.0
Bromomethane	<5.0				--	5.0
n-Butylbenzene	<1.0					1.0
sec-Butylbenzene	<1.0					1.0
tert-Butylbenzene	<1.0					1.0
Carbon Disulfide	<1.0				--	1.0
Carbon Tetrachloride	<1.0					1.0
Chlorobenzene	<1.0					1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407370 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 07/25/2014 By: LEW
Analytical Batch: 4G25006

Unit: ug/L

Chloroethane	<5.0		5.0
Chloroform	<1.0		1.0
Chloromethane	<5.0		5.0
1,2-Dibromo-3-chloropropane	<5.0		5.0
Dibromochloromethane	<1.0		1.0
1,2-Dibromoethane	<1.0		1.0
Dibromomethane	<1.0		1.0
trans-1,4-Dichloro-2-butene	<1.0		1.0
1,2-Dichlorobenzene	<1.0		1.0
1,3-Dichlorobenzene	<1.0	--	1.0
1,4-Dichlorobenzene	<1.0	--	1.0
Dichlorodifluoromethane	<5.0		5.0
1,1-Dichloroethane	<1.0		1.0
1,2-Dichloroethane	<1.0		1.0
1,1-Dichloroethene	<1.0		1.0
cis-1,2-Dichloroethene	<1.0		1.0
trans-1,2-Dichloroethene	<1.0		1.0
1,2-Dichloropropane	<1.0		1.0
cis-1,3-Dichloropropene	<1.0		1.0
trans-1,3-Dichloropropene	<1.0		1.0
Ethylbenzene	<1.0		1.0
Ethyl Ether	<5.0		5.0
2-Hexanone	<5.0		5.0
Iodomethane	<1.0		1.0
Isopropylbenzene	<1.0		1.0
4-Isopropyltoluene	<5.0		5.0
Methyl tert-Butyl Ether	<5.0		5.0
Methylene Chloride	<5.0	--	5.0
2-Butanone (MEK)	<5.0		5.0
2-Methylnaphthalene	<5.0	--	5.0
4-Methyl-2-pentanone (MIBK)	<5.0		5.0
Naphthalene	<5.0	--	5.0
n-Propylbenzene	<1.0		1.0
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407370 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 07/25/2014 By: LEW
Analytical Batch: 4G25006

Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0					1.0
1,2,3-Trichlorobenzene			<5.0			--		5.0
1,2,4-Trichlorobenzene			<5.0					5.0
1,1,1-Trichloroethane			<1.0					1.0
1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0					1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>				98	85-118			
<i>1,2-Dichloroethane-d4</i>				101	87-122			
<i>Toluene-d8</i>				99	85-113			
<i>4-Bromofluorobenzene</i>				101	82-110			

Laboratory Control Sample

Unit: ug/L

Analyzed: 07/24/2014 By: LEW
Analytical Batch: 4G25006

Benzene	40.0	40.5		101	84-119	--		1.0
Chlorobenzene	40.0	39.7		99	84-118	--		1.0
1,1-Dichloroethene	40.0	40.0		100	77-123	--		1.0
Toluene	40.0	40.6		101	85-118	--		1.0
Trichloroethene	40.0	42.1		105	82-119	--		1.0

Surrogates:

<i>Dibromofluoromethane</i>				101	85-118			
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QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407370 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Laboratory Control Sample (Continued)

Analyzed: 07/24/2014 By: LEW
 Analytical Batch: 4G25006

Unit: ug/L

Surrogates (Continued):

<i>1,2-Dichloroethane-d4</i>	101	87-122
<i>Toluene-d8</i>	101	85-113
<i>4-Bromofluorobenzene</i>	101	82-110

Matrix Spike 1407336-31 MW-31

Analyzed: 07/25/2014 By: LEW
 Analytical Batch: 4G25006

Unit: ug/L

Benzene	<2.5	100	110	110	80-129	--	2.5
Chlorobenzene	<2.5	100	106	106	80-121	--	2.5
1,1-Dichloroethene	<2.5	100	110	110	74-134	--	2.5
Toluene	<2.5	100	110	110	79-129	--	2.5
Trichloroethene	259	100	366	107	75-127	--	2.5

Surrogates:

<i>Dibromofluoromethane</i>	101	85-118
<i>1,2-Dichloroethane-d4</i>	102	87-122
<i>Toluene-d8</i>	101	85-113
<i>4-Bromofluorobenzene</i>	102	82-110

Matrix Spike Duplicate 1407336-31 MW-31

Analyzed: 07/25/2014 By: LEW
 Analytical Batch: 4G25006

Unit: ug/L

Benzene	<2.5	100	108	108	80-129	2	9	2.5
Chlorobenzene	<2.5	100	105	105	80-121	1	8	2.5
1,1-Dichloroethene	<2.5	100	106	106	74-134	3	11	2.5
Toluene	<2.5	100	107	107	79-129	3	9	2.5
Trichloroethene	259	100	357	98	75-127	3	10	2.5

Surrogates:

<i>Dibromofluoromethane</i>	101	85-118
<i>1,2-Dichloroethane-d4</i>	101	87-122
<i>Toluene-d8</i>	100	85-113
<i>4-Bromofluorobenzene</i>	101	82-110

Continued on next page

QUALITY CONTROL REPORT
Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407532 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Unit: ug/L

 Analyzed: 07/28/2014 By: DLV
 Analytical Batch: 4G29008

Acetone			<20			--		20
Acrylonitrile			<2.0					2.0
Benzene			<1.0					1.0
Bromobenzene			<1.0					1.0
Bromochloromethane			<1.0					1.0
Bromodichloromethane			<1.0					1.0
Bromoform			<1.0					1.0
Bromomethane			<5.0			--		5.0
n-Butylbenzene			<1.0					1.0
sec-Butylbenzene			<1.0					1.0
tert-Butylbenzene			<1.0					1.0
Carbon Disulfide			<1.0			--		1.0
Carbon Tetrachloride			<1.0					1.0
Chlorobenzene			<1.0					1.0
Chloroethane			<5.0					5.0
Chloroform			<1.0					1.0
Chloromethane			<5.0					5.0
1,2-Dibromo-3-chloropropane			<5.0					5.0
Dibromochloromethane			<1.0					1.0
1,2-Dibromoethane			<1.0					1.0
Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0			--		1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0					1.0
Ethyl Ether			<5.0					5.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407532 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 07/28/2014 By: DLV
Analytical Batch: 4G29008

Unit: ug/L

2-Hexanone	<5.0		5.0
Iodomethane	<1.0		1.0
Isopropylbenzene	<1.0		1.0
4-Isopropyltoluene	<5.0		5.0
Methyl tert-Butyl Ether	<5.0		5.0
Methylene Chloride	<5.0		5.0
2-Butanone (MEK)	<5.0		5.0
2-Methylnaphthalene	<5.0	--	5.0
4-Methyl-2-pentanone (MIBK)	<5.0	--	5.0
Naphthalene	<5.0		5.0
n-Propylbenzene	<1.0		1.0
Styrene	<1.0		1.0
1,1,1,2-Tetrachloroethane	<1.0		1.0
1,1,2,2-Tetrachloroethane	<1.0		1.0
Tetrachloroethene	<1.0		1.0
Tetrahydrofuran	<5.0		5.0
Toluene	<1.0		1.0
1,2,3-Trichlorobenzene	<5.0		5.0
1,2,4-Trichlorobenzene	<5.0		5.0
1,1,1-Trichloroethane	<1.0		1.0
1,1,2-Trichloroethane	<1.0		1.0
Trichloroethene	<1.0		1.0
Trichlorofluoromethane	<1.0		1.0
1,2,3-Trichloropropane	<1.0		1.0
1,2,4-Trimethylbenzene	<1.0		1.0
1,3,5-Trimethylbenzene	<1.0		1.0
Vinyl Chloride	<1.0		1.0
Xylene, Meta + Para	<2.0		2.0
Xylene, Ortho	<1.0		1.0

Surrogates:

<i>Dibromofluoromethane</i>	99	85-118
<i>1,2-Dichloroethane-d4</i>	100	87-122
<i>Toluene-d8</i>	97	85-113

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
---------	--------------	------------	--------	--------------	----------------	-----	------------	----

QC Batch: 1407532 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Unit: ug/L

Analyzed: 07/28/2014 By: DLV
Analytical Batch: 4G29008

Surrogates (Continued):

4-Bromofluorobenzene

99 82-110

Laboratory Control Sample

Unit: ug/L

Analyzed: 07/28/2014 By: DLV
Analytical Batch: 4G29008

Benzene	40.0	42.2	105	84-119	--	1.0
Chlorobenzene	40.0	41.8	104	84-118	--	1.0
1,1-Dichloroethene	40.0	41.9	105	77-123	--	1.0
Toluene	40.0	42.4	106	85-118	--	1.0
Trichloroethene	40.0	41.5	104	82-119	--	1.0

Surrogates:

Dibromofluoromethane

98 85-118

1,2-Dichloroethane-d4

96 87-122

Toluene-d8

101 85-113

4-Bromofluorobenzene

101 82-110

Matrix Spike 1407336-33 MW-38s

Unit: ug/L

Analyzed: 07/28/2014 By: DLV
Analytical Batch: 4G29008

Benzene	<2.0	80.0	85.7	107	80-129	--	2.0
Chlorobenzene	<2.0	80.0	84.3	105	80-121	--	2.0
1,1-Dichloroethene	<2.0	80.0	83.8	105	74-134	--	2.0
Toluene	<2.0	80.0	86.3	108	79-129	--	2.0
Trichloroethene	245	80.0	308	79	75-127	--	2.0

Surrogates:

Dibromofluoromethane

101 85-118

1,2-Dichloroethane-d4

99 87-122

Toluene-d8

101 85-113

4-Bromofluorobenzene

98 82-110

Matrix Spike Duplicate 1407336-33 MW-38s

Unit: ug/L

Analyzed: 07/28/2014 By: DLV
Analytical Batch: 4G29008

Benzene	<2.0	80.0	84.6	106	80-129	1	9	2.0
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Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
---------	--------------	------------	--------	--------------	----------------	-----	------------	----

QC Batch: 1407532 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Matrix Spike Duplicate (Continued) 1407336-33 MW-38s

Analyzed: 07/28/2014 By: DLV
Analytical Batch: 4G29008

Unit: ug/L

Chlorobenzene	<2.0	80.0	82.7	103	80-121	2	8	2.0
1,1-Dichloroethene	<2.0	80.0	84.8	106	74-134	1	11	2.0
Toluene	<2.0	80.0	84.3	105	79-129	2	9	2.0
Trichloroethene	245	80.0	306	76	75-127	0.6	10	2.0

Surrogates:

<i>Dibromofluoromethane</i>	101	85-118
<i>1,2-Dichloroethane-d4</i>	99	87-122
<i>Toluene-d8</i>	100	85-113
<i>4-Bromofluorobenzene</i>	101	82-110

QC Batch: 1407600 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank

Analyzed: 07/29/2014 By: LEW
Analytical Batch: 4G30007

Unit: ug/L

Acetone	<20	--	20
Acrylonitrile	<2.0		2.0
Benzene	<1.0		1.0
Bromobenzene	<1.0		1.0
Bromochloromethane	<1.0		1.0
Bromodichloromethane	<1.0		1.0
Bromoform	<1.0		1.0
Bromomethane	<5.0	--	5.0
n-Butylbenzene	3.9	--	1.0
sec-Butylbenzene	<1.0	--	1.0
tert-Butylbenzene	<1.0		1.0
Carbon Disulfide	<1.0	--	1.0
Carbon Tetrachloride	<1.0		1.0
Chlorobenzene	<1.0		1.0
Chloroethane	<5.0		5.0
Chloroform	<1.0		1.0
Chloromethane	<5.0		5.0
1,2-Dibromo-3-chloropropane	<5.0		5.0
Dibromochloromethane	<1.0		1.0
1,2-Dibromoethane	<1.0		1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
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QC Batch: 1407600 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 07/29/2014 By: LEW
 Analytical Batch: 4G30007

Unit: ug/L

Dibromomethane			<1.0					1.0
trans-1,4-Dichloro-2-butene			<1.0					1.0
1,2-Dichlorobenzene			<1.0					1.0
1,3-Dichlorobenzene			<1.0			--		1.0
1,4-Dichlorobenzene			<1.0			--		1.0
Dichlorodifluoromethane			<5.0					5.0
1,1-Dichloroethane			<1.0					1.0
1,2-Dichloroethane			<1.0					1.0
1,1-Dichloroethene			<1.0					1.0
cis-1,2-Dichloroethene			<1.0					1.0
trans-1,2-Dichloroethene			<1.0					1.0
1,2-Dichloropropane			<1.0					1.0
cis-1,3-Dichloropropene			<1.0					1.0
trans-1,3-Dichloropropene			<1.0					1.0
Ethylbenzene			<1.0					1.0
Ethyl Ether			<5.0					5.0
2-Hexanone			<5.0					5.0
Iodomethane			6.6			--		1.0
Isopropylbenzene			<1.0					1.0
4-Isopropyltoluene			<5.0			--		5.0
Methyl tert-Butyl Ether			<5.0					5.0
Methylene Chloride			<5.0					5.0
2-Butanone (MEK)			<5.0			--		5.0
2-Methylnaphthalene			<5.0			--		5.0
4-Methyl-2-pentanone (MIBK)			<5.0					5.0
Naphthalene			<5.0			--		5.0
n-Propylbenzene			<1.0					1.0
Styrene			<1.0					1.0
1,1,1,2-Tetrachloroethane			<1.0					1.0
1,1,2,2-Tetrachloroethane			<1.0					1.0
Tetrachloroethene			<1.0					1.0
Tetrahydrofuran			<5.0					5.0
Toluene			<1.0					1.0
1,2,3-Trichlorobenzene			<5.0			--		5.0
1,2,4-Trichlorobenzene			5.0			--		5.0
1,1,1-Trichloroethane			<1.0					1.0

Continued on next page

QUALITY CONTROL REPORT

Volatile Organic Compounds by EPA Method 8260B (Continued)

Analyte	Sample Conc.	Spike Qty.	Result	Spike % Rec.	Control Limits	RPD	RPD Limits	RL
---------	--------------	------------	--------	--------------	----------------	-----	------------	----

QC Batch: 1407600 (Continued) 5030B Aqueous Purge & Trap/USEPA-8260B

Method Blank (Continued)

Analyzed: 07/29/2014 By: LEW
 Analytical Batch: 4G30007

Unit: ug/L

1,1,2-Trichloroethane			<1.0					1.0
Trichloroethene			<1.0					1.0
Trichlorofluoromethane			<1.0					1.0
1,2,3-Trichloropropane			<1.0					1.0
1,2,4-Trimethylbenzene			<1.0			--		1.0
1,3,5-Trimethylbenzene			<1.0					1.0
Vinyl Chloride			<1.0					1.0
Xylene, Meta + Para			<2.0					2.0
Xylene, Ortho			<1.0					1.0

Surrogates:

<i>Dibromofluoromethane</i>				97	85-118			
<i>1,2-Dichloroethane-d4</i>				96	87-122			
<i>Toluene-d8</i>				98	85-113			
<i>4-Bromofluorobenzene</i>				99	82-110			

Laboratory Control Sample

Analyzed: 07/29/2014 By: LEW
 Analytical Batch: 4G30007

Unit: ug/L

Benzene	40.0	39.5		99	84-119	--		1.0
Chlorobenzene	40.0	39.5		99	84-118	--		1.0
1,1-Dichloroethene	40.0	37.8		95	77-123	--		1.0
Toluene	40.0	39.2		98	85-118	--		1.0
Trichloroethene	40.0	38.7		97	82-119	--		1.0

Surrogates:

<i>Dibromofluoromethane</i>				98	85-118			
<i>1,2-Dichloroethane-d4</i>				95	87-122			
<i>Toluene-d8</i>				99	85-113			
<i>4-Bromofluorobenzene</i>				99	82-110			



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512

Phone (616) 975-4500 Fax (616) 942-7463

www.trimatrixlabs.com

Chain of Custody Record

COC No.

148004

Analyses Requested

Pg. 1 of 2

148004

1 of 2

PRESERVATIVES

- A NONE pH-7
- B HNO₃ pH-2
- C H₂SO₄ pH-2
- D 1+1 HCl pH-2
- E NaOH pH-12
- F ZnAc₂/NaOH pH-9
- G MeOH
- H Other (note below)

Container Type (corresponds to Container Packing List)	Number of Containers Submitted	Total	Sample Comments
VOC E260			

For Lab Use Only

Cart: 3034
VOC Pack/Tray: 423 417-11
Receipt Log No.: 5-15
Project Chemist: 1407331e

Client Name: TRC
Address: 1540 Eisenhower Place
City/State/Zip: Ann Arbor MI 48106
Phone/Fax: 734-971-2880 734-971-9800
Email:

Project Name: TPIC
Client Project No./P.O. No.: 064304000100
Invoice To: Client Other (comments)
Contact/Report to: Stacy Metz

Schedule	Main Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Total	Sample Comments
03		01	TRIS Blank #1	35777	7/14/14	0841	f	1	1	
		02	NS-18s		7/14/14	0841	+bw+		2	
		03	NS-18I		7/14/14	0943	+bw+		2	
		04	NS-18D		7/14/14	1127	+bw+		2	
		05	NS-19s		7/14/14	1225	f		2	
		06	NS-19I		7/14/14	1352	f		2	
		07	NS-19D		7/14/14	1540	f		2	
		08	NS-20s		7/15/14	0844	f		2	
		09	NS-20I		7/15/14	0946	f		2	
		10	NS-20D		7/15/14	1013	f		2	

Sampled By (print): SAUER JASJ
Sample's Signature: *JASJ*
Tracking No.:
How Shipped? Hand Carried

Company: TRC

1. Requested by: *JASJ* Date: 7/16/14 Time: 1800

2. Received by: *Stacy Metz* Date: 7/16/14 Time: 1800

3. Delivered by: *Stacy Metz* Date: 7/18/14 Time: 1710

WHITE COPY - REPORT

YELLOW COPY - LABORATORY

PINK COPY - FIELD



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512

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Chain of Custody Record

COC No.

148228

Analyses Requested

Pg. 2 of 2

For Lab Use Only

Cart

VQA Pack/Try

Receipt Log No.

Project Chemist

Work Order No.

1407336

Client Name

TRC
1540 Eisenhower Place
Ann Arbor MI 48106
Phone/Fax 7349717080 7349719000

Project Name

P.P.C

Client Project No./P.O. No.

004304 0001.0000

Invoice To

Client

Contact/Report To

Stacy Metz

Schedule
Matrix Code
Sample Number

Field Sample ID

Order ID Sample Date Sample Time

Matrix

Number of Containers Submitted

Sample Comments

Container Type (corresponds to Container Packing List)

PRESERVATIVES

- A NONE pH-7
- B HNO₃ pH<2
- C H₂SO₄ pH<2
- D 1+1 HCl pH<2
- E NaOH pH>12
- F ZnAc/NaOH pH>9
- G MeOH
- H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Order ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Sample Comments
01		11	MW-325	2577	7/15/14	1133	Low	2	
		12	MW-32ED		7/15/14	1396	Low	2	
		13	MW-39D		7/15/14	1510	Low	2	
		14	MW-35D		7/16/14	0651	Low	2	
		15	MW-8D	2590	7/16/14	0756	Low	2	
		16	MW-34D		7/16/14	0843	Low	2	
		17	MW-405		7/16/14	1045	Low	2	
		18	MW-400		7/16/14	1153	Low	2	
		19	MW-141D		7/16/14	1319	Low	2	
		20	MW-25		7/16/14	1422	Low	2	

Comments

Matrix

Low

Sample Comments

Low

Sampler's Signature
Saver Jasse

Company

How Shipped?

Hand

Carry

Tracking No.

Returned By

Received By

Date

Time

Date

Time

Date

Time

Date

Time

Signature

Signature

7/16/14

1800

Signature

7/16/14

Signature

7/18/14

17



5560 Corporate Exchange Court SE
Grand Rapids, MI 49512
Phone (616) 975-4500 Fax (616) 942-7463
www.trimatrixlabs.com

Chain of Custody Record

COC No. **148290**

Analyses Requested

Pg. 1 of 2

For Lab Use Only
Cart 200X

VQA Pack/Tray
665, 717, 4

Receipt Log No.
5-15

Project Chemist

Work Order No.
1407336

Client Name
TRC
Address
1540 Eisenhower Place
City/State/Zip
Ann Arbor MI 48108
Phone/Fax
3349717088 334971900
Email

Project Name
T.P.C
Client Project No. / P.O. No.
004304001000
Invoice To
 Client
 Other (comments)
Contact/Report To
Stacy Metz

Container Type (corresponds to Container Packing List)

<u>VOC 8260</u>	

- RESERVATIVES
- A NONE pH-7
 - B HNO₃ pH-2
 - C H₂SO₄ pH-2
 - D 1+1 HCl pH-2
 - E NaOH pH-12
 - F ZnAcOH pH-9
 - G MeOH
 - H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Title	Sample Comments
<u>01</u>		<u>21</u>	<u>MW - 20s</u>	<u>2590</u>	<u>7/16/14</u>	<u>1543</u>	<u>K</u>		<u>2</u>	
		<u>22</u>	<u>MW - 20D</u>		<u>7/16/14</u>	<u>1611</u>	<u>J</u>		<u>2</u>	
		<u>23</u>	<u>MW - 38D</u>		<u>7/17/14</u>	<u>0659</u>	<u>T</u>		<u>2</u>	
		<u>24</u>	<u>TRP Bltn #05TB-02</u>				<u>T</u>		<u>1</u>	
		<u>25</u>	<u>SS 09T</u>		<u>7/17/14</u>	<u>0847</u>	<u>T</u>		<u>2</u>	
		<u>26</u>	<u>SS 09S</u>		<u>7/17/14</u>	<u>0901</u>	<u>T</u>		<u>2</u>	
		<u>27</u>	<u>Duo #02</u>		<u>7/17/14</u>		<u>T</u>		<u>2</u>	
		<u>28</u>	<u>SS - 10S</u>		<u>7/17/14</u>	<u>1001</u>	<u>T</u>		<u>2</u>	
		<u>29</u>	<u>SS - 10T</u>		<u>7/17/14</u>	<u>1006</u>	<u>T</u>		<u>2</u>	
		<u>30</u>	<u>SS - 10D</u>		<u>7/19/14</u>	<u>1103</u>	<u>T</u>		<u>2</u>	

Sampled By (print)
JAVIER JASS

How Shipped?
Tracking No.
Hand
 Carried

Comments

Company
TRC

1. Requisitioned By
Jass
Date
7/17/14

Title
TRC

2. Requisitioned By
TRC
Date
7/17/14

3. Requisitioned By
TRC
Date
7/17/14

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YELLOW COPY - LABORATORY

PINK COPY - FIELD



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 Grand Rapids, MI 49512
 Phone (616) 975-4500 Fax (616) 942-7463
 www.trimatrixlabs.com

Chain of Custody Record

COC No.

146395

Analyses Requested

Pg. 2 of 2

For Lab Use Only
 Cart 30X
 VQA Rack/Try 1065 7117-6
 Receipt Log No. 5-15
 Project Client 1407336
 Work Order No. ↓

Client Name TRC Project Name T.P.C
 Address 1540 Eisenhower Place Client Project No. / P.O. No. 004304.0001000
 City/State/Zip Ann Arbor MI 48108 Invoice To
 Phone/Fax 7344971282 7344971900 Other (comments)
 Email stacy.metz Contact/Report To

Container Type (corresponds to Container Picking List)	Number of Containers Submitted
VOC 8260	

PRESERVATIVES
 A NONE pH-7
 B HNO₃ pH<2
 C H₂SO₄ pH<2
 D 1+1 HCl pH<2
 E NaOH pH>12
 F ZnAc₂/NaOH pH>9
 G MeOH
 H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix	Number of Containers Submitted	Total	Sample Comments

Sampled By (print) JAVIER JASE

How Shipped? Carrier

Comments

Sampler's Signature Jase

Tracking No.

1. Refrigerated By Jase Date 7/17/14 Time 1800
 2. Refrigerated By Ray Date 7/17/14 Time 1800
 3. Refrigerated By Ray Date 7/18/14 Time 1710

Collector's Signature TRC

Hand Carrier

4. Refrigerated By Ray Date 7/18/14 Time 1710
 5. Refrigerated By Ray Date 7/18/14 Time 1710



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Grand Rapids, MI 49512

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Chain of Custody Record

COC No.

146396

Analyses Requested

Pg. 1 of 1

For Lab Use Only
Cart: *BOX*

Client Name

TRC

Project Name

T.P.C

VOA Rack Tray

6665 7/17-6/18

Address

1540 Eisenhower Place

Client Project No. / P.O. No.

00430402010000

Project Chemist

5-15

City/State/Zip

Ann Arbor MI 48106

Invoice To

Client
 Other (comments)

Work Order No.

1407336

Phone/Fax

734971 208 734971905

Contact/Report To

Stacy Metz

Container Type (corresponds to Container Packing List)

VOC 8260

- PRESERVATIVES
- A NONE pH-7
 - B HNO₃ pH-2
 - C H₂SO₄ pH-2
 - D 1+1 HCl pH-2
 - E NaOH pH-12
 - F ZnAcNaOH pH-9
 - G MeOH
 - H Other (note below)

Schedule	Matrix Code	Sample Number	Field Sample ID	Cooler ID	Sample Date	Sample Time	Matrix			Total	Sample Comments
							F	M	S		
01		35	MW-3ies	2590	7/18/14	0654	+	low	+	2	
		36	Dyp #c1		7/18/14	—	+	low	+	2	
		37	MW-21		7/18/14	0247	+	low	+	2	
		38	MW-4I		7/18/14	0911	+	low	+	2	
		39	MW-37s		7/18/14	1007	+	low	+	2	
		40	MW-35I		7/18/14	1049	+	low	+	2	
		41	MW-39s		7/18/14	1133	+	low	+	2	
		42	E.B #01		7/18/14	1140	+	DI	+	2	

Sampler (print)

Javier Jasso

Sampler's Signature

Javier

Company

TRC

How Shipped?

Hand

Carrier

Tracking No.

1. Requisitioned By

Javier

Date

7/18/14

Time

1300

2. Requisitioned By

Javier

Date

7/18/14

Time

1300

3. Sampled By

Javier

Date

7/18/14

Time

1700

SAMPLE RECEIVING / LOG-IN CHECKLIST



Client: TRC	Work Order #: 1407336
Receipt Record Page/Line #: 5-15	New / Add To: <input type="checkbox"/> Project Chemist: <input type="checkbox"/> Sample #: <input type="checkbox"/>

Recorded by (initials/date): DN 7/18/14	Cooler: <input checked="" type="checkbox"/> Cooler <input type="checkbox"/> Box <input type="checkbox"/> Other	Qty Received: 2	Thermometer Used: <input checked="" type="checkbox"/> IR Gun (#202) <input type="checkbox"/> Digital Thermometer (#54) <input type="checkbox"/> Other (#)	See Additional Cooler Information Form: <input type="checkbox"/>
--	--	------------------------	---	--

Cooler #	Time	Cooler #	Time	Cooler #	Time	Cooler #	Time		
TR2590	1751	TR2577	1802						
Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input checked="" type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact		Custody Seals: <input type="checkbox"/> None <input type="checkbox"/> Present / Intact <input type="checkbox"/> Present / Not Intact			
Coolant Type: <input checked="" type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input checked="" type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None		Coolant Type: <input type="checkbox"/> Loose Ice <input type="checkbox"/> Bagged Ice <input type="checkbox"/> Blue Ice <input type="checkbox"/> None			
Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom		Coolant Location: Dispersed / Top / Middle / Bottom			
Temp Blank Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No		Temp Blank Present: <input type="checkbox"/> Yes <input type="checkbox"/> No			
If Present, Temperature Blank Location is: <input checked="" type="checkbox"/> Representative <input type="checkbox"/> Not Representative		If Present, Temperature Blank Location is: <input checked="" type="checkbox"/> Representative <input type="checkbox"/> Not Representative		If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative		If Present, Temperature Blank Location is: <input type="checkbox"/> Representative <input type="checkbox"/> Not Representative			
Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C	Observed °C	Correction Factor °C	Actual °C	
Temp Blank: 2.7	0	2.7	Temp Blank: 2.9	0	2.9	Temp Blank:			
Sample 1: 4.3	0	4.3	Sample 1: 3.7	0	3.7	Sample 1:			
Sample 2: 4.4	0	4.4	Sample 2: 3.6	0	3.6	Sample 2:			
Sample 3: 3.6	0	3.6	Sample 3: 3.2	0	3.2	Sample 3:			
3 Sample Average °C: 4.1			3 Sample Average °C: 3.5			3 Sample Average °C:			
<input type="checkbox"/> Cooler ID on COC?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> Cooler ID on COC?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> Cooler ID on COC?	
<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?		<input type="checkbox"/> VOC Trip Blank received?	

If any shaded areas checked, complete Sample Receiving Non-Conformance and/or Inventory Form

Paperwork Received

Yes No Chain of Custody record(s)? If No, Initiated By _____

Received for Lab Signed/Date/Time? _____

Shipping document?

Other _____

COC Information

TriMatrix COC Other _____

COC ID Numbers: **148004, 148228, 148290**
146395, 146396

Check COC for Accuracy

Yes No Analysis Requested?

Sample ID matches COC?

Sample Date and Time matches COC?

Container type completed on COC?

All container types indicated are received?

Check Sample Preservation

N/A Yes No

Temperature Blank OR average sample temperature, ≥6° C?

If either is ≥6° C, was thermal preservation required?

If "Yes", Project Chemist Approval Initials: _____

If "Yes" Completed Non Con Cooler - Cont Inventory Form?

Completed Sample Preservation Verification Form?

Samples chemically preserved correctly?

If "No", added orange tag?

Received pre-preserved VOC soils?

MeOH Na₂SO₄

Check for Short Hold-Time Prep/Analyses

Bacteriological

Air Bags

EnCores / Methanol Pre-Preserved

Formaldehyde/Aldehyde

Green-tagged containers

Yellow/White-tagged 1 L ambers (SV Prep-Lab)

AFTER HOURS ONLY:
COPIES OF COC TO LAB AREA(S)

NONE RECEIVED

RECEIVED, COCs TO LAB(S)

Sample Condition Summary

N/A Yes No

Broken containers/lids?

Missing or incomplete labels?

Illegible information on labels?

Low volume received?

Inappropriate or non-TriMatrix containers received?

VOC vials / TOX containers have headspace?

Extra sample locations / containers not listed on COC?

Notes

Trip Blank received Trip Blank not listed on COC

Cooler Received (Date/Time): DN 7/18/14	Paperwork Delivered (Date/Time): 7/18/14	≤1 Hour Goal Met? Yes / No
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Technical Memorandum

Attachment 2 Data Validation Report

Laboratory Data Validation

July 2014 Groundwater Monitoring Event Former Tecumseh Products Company Site Tecumseh, Michigan

Thirty-nine groundwater samples, including two duplicates, two trip blanks, and one equipment rinsate blank, were collected from July 14 to 18, 2014. These samples were analyzed by TriMatrix Laboratories, located in Grand Rapids, Michigan. The samples were analyzed for volatile organic analytes by USEPA Method 8260B following protocols specified in the Quality Assurance Project Plan (QAPP) for the former Tecumseh Products Company (TPC) site in Tecumseh, Michigan. TRC performed a validation of the laboratory data. The following sections summarize the data validation procedure and the results of the validation.

Validation Procedure

The analytical data were validated using the USEPA National Functional Guidelines for Organic Data Review (USEPA, 2008). The data validation included a review of the spike, duplicate, and blank results from the laboratory, as well as verification that the sample holding times were met. TRC reviewed additional quality control (QC) information to check for appropriate matrix performance using the analytical method specified by the laboratory. The procedures TRC used to evaluate data in general included the following items:

- Checked technical holding times for analyses and sample receipt temperature;
- Reviewed QC data for blanks, matrix spikes, surrogates, and laboratory control samples;
- Determined field precision from blind field duplicate data; and
- Assessed the usability of the data.

The data validation report addresses the following items:

- Usability of the data if QC results suggest potential problems with all or some of the data;
- Potential sample contamination due to blank contributions; and
- Actions regarding specific QC criteria exceedances.

TRC reviewed internal standard areas and retention times, method blanks, project-specific matrix spike and matrix spike duplicate (MS/MSD) recoveries, surrogate spike recoveries, field and laboratory duplicate relative percent differences (RPDs), Laboratory Control Sample (LCS) recoveries, holding times, and temperature.

Findings

The data quality objectives and laboratory completeness goals for the project were met, and the data are usable. The procedures specified in the methods were implemented, and the data packages were found to contain all of the deliverables necessary for validation of the analytical data. The discussion that follows describes the QA/QC results and evaluation.

- The laboratory met technical holding times for all samples. The sample temperatures met QC limits. Sample preservative was listed on the chain-of-custody as sodium hydroxide. However, the project coordinator communicated that the samples were preserved with hydrochloric acid. Efforts should be made to ensure that sample preservation is properly noted on chains-of-custody in the future.
- Surrogate recoveries met QC limits for all samples.
- Internal standard areas and retention times were reviewed and found to be within acceptable QC limits.
- The laboratory performed an LCS with each analytical batch. Recoveries were within the laboratory control limits.
- Contaminants were not detected in the trip blanks. Xylenes were detected in the equipment rinsate blank (EB-01). Xylenes were not detected in any other sample; therefore, there are no data interpretation issues associated with these detections.
 - m,p-Xylenes at 3.3 µg/L
 - o-Xylene at 1.7 µg/L
- The following contaminants were detected in in the method blank for batch 1407600. These constituents were not detected in the associated samples (Dup-02 and Dup-01); therefore, there are no data interpretation issues associated with these detections.
 - n-Butylbenzene at 3.9 µg/L
 - Iodomethane at 6.6 µg/L
 - 1,2,4-Trichlorobenzene at 5.0 µg/L
- Two field duplicate samples were collected. Dup-01 corresponded with sample MW-21, and Dup-02 corresponded with sample SS-09s. RPDs were within QC limits. There were no laboratory duplicates.
- MS/MSD analyses were performed on samples MW-31 and MW-38s. Recoveries and RPDs were within QC limits.

Prepared by: Jennifer Meek

Reviewed by: Elizabeth Denly

Appendix C
Third Quarter 2014 Soil Gas Sample Event

Technical Memorandum

To: Jason Smith, Tecumseh Products Company

From: Stacy Metz and Graham Crockford, TRC

Subject: Third Quarter 2014 Soil Gas Sample Event –
RCRA 3008(h) Consent Order (RCRA-05-2010-0012) – Tecumseh Products Company

Date: October 9, 2014

cc: Joseph Kelly, USEPA
Bhooma Sundar, USEPA
Chris DeWetter, Tecumseh Products Company
Douglas McClure, Conlin, McKenney and Philbrick, PC

Project No.: 004308.0001

Tecumseh Products Company (TPC) retained TRC Environmental Corporation (TRC) to investigate the potential for off-site vapor intrusion near the former TPC site located in Tecumseh, Michigan. TRC has been assisting TPC with investigative activities in accordance with the RCRA Administrative Order on Consent (RCRA 05-2010-0012) for the site.

These investigation activities included the installation of 21 soil gas monitoring points (SG-XX locations) and one vacuum monitoring point (TVP-02s) which also serves as a soil gas sample collection point. Quarterly soil gas monitoring was initiated in April 2010. Quarterly sampling activities are conducted in general accordance with the Quality Assurance Project Plan (QAPP) which was submitted to the United States Environmental Protection Agency (USEPA) for review in August 2010 and the Quarterly Sampling Plan described in the July 15, 2014 Technical Memorandum titled *Third Quarter 2013 through Second Quarter 2014 Soil Gas Sample Events*. Active soil gas samples are collected quarterly at each of the following soil gas sample points: SG-01, SG-02, SG-03R, SG-04, SG-05, SG-06, SG-07, SG-08, SG-09, SG-10, SG-11, SG-12R¹, SG-13, SG-14R, SG-15R, SG-16, SG-17, SG-18, SG-19, SG-20, SG-21 and TVP-02s. The locations of soil gas monitoring points are illustrated

¹ Soil gas sample point SG-12R was installed due to water in the sample point at SG-12 which prevented sample collection during approximately half of the sample events. Tight, high-moisture soils at sample point SG-12R intermittently prevent the collection a sufficient sample volume at sample point SG-12R. Each quarter sample collection is first attempted at SG-12R. If sample volume is insufficient from sample point SG-12R, sample collection is then attempted at soil gas sample point SG-12.

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on Figure 1. The sampling plan was developed to evaluate the volatilization to indoor air migration pathway. As such, sampling data are validated using level 4 data quality objectives.

Summary of Field Activities

- **Third Quarter 2014 Soil Gas Sample Event:** TRC completed the third quarter 2014 soil gas sample event between July 22, 2014 and July 24, 2014. Details of the third quarter soil gas sample event are summarized below:
 - Sample collection at all soil gas sample point locations (SG-01 through SG-21);
 - Sample collection at one exterior subsurface vacuum monitoring point (TVP-02s); and
 - Analysis of all soil gas samples by USEPA Method TO-15 for the project specific list of CVOCs.
- **Third Quarter 2014 Re-Sample Event:** A re-sample event was conducted on September 22, 2014, to confirm (or not) the anomalous data reported for the sample collected at SG-03R during the regular third quarter 2014 sample event. Given demonstrated temporal variability in soil gas, a sample was also collected at SG-02 during the re-sample event to assess the potential effect of temporal variability on soil gas concentrations between the July 2014 sample event and the September 2014 re-sample event.

Summary of Soil Gas Data

Soil gas data are summarized and compared to SGSLs in Table 1, and soil gas sample locations are shown on Figure 1. Laboratory analytical reports are provided in Attachment 1. TRC conducted data quality assurance to verify that field practices and laboratory data met the project data quality objectives. Laboratory data validation reports are included in Attachment 2. As observed during the August 2013 sample event, soil gas concentrations typically peak during the summer months. Since that time, constituents of concern have not exceeded the most restrictive residential SGSLs at any of soil gas sample locations located in residential areas north and west of the site.

Soil gas concentrations at soil gas sample point SG-01 remained low compared to historical data throughout the spring and summer. The observed decrease in concentrations at soil gas sample point SG-01 can be attributed to the installation and start-up of the perimeter soil vapor extraction system in March 2014. At other locations, soil gas data are generally consistent with historical data. However data quality issues were identified with the unusually high tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene concentrations reported in July 2014 at soil gas sample point SG-03R. These concentrations have been demonstrated to be invalid (see Attachment 2), and may be due to residual concentrations in the canister from a previous event or other similar sample contamination issues. Tetrachloroethene, 1,1,1-trichloroethane, and/or trichloroethene were also detected at soil gas sample points SG-04, SG-15R, and TVP-02s where concentrations of these compounds are typically not detected. The detected concentrations were low enough that an evaluation such as that completed for SG-03R could not be used to conclusively invalidate these data. Furthermore, these concentrations

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are below applicable soil gas screening levels and do not trigger further action. Therefore a re-sample event was not conducted for these locations. However, these detections, in the absence of additional data confirming these low-level detections, should be considered suspect and should not, in isolation, be used to trigger further action.

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Table

Table 1
 Summary of Chlorinated Volatile Organic Compounds at Off-Site Soil Gas Sample Locations
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	
MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21	
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210	
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000	
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
SG-01 (8-8.5')	4/5/2010	5.7	<2.3	4.4	17.0	<4.4	<2.3	279	396	<2.3
	5/20/2010 ⁽²⁾	52.4	<4.4	21.6	184	<4.4	52.1	1,690	2,800	<4.4
	10/21/2010	74.7	<16.8	<16.8	272	25.8	222	8,300	32,100	<16.8
	12/9/2010	<709	<709	<709	<709	<709	<709	6,440	17,800	<709
	4/13/2011	32.8	166	21.0	110	7.8	84.6	2,630	10,500	<6.7
	6/27/2011	<180	<90	<180	<180	<180	98.0	1,420	7,340	<90
	9/28/2011	<100	<100	<100	220	<200	150	4,300	19,000	<100
	11/21/2011 ⁽³⁾	--	--	--	--	--	--	--	--	--
	1/30/2012	10	<4.0	6.2	17	<8.0	<4.0	610	700	<4.0
	6/27/2012	53	<5.0	13	170	19	190	4,700	23,000	<5.0
	10/1/2012	56	<50	<50	190	<100	310	5,100	16,000	<50
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	10	1.9	<1.0
	3/14/2013	4.7	<1.0	4.7	6.7	<2.0	<1.0	300	190	<1.0
	5/30/2013 ⁽⁴⁾	<120	<24	<120	<120	<120	49	1,400	3,700	<19
	6/24/2013 ⁽³⁾	--	--	--	--	--	--	--	--	--
	8/8/2013	110	<1.0	30	440	45	2,200	12,000	110,000	<1.0
	11/12/2013	42	<1.0	13	160	15	950	6,000	51,000	<1.0
3/26/2014	<1.0	<1.0	<1.0	1.2	<2.0	11	31	310	<1.0	
5/21/2014	1.0	1.6	<1.0	3.0	<2.0	73	180	1,500	<1.0	
7/24/2014	<5.0	<5.0	<5.0	<5.0	<10	140	28	890	<5.0	
SG-01 (DUP-01)	4/5/2010	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
	5/20/2010 ⁽²⁾	63.2	<4.4	31.0	245	22.6	256	2,120	3,770	<4.4
	9/28/2011	<100	<100	<100	270	<200	200	5,800	28,000	<100
	11/21/2011	22 ⁽⁶⁾	<5.0	9.9	48	<10	25	1,700	8,500	<5.0
1/30/2012	15	<4.0	9.3	26	<8.0	4.0	920	1,000	<4.0	
SG-02 (5.5-6')	4/5/2010	<4.0	<4.0	<4.0	<4.0	<4.0	<4.0	19.6	<4.0	<4.0
	10/21/2010	<12.5	<12.5	<12.5	<12.5	<12.5	532	328	1,610	<12.5
	12/9/2010 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/27/2011	8.5	<3.5	<7.0	28.0	8.6	1,240	943	3,970	<3.5
	9/28/2011	<5.0	<5.0	<5.0	6.1	<10	1,100	230	550	<5.0
	11/21/2011	2.3	<1.0	<1.0	2.6	2.5	400	120	310	1.1
	1/30/2012	<1.0	<1.0	2.1	<1.0	<2.0	<1.0	8.6	2.3	<1.0
	6/27/2012	18	<1.0	4.2	1,300	52	780	430	2,200	3.3
	10/2/2012	11	<5.0	<5.0	260	33	280	510	1,900	<5.0
	11/27/2012	4.6	<1.0	2.4	44	7.3	3.4	80	120	<1.0
	3/26/2013	<2.0	<2.0	3.4	46	4.6	10	32	100	2.1
	5/30/2013 ⁽⁶⁾	7.3	<2.0	4.5	200	22	350	380	1,900	<2.0
	8/9/2013	17	<1.0	12	220	46	4,800	990	9,100	<1.0
	11/13/2013	7.4	<1.0	2.0	51	10	950	270	1,800	<1.0
	3/26/2014 ⁽³⁾	--	--	--	--	--	--	--	--	--
	4/16/2014	<1.0	<1.0	<1.0	9.9	2.5	210	34	300	<1.0
5/21/2014	7.6	<1.0	5.1	68	16	2,000	410	2,600	<1.0	
7/24/2014	31	<10	<10	120	47	5,400	1,300	5,600	<10	
9/22/2014	15	<10	<10	71	38	2,500	770	5,000	<10	

Notes:

- As recommended by USEPA in an email dated August 1, 2013, soil gas screening levels (SGSLs) are taken from the May 2013 Michigan Department of Environmental Quality (MDEQ) Final Guidance Document for the Vapor Intrusion Pathway.
- Elevated concentrations of 2-propanol (tracer) detected; DUP-01 results from 5/20/10 reflect true soil gas concentrations. Tracer concentration from SG-01 and analytical data from DUP-01 suggests that sample was diluted with approximately 30-percent ambient air.
- Elevated concentrations of tracer detected. Analytical data for other analytes are presumed to be invalid (-).
- Elevated detection limit due to siloxane contamination in sample.
- Water in sample point prevented sample collection.
- Quality control results are outside the established control limits, the result is approximate.
- Analyte was evaluated for detection to the method detection limit.
- Potential data quality issues were identified with tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene concentrations reported in July 2014. Data may be biased high. Data for these compounds, in the absence of additional data confirming these low-level detections, should be considered suspect and should not, in isolation, be used to trigger further action.
- Sample port is screened in the low permeability zone. Available sample volume insufficient for analysis.

Bold font denotes concentrations detected above laboratory reporting limits.

 Denotes concentrations above one or more soil gas screening level

ppbv - parts per billion by volume

NS - No Sample

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 Tecumseh, Michigan

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MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
SG-03 (5-5.5')	4/5/2010	<2.6	<2.6	<2.6	<2.6	<5.1	<2.6	<2.6	<2.6
	10/21/2010	91.0	<15.7	<15.7	193	90.3	<15.7	<15.7	<15.7
	12/9/2010	47.7	<11.9	<11.9	98.0	48.5	<11.9	<11.9	<11.9
	3/31/2011	<0.56	<0.56	<0.57	<0.57	<0.57	<0.57	<0.56	<0.57
	6/27/2011	<0.36	<0.18	<0.37	<0.37	<0.37	6.8	4.8	22.3
	9/28/2011	3.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	11/21/2011	3.5	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.8
	1/30/2012 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	6/27/2012	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	12
	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/26/2013 ⁽³⁾	--	--	--	--	--	--	--	--
4/15/2013 ⁽³⁾	--	--	--	--	--	--	--	--	
SG-03R (5-5.5')	5/30/2013	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	5/21/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.8	<1.0	<1.0
	9/22/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
SG-04 (5-5.5')	4/5/2010	<2.6	<1.3 ⁽⁷⁾	<2.6	<2.6	<4.9	<2.6	<2.6	<2.5
	9/23/2010	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5
	12/9/2010	<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	<0.78	<0.78
	3/31/2011	<1.6	<1.6	<1.6	<1.6	<1.6	2.0	<1.6	<1.6
	6/7/2011	<1.0	<0.53	<1.1	<1.1	<1.1	<0.52	<1.0	<0.53
	9/28/2011	<1.0	<1.0	<1.0	<1.0	<2.0	1.7	<1.0	<1.0
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	2.4
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.0
	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	5/24/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	4.7
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
5/21/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	
7/24/2014 ⁽⁸⁾	<1.0	<1.0	<1.0	<1.0	<2.0	5.6	<1.0	<1.0	

Notes:

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- Elevated concentrations of 2-propanol (tracer) detected; DUP-01 results from 5/20/10 reflect true soil gas concentrations. Tracer concentration from SG-01 and analytical data from DUP-01 suggests that sample was diluted with approximately 30-percent ambient air.
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Bold font denotes concentrations detected above laboratory reporting limits.

Green background Denotes concentrations above one or more soil gas screening level

ppbv - parts per billion by volume

NS - No Sample

Table 1
 Summary of Chlorinated Volatile Organic Compounds at Off-Site Soil Gas Sample Locations
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	
MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21	
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210	
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000	
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
SG-05 (7.5-8')	4/5/2010	<2.6	<2.6	<2.6	<2.6	<4.9	<2.6	28.7	26.6	<2.5
	10/21/2010	<16.8	<16.8	<16.8	<16.8	<16.8	<16.8	708	1,320	<16.8
	12/9/2010	<15.7	<15.7	<15.7	<15.7	<15.7	<15.7	357	538	<15.7
	3/31/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/27/2011	<0.34	<0.17	<0.35	<0.35	<0.35	<0.17	2.2	0.20	<0.17
	9/28/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.1	1.1	<1.0
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	1/30/2012 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS	NS
	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.1	<1.0	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	220	380	<1.0
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	54	22	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	16	21	<1.0
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	170	260	<1.0
3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	150	250	<1.0	
5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.2	1.7	<1.0	
7/22/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.3	5.0	14	<1.0	
SG-05 (DUP-01)	10/21/2010	<16.8	<16.8	<16.8	<16.8	<16.8	<16.8	581	1,020	<16.8
	12/9/2010	<211	<211	<211	<211	<211	<211	772	849	<211
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	190	370	<1.0
SG-06 (8-8.5')	4/5/2010	<2.6	<2.6	<2.6	<2.6	<4.9	<2.6	<2.6	7.2	<2.5
	5/20/2010	<4.6	<4.6	<4.6	<4.6	<4.6	9.5	6.0	104	<4.6
	9/21/2010	<29.2	<29.2	<29.2	<29.2	<29.2	62.2	<29.2	263	<29.2
	12/9/2010	<3.9	<3.9	<3.9	6.1	<3.9	4.3	7.4	64.9	<3.9
	3/31/2011	0.73	<0.17	<0.35	<0.35	1.3	<0.17	1.7	14.1	<0.17
	6/7/2011	0.88	<0.18	<0.37	5.6	2.5	7.5	2.5	50.2	<0.18
	9/28/2011	3.6	<2.0	<2.0	35	6.4	16	7.7	150	<2.0
	11/21/2011	2.2	<1.0	<1.0	9.2	2.6	<1.0	5.1	29	1.1
	1/30/2012	1.4	<1.0	<1.0	5.4	<2.0	<1.0	1.3	9.7	<1.0
	6/27/2012	<1.0	<1.0	<1.0	7.7	<2.0	9.1	3.4	68	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	2.3 ⁽⁶⁾	<1.0	12 ⁽⁶⁾	<1.0
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	2.1	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	20	<1.0	10	<1.0
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	8.9	<1.0	6.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.7	<1.0	1.1	<1.0
5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	5.0	<1.0	2.1	<1.0	
7/22/2014	<1.0	<1.0	<1.0	<1.0	<2.0	59	7.9	59	<1.0	

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MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
SG-07 (8-8.5')	4/5/2010	<75.2	<75.2	<75.2	<75.2	<75.2	<75.2	<75.2	<75.2
	5/20/2010	<5.0	<5.0	<5.0	<5.0	<5.0	13.8	6.8	145
	9/21/2010	<69.6	<69.6	<69.6	<69.6	<69.6	140	<69.6	403
	12/9/2010	<22.2	<22.2	<22.2	<22.2	<22.2	24.4	<22.2	139
	3/31/2011	<0.34	<0.17	<0.35	<0.35	<0.35	5.9	4.3	47.2 ⁽⁶⁾
	6/7/2011	<0.36	<0.18	<0.37	<0.37	<0.37	23.6	4.4 ⁽⁶⁾	171 ⁽⁶⁾
	9/28/2011	<1.0	<1.0	<1.0	<1.0	<2.0	76	16	260
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.7	3.1
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	2.4
	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	67	9.0	250
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	16	8.8	130
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	1.7	3.4	34
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.4	13
	5/23/2013	<1.0	<1.0	<1.0	<1.0	<2.0	27	4.0	120
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	260	13	510
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	160	7.7	340
3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	41	2.5	79	
5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	110	4.1	180	
7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	210	11 ⁽⁶⁾	320	
SG-07 (DUP-01)	3/31/2011	<0.56	<0.56	<0.57	<0.57	<0.57	7.9	5.0	90.6 ⁽⁶⁾
	6/7/2011	<0.36	<0.18	<0.37	<0.37	<0.37	28.4 ⁽⁶⁾	9.5 ⁽⁶⁾	97.2 ⁽⁶⁾
	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	66	9.3	250
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	1.5	3.1	33
	5/23/2013 ⁽⁴⁾	<4,900	<970	<5,000	<5,000	<5,000	<580	<3,600	<730
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	220	12	420
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	160	7.6	350
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	42	2.6	82
5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	110	4.3	180	
7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	190	8.6 ⁽⁶⁾	300	
SG-07 (DUP-02)	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.4	12

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MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21
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MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
SG-08 (6.5-7')	4/5/2010	<2.6	<1.3 ⁽⁷⁾	<2.6	<2.6	<5.1	<2.6	<2.6	<2.6
	9/23/2010	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	4.5	3.5
	12/9/2010 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2011	<0.34	<0.17	<0.35	<0.35	<0.35	0.29	3.4	<0.17
	6/27/2011	<0.34	<0.17	<0.35	<0.35	<0.35	<0.17	0.97	<0.18
	9/28/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.9	<1.0
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	6.9	1.3
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	6/29/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.8	2.0
	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.7	<1.0
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	5/24/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	5.4	8.6
	11/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.6	3.2
4/16/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.2	
5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.4	4.0	
7/24/2014	<1.0	<1.0	<1.0	<1.0	<2.0	2.2	4.0	5.2	
SG-08 (DUP-02)	5/24/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	4.8	7.1
	11/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.5	3.7
	5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	2.0	1.6
	7/24/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.8	3.9	5.2
SG-09 (5.5-6')	4/5/2010 ⁽³⁾	--	--	--	--	--	--	--	--
	5/20/2010	10.6	<4.4	<4.4	<4.4	<4.4	<4.4	123	176
	9/23/2010	<23.4	<23.4	<23.4	<23.4	<23.4	<23.4	142	436
	12/9/2010	<13.2	<13.2	<13.2	<13.2	<13.2	<13.2	61.8	51.7
	3/31/2011	4.3	<0.17	<0.35	1.3	<0.35	<0.17	52.5	13.9
	6/27/2011	5.4	<0.17	<0.35	1.4	<0.35	<0.17	52.8	45.8
	9/28/2011	1.7	<1.0	<1.0	<1.0	<2.0	<1.0	13	7.9
	11/21/2011	3.8	<1.0	<1.0	<1.0	<2.0	<1.0	32	9.1
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	7.2	1.3
	6/29/2012	<1.0	<1.0	<1.0	1.0	<2.0	<1.0	89	190
	10/2/2012	1.0	<1.0	<1.0	<1.0	<2.0	<1.0	56	74
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	4.3	1.9
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	5.4	4.0
	5/24/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	18	27
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	67	270
	11/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	35	170
	4/16/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	6.2	36
5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	15	73	
7/24/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	23	99	
SG-09 (DUP-02)	6/29/2012	<1.0	<1.0	<1.0	1.2	<2.0	<1.0	93	200

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MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210	
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000	
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
SG-10 (5-5.5')	4/5/2010	<40.3 ⁽⁷⁾	<40.3 ⁽⁷⁾	<80.6	<80.6	<80.6	<40.3 ⁽⁷⁾	<80.6	<40.3 ⁽⁷⁾	<40.3 ⁽⁷⁾
	9/21/2010	<4.4	<2.2 ⁽⁷⁾	<4.4	<4.4	<4.4	<4.4	<4.4	11.5	<4.4
	12/9/2010	<8.7	<4.4 ⁽⁷⁾	<8.7	<8.7	<8.7	<4.4 ⁽⁷⁾	<8.7	<8.7	<8.7
	3/31/2011	<0.61	<0.61	<0.62	<0.62	<0.62	<0.61	<0.59	<0.60	<0.62
	6/27/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/28/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.4	19	<1.0
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	19	56	<1.0
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	6/27/2012	<1.0	<1.0	<1.0	4.8	<2.0	1.9	46	210	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/29/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013 ⁽⁹⁾	--	--	--	--	--	--	--	--	--
	6/24/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	8/8/2013	<1.0	<1.0	<1.0	1.6	<2.0	29	6.9	53	<1.0
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
SG-11 (5.5-6')	4/5/2010	<2.8	<1.4 ⁽⁷⁾	<2.8	<2.8	<5.4	<2.8	<2.8	<2.8	<2.8
	9/23/2010	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4	<2.4
	12/9/2010	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84	<0.84
	3/31/2011	<0.56	<0.56	<0.57	<0.57	<0.57	<0.57	<0.56	<0.57	<0.58
	6/7/2011	<0.39	<0.19	<0.40	<0.40	<0.40	0.89	0.54	1.2	<0.19
	9/28/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	6.8	18	<1.0
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/29/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	1.2	<1.0	3.0	<1.0
	11/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.3	<1.0	<1.0	<1.0
5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	

Notes:

- As recommended by USEPA in an email dated August 1, 2013, soil gas screening levels (SGSLs) are taken from the May 2013 Michigan Department of Environmental Quality (MDEQ) Final Guidance Document for the Vapor Intrusion Pathway.
- Elevated concentrations of 2-propanol (tracer) detected; DUP-01 results from 5/20/10 reflect true soil gas concentrations. Tracer concentration from SG-01 and analytical data from DUP-01 suggests that sample was diluted with approximately 30-percent ambient air.
- Elevated concentrations of tracer detected. Analytical data for other analytes are presumed to be invalid (-).
- Elevated detection limit due to siloxane contamination in sample.
- Water in sample point prevented sample collection.
- Quality control results are outside the established control limits, the result is approximate.
- Analyte was evaluated for detection to the method detection limit.
- Potential data quality issues were identified with tetrachloroethene, 1,1,1-trichloroethane, and trichloroethene concentrations reported in July 2014. Data may be biased high. Data for these compounds, in the absence of additional data confirming these low-level detections, should be considered suspect and should not, in isolation, be used to trigger further action.
- Sample port is screened in the low permeability zone. Available sample volume insufficient for analysis.

Bold font denotes concentrations detected above laboratory reporting limits.

Green background Denotes concentrations above one or more soil gas screening level

ppbv - parts per billion by volume

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Table 1
 Summary of Chlorinated Volatile Organic Compounds at Off-Site Soil Gas Sample Locations
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride
MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
SG-12 (5-5.5')	4/5/2010 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	5/20/2020 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	9/21/2010 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	12/9/2010	<2.5	<1.3 ⁽⁷⁾	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
	3/31/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	6/27/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	9/28/2011 ⁽⁶⁾	NS	NS	NS	NS	NS	NS	NS	NS
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	1/30/2012 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
SG-12R (7-7.5')	3/26/2013 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	5/24/2013 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	10/3/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/28/2012 ⁽⁹⁾	NS	NS	NS	NS	NS	NS	NS	NS
	3/26/2013 ⁽⁹⁾	NS	NS	NS	NS	NS	NS	NS	NS
	5/24/2013 ⁽⁹⁾	NS	NS	NS	NS	NS	NS	NS	NS
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/13/2013	<1.0	<1.0	<1.0	1.9	<2.0	<1.0	<1.0	5.6
	3/26/2014 ⁽³⁾	--	--	--	--	--	--	--	--
SG-13 (5.5-6')	4/16/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	5/19/2014	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	7/22/2014 ⁽³⁾	--	--	--	--	--	--	--	--
	4/5/2010	<2.5	<1.3 ⁽⁷⁾	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
	5/20/2010	<4.5	<2.2 ⁽⁷⁾	<4.5	<4.5	<4.5	<4.5	<4.5	6.1
	9/23/2010	<1.5	<1.5	<1.5	2.5	5.6	<1.5	<1.5	<1.5
	12/9/2010	<1.6	<1.6	<1.6	<1.6	2.9	<1.6	<1.6	<1.6
	3/31/2011	<0.56	<0.56	<0.57	<0.57	<0.57	<0.57	<0.56	<0.58
	6/7/2011	1.5	<0.19	<0.40	4.8	10.8	0.77	0.81	1.6
	9/28/2011	1.1	<1.0	<1.0	6.2	10	<1.0	<1.0	<1.0
	11/21/2011	1.9	<1.0	<1.0	2.0	4.0	<1.0	<1.0	<1.0
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	6/26/2012	<1.0	<1.0	<1.0	4.9	7.7	<1.0	<1.0	<1.0
	10/2/2012	<1.0	<1.0	<1.0	3.4 ⁽⁶⁾	5.9 ⁽⁶⁾	<1.0	<1.0	<1.0
	11/28/2012	<1.0	<1.0	<1.0	1.7	2.7	<1.0	<1.0	<1.0
3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	
5/23/2013	<1.0	<1.0	<1.0	<1.0	3.4	<1.0	<1.0	<1.0	
8/8/2013	<1.0	<1.0	<1.0	1.3	8.8	<1.0	<1.0	<1.0	
11/14/2013	<1.0	<1.0	<1.0	<1.0	4.5	<1.0	<1.0	<1.0	
3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	
5/20/2014	<1.0	<1.0	<1.0	1.3	4.0	<1.0	<1.0	<1.0	
7/23/2014	<1.0	<1.0	<1.0	1.4	6.6	<1.0	<1.0	<1.0	

Notes:

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Table 1
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 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride
MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv
SG-14 (6.5-7) ⁽⁵⁾	4/5/2010	NS	NS	NS	NS	NS	NS	NS	NS
	5/20/2010	NS	NS	NS	NS	NS	NS	NS	NS
	9/21/2010	NS	NS	NS	NS	NS	NS	NS	NS
	12/9/2010	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2011	NS	NS	NS	NS	NS	NS	NS	NS
	6/27/2011	NS	NS	NS	NS	NS	NS	NS	NS
	9/28/2011	NS	NS	NS	NS	NS	NS	NS	NS
	11/21/2011	NS	NS	NS	NS	NS	NS	NS	NS
SG-14R (6.5-7)	1/30/2012	NS	NS	NS	NS	NS	NS	NS	NS
	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.3
	10/3/2012 ⁽⁹⁾	NS	NS	NS	NS	NS	NS	NS	NS
	11/28/2012 ⁽⁹⁾	NS	NS	NS	NS	NS	NS	NS	NS
	3/14/2013	NS	NS	NS	NS	NS	NS	NS	NS
	5/24/2013 ⁽³⁾	--	--	--	--	--	--	--	--
	8/9/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.6
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	4/16/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
SG-15 (11-11.5)	5/19/2014	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0
	7/22/2014 ⁽³⁾	--	--	--	--	--	--	--	--
	9/23/2010 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	12/15/2010 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	3/31/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	6/27/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	9/28/2011 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	10	30
1/30/2012 ⁽⁵⁾	NS	NS	NS	NS	NS	NS	NS	NS	
SG-15R (8.75-9.25)	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	10/3/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	5/24/2013 ^(4,7)	<1.6	<1.6	<1.9	<1.6	<1.2	<1.0	<1.0	<1.2
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
	5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0
7/23/2014 ⁽⁸⁾	<1.0	<1.0	<1.0	<1.0	<2.0	1.4	<1.0	8.5	

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MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21	
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210	
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Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
SG-16 (7.5-8')	9/23/2010	<2.5	<2.5	<2.5	<2.5	<2.5	2.6	<2.5	<2.5	<2.5
	12/9/2010	<15.7	<7.8 ⁽⁷⁾	<15.7	<15.7	<15.7	<7.8 ⁽⁷⁾	<15.7	<15.7	<7.8 ⁽⁷⁾
	3/31/2011	<0.61	<0.61	<0.60	<0.60	<0.60	<0.61	<0.59	<0.60	<0.62
	6/7/2011	<1.1	<0.53	<1.1	<1.1	<1.1	<0.54	<1.1	0.62	<0.54
	9/28/2011	<1.0	<1.0	<1.0	3.3	<2.0	7.4	<1.0	28	<1.0
	11/21/2011	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	1.1
	1/30/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013 ⁽⁴⁾	<4,900	<970	<5,000	<5,000	<5,000	<580	<3,600	<730	<770
	6/24/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	13	<1.0
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.3	<1.0	1.1	<1.0	
SG-16 (DUP-02)	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	6/24/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
SG-17 (8-8.5')	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	1.8	330	5.7	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	250	<1.0	<1.0
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	42	<1.0	<1.0
	3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	42	<1.0	<1.0
	5/23/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	83	<1.0	<1.0
	8/8/2013	<2.0	<2.0	<2.0	<2.0	<4.0	6.0	550	<2.0	<2.0
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	5.1	300	6.2	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	81	<1.0	<1.0
5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	1.8	120	<1.0	<1.0	
7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	4.6	330	<1.0	<1.0	

Notes:

- As recommended by USEPA in an email dated August 1, 2013, soil gas screening levels (SGSLs) are taken from the May 2013 Michigan Department of Environmental Quality (MDEQ) Final Guidance Document for the Vapor Intrusion Pathway.
- Elevated concentrations of 2-propanol (tracer) detected; DUP-01 results from 5/20/10 reflect true soil gas concentrations. Tracer concentration from SG-01 and analytical data from DUP-01 suggests that sample was diluted with approximately 30-percent ambient air.
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Bold font denotes concentrations detected above laboratory reporting limits.

Denotes concentrations above one or more soil gas screening level

ppbv - parts per billion by volume

NS - No Sample

Table 1
 Summary of Chlorinated Volatile Organic Compounds at Off-Site Soil Gas Sample Locations
 Tecumseh Products Company
 Tecumseh, Michigan

Analyte	1,1-Dichloroethane	1,2-Dichloroethane	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Tetrachloroethene	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	
MDEQ Residential Sub-Slab SGSL ⁽¹⁾	4,100	8.2	1,700	58	580	170	36,000	12	21	
MDEQ Residential Deep SGSL ⁽¹⁾	41,000	82	17,000	580	5,800	1,700	360,000	120	210	
MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000	
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
SG-18 (8-8.5')	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.1	2.3	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/29/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	2.1	<1.0	6.4	<1.0
	11/13/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
SG-19 (8-8.5')	5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	2.1	<1.0	1.9	<1.0
	6/26/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/24/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
SG-20 (8-8.5')	11/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	7/23/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	5.4	1.5	17	<1.0
	10/2/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.9	<1.0
	11/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.3	<1.0
SG-20 (DUP-02)	5/24/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	3.6	<2.0	<2.0	<2.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	3.1	1.0	<1.0
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	13	1.4	23	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	2.9	<1.0	5.3	<1.0
	5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	7.8	<1.0	12	<1.0
7/24/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	2.7	<1.0	5.8	<1.0	

Notes:

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Table 1
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MDEQ Non-Residential Deep SGSL ⁽¹⁾	690,000	1,600	280,000	9,800	98,000	33,000	6,100,000	2,100	15,000	
Units	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	ppbv	
SG-21 (8-8.5')	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.1	2.3	<1.0
	3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/24/2013 ⁽⁴⁾	<120	<24	<120	<120	<120	<15	<91	<18	<19
	6/24/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	4/16/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/20/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
7/24/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	
SG-21 (DUP-01)	3/14/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
SG-21 (DUP-02)	11/29/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
TVP-02s (10-10.5')	6/27/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	1.2	8.8	<1.0
	10/1/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	1.2	<1.0
	11/28/2012	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/18/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/23/2013 ⁽⁴⁾	<2.0	<2.0	<2.0	<2.0	<4.0	<2.0	<2.0	<2.0	<2.0
	8/8/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	11/12/2013	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	3/26/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
	5/19/2014	<1.0	<1.0	<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0
7/23/2014 ⁽⁸⁾	<1.0	<1.0	<1.0	<1.0	<2.0	18	2.9	20	<1.0	

Notes:

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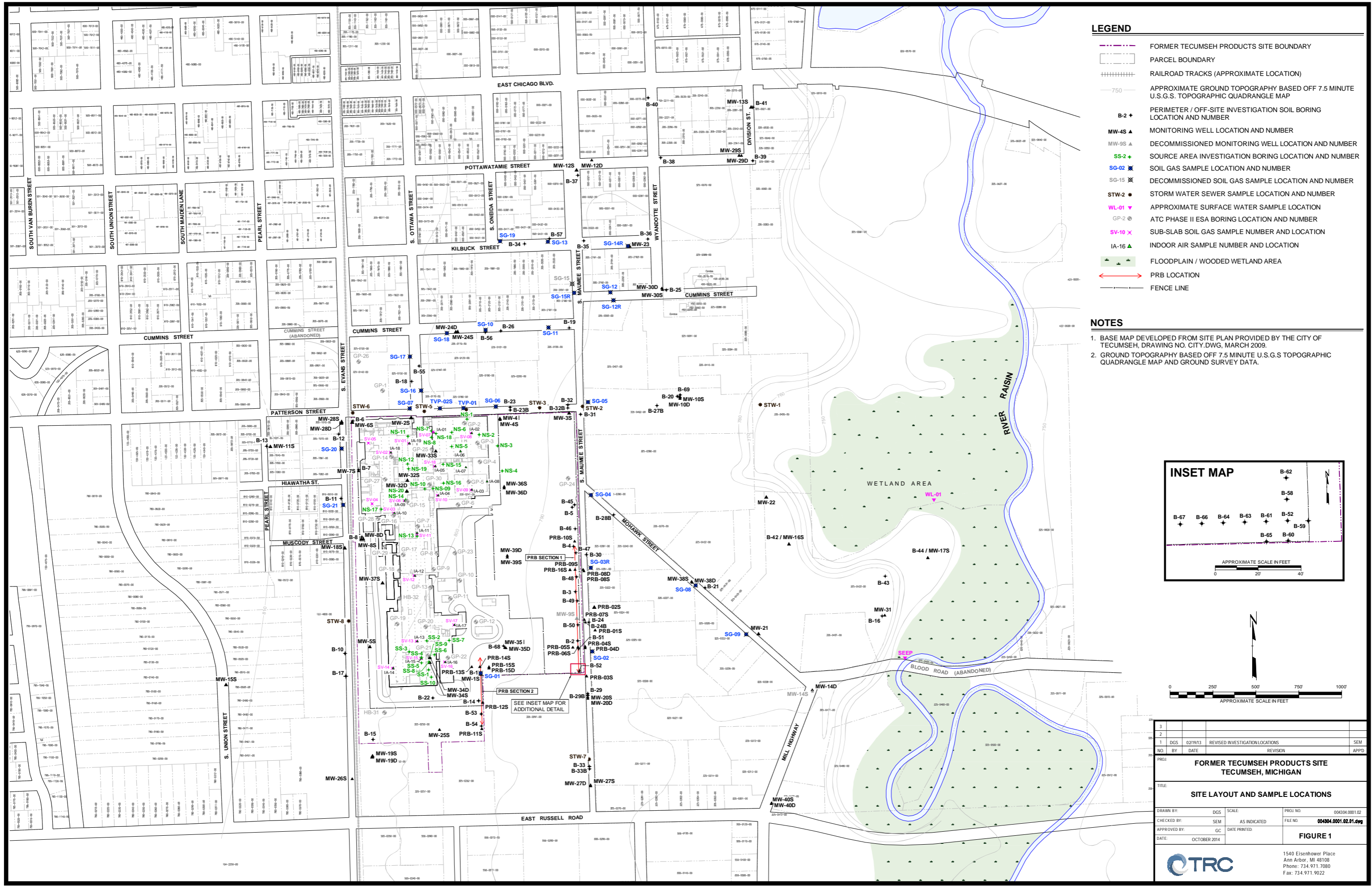
Denotes concentrations above one or more soil gas screening level

ppbv - parts per billion by volume

NS - No Sample

Technical Memorandum

Figure

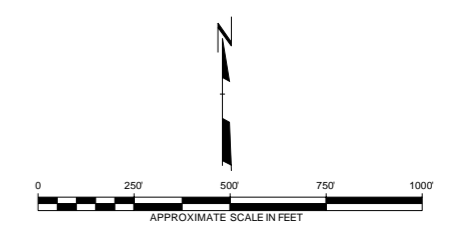
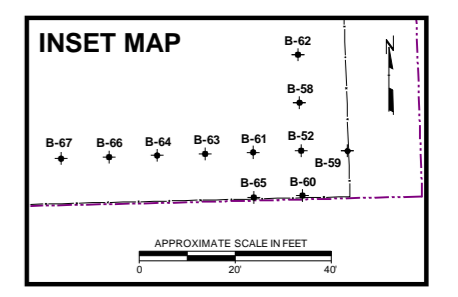


LEGEND

- FORMER TECUMSEH PRODUCTS SITE BOUNDARY
- PARCEL BOUNDARY
- RAILROAD TRACKS (APPROXIMATE LOCATION)
- APPROXIMATE GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S. TOPOGRAPHIC QUADRANGLE MAP
- PERIMETER / OFF-SITE INVESTIGATION SOIL BORING LOCATION AND NUMBER
- MONITORING WELL LOCATION AND NUMBER
- DECOMMISSIONED MONITORING WELL LOCATION AND NUMBER
- SOURCE AREA INVESTIGATION BORING LOCATION AND NUMBER
- SOIL GAS SAMPLE LOCATION AND NUMBER
- DECOMMISSIONED SOIL GAS SAMPLE LOCATION AND NUMBER
- STORM WATER SEWER SAMPLE LOCATION AND NUMBER
- APPROXIMATE SURFACE WATER SAMPLE LOCATION
- ATC PHASE II ESA BORING LOCATION AND NUMBER
- SUB-SLAB SOIL GAS SAMPLE NUMBER AND LOCATION
- INDOOR AIR SAMPLE NUMBER AND LOCATION
- FLOODPLAIN / WOODED WETLAND AREA
- PRB LOCATION
- FENCE LINE

NOTES

- BASE MAP DEVELOPED FROM SITE PLAN PROVIDED BY THE CITY OF TECUMSEH, DRAWING NO. CITY.DWG, MARCH 2009.
- GROUND TOPOGRAPHY BASED OFF 7.5 MINUTE U.S.G.S TOPOGRAPHIC QUADRANGLE MAP AND GROUND SURVEY DATA.



NO.	BY	DATE	REVISION	SEM	APPTD.
3					
2	DGS	02/19/13	REVISED INVESTIGATION LOCATIONS		
1	DGS	02/19/13	REVISED INVESTIGATION LOCATIONS		
FORMER TECUMSEH PRODUCTS SITE TECUMSEH, MICHIGAN					
SITE LAYOUT AND SAMPLE LOCATIONS					
DRAWN BY: DGS		SCALE: AS INDICATED		PROJ. NO: 004304.0001.02	
CHECKED BY: SEM		DATE PRINTED: 04/08/2014		FILE NO: 004304.0001.02.dwg	
APPROVED BY: GC		DATE: OCTOBER 2014		FIGURE 1	
			1540 Eisenhower Place Ann Arbor, MI 48108 Phone: 734.971.7080 Fax: 734.971.9022		

J:\TRC\Tecumseh Products\Tecumseh Michigan\004304\0001\02.dwg
 Drawing Name: SITE LAYOUT AND SAMPLE LOCATIONS
 Operator Name: BTABLE: DVAH:
 Date: 10/20/14
 Plot Date: October 8, 2014
 Plot Time: 8:22 AM
 Plot Size: 11x17
 Plot Scale: 1:1
 Plot Orientation: Landscape
 Plot Title: 004304.dwg

Technical Memorandum

Attachment 1 Laboratory Analytical Data

11 August 2014

Ms. Stacy Metz
TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108



H&P Project: TRC072814-16
Client Project: 004308.0001 Phase 1 / Tecumseh, MI

Dear Ms. Stacy Metz:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 28-Jul-14 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody

Unless otherwise noted, all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

A handwritten signature in cursive script that reads "Janis Villarreal".

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. operates under CA Environmental Lab Accreditation Program Numbers 2579, 2740, 2741, 2742, 2743, 2745 and 2754. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-14R	E407104-01	Vapor	22-Jul-14	28-Jul-14
SG-12R	E407104-02	Vapor	22-Jul-14	28-Jul-14
SG-05	E407104-03	Vapor	22-Jul-14	28-Jul-14
SG-06	E407104-04	Vapor	22-Jul-14	28-Jul-14
TVP-02	E407104-05	Vapor	23-Jul-14	28-Jul-14
SG-07	E407104-06	Vapor	23-Jul-14	28-Jul-14
SG-16	E407104-07	Vapor	23-Jul-14	28-Jul-14
SG-17	E407104-08	Vapor	23-Jul-14	28-Jul-14
SG-18	E407104-09	Vapor	23-Jul-14	28-Jul-14
SG-10	E407104-10	Vapor	23-Jul-14	28-Jul-14
SG-11	E407104-11	Vapor	23-Jul-14	28-Jul-14
SG-13	E407104-12	Vapor	23-Jul-14	28-Jul-14
SG-19	E407104-13	Vapor	23-Jul-14	28-Jul-14
SG-15R	E407104-14	Vapor	23-Jul-14	28-Jul-14
SG-01	E407104-15	Vapor	24-Jul-14	28-Jul-14
SG-02	E407104-16	Vapor	24-Jul-14	28-Jul-14
SG-03R	E407104-17	Vapor	24-Jul-14	28-Jul-14
SG-04	E407104-18	Vapor	24-Jul-14	28-Jul-14
SG-08	E407104-19	Vapor	24-Jul-14	28-Jul-14
SG-09	E407104-20	Vapor	24-Jul-14	28-Jul-14
SG-20	E407104-21	Vapor	24-Jul-14	28-Jul-14
SG-21	E407104-22	Vapor	24-Jul-14	28-Jul-14
DUP-01	E407104-23	Vapor	23-Jul-14	28-Jul-14
DUP-02	E407104-24	Vapor	24-Jul-14	28-Jul-14

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

DETECTIONS SUMMARY

Sample ID: **SG-14R**

Laboratory ID: **E407104-01**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1-Difluoroethane (LCC)	1500000	3600	ppbv	EPA TO-15	E

Sample ID: **SG-12R**

Laboratory ID: **E407104-02**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1-Difluoroethane (LCC)	2200000	3600	ppbv	EPA TO-15	E
Trichloroethene	1.3	1.0	ppbv	EPA TO-15	

Sample ID: **SG-05**

Laboratory ID: **E407104-03**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	5.0	1.0	ppbv	EPA TO-15	
Trichloroethene	14	1.0	ppbv	EPA TO-15	
Tetrachloroethene	1.3	1.0	ppbv	EPA TO-15	

Sample ID: **SG-06**

Laboratory ID: **E407104-04**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	7.9	1.0	ppbv	EPA TO-15	
Trichloroethene	59	1.0	ppbv	EPA TO-15	
Tetrachloroethene	59	1.0	ppbv	EPA TO-15	

Sample ID: **TVP-02**

Laboratory ID: **E407104-05**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	2.9	1.0	ppbv	EPA TO-15	
Trichloroethene	20	1.0	ppbv	EPA TO-15	
Tetrachloroethene	18	1.0	ppbv	EPA TO-15	

Sample ID: **SG-07**

Laboratory ID: **E407104-06**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	11	1.0	ppbv	EPA TO-15	
Trichloroethene	320	1.0	ppbv	EPA TO-15	
Tetrachloroethene	210	1.0	ppbv	EPA TO-15	

TRC Environmental - MI
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Project: TRC072814-16
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Project Manager: Ms. Stacy Metz

Reported:
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Sample ID: **SG-16**

Laboratory ID: **E407104-07**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Trichloroethene	1.1	1.0	ppbv	EPA TO-15	
Tetrachloroethene	1.3	1.0	ppbv	EPA TO-15	

Sample ID: **SG-17**

Laboratory ID: **E407104-08**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	330	1.0	ppbv	EPA TO-15	
Tetrachloroethene	4.6	1.0	ppbv	EPA TO-15	

Sample ID: **SG-18**

Laboratory ID: **E407104-09**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Trichloroethene	1.9	1.0	ppbv	EPA TO-15	
Tetrachloroethene	2.1	1.0	ppbv	EPA TO-15	

Sample ID: **SG-10**

Laboratory ID: **E407104-10**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
No Detections Reported					

Sample ID: **SG-11**

Laboratory ID: **E407104-11**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1-Difluoroethane (LCC)	7400	3600	ppbv	EPA TO-15	E

Sample ID: **SG-13**

Laboratory ID: **E407104-12**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1-Difluoroethane (LCC)	10000	3600	ppbv	EPA TO-15	E
trans-1,2-Dichloroethene	6.6	2.0	ppbv	EPA TO-15	
cis-1,2-Dichloroethene	1.4	1.0	ppbv	EPA TO-15	

Sample ID: **SG-19**

Laboratory ID: **E407104-13**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
No Detections Reported					

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Sample ID: **SG-15R**

Laboratory ID: **E407104-14**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,1-Difluoroethane (LCC)	4400	3600		ppbv	EPA TO-15	E
Trichloroethene	8.5	1.0		ppbv	EPA TO-15	
Tetrachloroethene	1.4	1.0		ppbv	EPA TO-15	

Sample ID: **SG-01**

Laboratory ID: **E407104-15**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,1,1-Trichloroethane	28	5.0		ppbv	EPA TO-15	
Trichloroethene	890	5.0		ppbv	EPA TO-15	
Tetrachloroethene	140	5.0		ppbv	EPA TO-15	

Sample ID: **SG-02**

Laboratory ID: **E407104-16**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
trans-1,2-Dichloroethene	47	20		ppbv	EPA TO-15	
1,1-Dichloroethane	31	10		ppbv	EPA TO-15	
cis-1,2-Dichloroethene	120	10		ppbv	EPA TO-15	
1,1,1-Trichloroethane	1300	10		ppbv	EPA TO-15	
Trichloroethene	5600	100		ppbv	EPA TO-15	
Tetrachloroethene	5400	100		ppbv	EPA TO-15	

Sample ID: **SG-03R**

Laboratory ID: **E407104-17**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,1,1-Trichloroethane	12	1.0		ppbv	EPA TO-15	
Trichloroethene	80	1.0		ppbv	EPA TO-15	
Tetrachloroethene	72	1.0		ppbv	EPA TO-15	

Sample ID: **SG-04**

Laboratory ID: **E407104-18**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,1-Difluoroethane (LCC)	9900	3600		ppbv	EPA TO-15	E
Tetrachloroethene	5.6	1.0		ppbv	EPA TO-15	

Sample ID: **SG-08**

Laboratory ID: **E407104-19**

Analyte	Result	Reporting		Units	Method	Notes
		Limit				
1,1,1-Trichloroethane	4.0	1.0		ppbv	EPA TO-15	
Trichloroethene	5.2	1.0		ppbv	EPA TO-15	

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Sample ID: **SG-08**

Laboratory ID: **E407104-19**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
Tetrachloroethene	2.2	1.0	ppbv	EPA TO-15	

Sample ID: **SG-09**

Laboratory ID: **E407104-20**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	23	1.0	ppbv	EPA TO-15	
Trichloroethene	99	1.0	ppbv	EPA TO-15	

Sample ID: **SG-20**

Laboratory ID: **E407104-21**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
No Detections Reported					

Sample ID: **SG-21**

Laboratory ID: **E407104-22**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
No Detections Reported					

Sample ID: **DUP-01**

Laboratory ID: **E407104-23**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	8.6	1.0	ppbv	EPA TO-15	
Trichloroethene	300	1.0	ppbv	EPA TO-15	
Tetrachloroethene	190	1.0	ppbv	EPA TO-15	

Sample ID: **DUP-02**

Laboratory ID: **E407104-24**

Analyte	Result	Reporting	Units	Method	Notes
		Limit			
1,1,1-Trichloroethane	3.9	1.0	ppbv	EPA TO-15	
Trichloroethene	5.2	1.0	ppbv	EPA TO-15	
Tetrachloroethene	1.8	1.0	ppbv	EPA TO-15	

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-14R (E407104-01) Vapor Sampled: 22-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	1500000	3600	ppbv	100	EH40303	04-Aug-14	05-Aug-14	EPA TO-15	E
Vinyl chloride	ND	100	"	"	"	"	"	"	
1,1-Dichloroethene	ND	100	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	200	"	"	"	"	"	"	
1,1-Dichloroethane	ND	100	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	100	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	100	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	100	"	"	"	"	"	"	
Trichloroethene	ND	100	"	"	"	"	"	"	
Tetrachloroethene	ND	100	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 93.1 % 76-134 " " " "

Surrogate: Toluene-d8 98.2 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 104 % 77-127 " " " "

SG-12R (E407104-02) Vapor Sampled: 22-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	2200000	3600	ppbv	100	EG43104	31-Jul-14	04-Aug-14	EPA TO-15	E
Vinyl chloride	ND	1.0	"	1	"	"	31-Jul-14	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	1.3	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 101 % 76-134 " " " "

Surrogate: Toluene-d8 104 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 105 % 77-127 " " " "

TRC Environmental - MI
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Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-05 (E407104-03) Vapor Sampled: 22-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	5.0	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	14	1.0	"	"	"	"	"	"	
Tetrachloroethene	1.3	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 101 % 76-134 " " " "

Surrogate: Toluene-d8 103 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 104 % 77-127 " " " "

SG-06 (E407104-04) Vapor Sampled: 22-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	7.9	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	59	1.0	"	"	"	"	"	"	
Tetrachloroethene	59	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 102 % 76-134 " " " "

Surrogate: Toluene-d8 105 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 105 % 77-127 " " " "

TRC Environmental - MI
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
TVP-02 (E407104-05) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	2.9	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	20	1.0	"	"	"	"	"	"	
Tetrachloroethene	18	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 104 % 76-134 " " " "

Surrogate: Toluene-d8 104 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 105 % 77-127 " " " "

SG-07 (E407104-06) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	11	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	320	1.0	"	"	"	"	"	"	
Tetrachloroethene	210	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 104 % 76-134 " " " "

Surrogate: Toluene-d8 104 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 104 % 77-127 " " " "

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-16 (E407104-07) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	A, E
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	1.1	1.0	"	"	"	"	"	"	
Tetrachloroethene	1.3	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 101 % 76-134 " " " "

Surrogate: Toluene-d8 105 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 102 % 77-127 " " " "

SG-17 (E407104-08) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	330	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	4.6	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 102 % 76-134 " " " "

Surrogate: Toluene-d8 101 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 103 % 77-127 " " " "

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Reported:
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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-18 (E407104-09) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	1.9	1.0	"	"	"	"	"	"	
Tetrachloroethene	2.1	1.0	"	"	"	"	"	"	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	102 %	76-134	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>	104 %	78-125	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>	102 %	77-127	"	"	"	"	"	"

SG-10 (E407104-10) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

<i>Surrogate: 1,2-Dichloroethane-d4</i>	104 %	76-134	"	"	"	"	"	"
<i>Surrogate: Toluene-d8</i>	103 %	78-125	"	"	"	"	"	"
<i>Surrogate: 4-Bromofluorobenzene</i>	104 %	77-127	"	"	"	"	"	"

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Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-11 (E407104-11) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	7400	3600	ppbv	1	EG43104	31-Jul-14	31-Jul-14	EPA TO-15	E
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 104 % 76-134 " " " "

Surrogate: Toluene-d8 102 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 104 % 77-127 " " " "

SG-13 (E407104-12) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	10000	3600	ppbv	1	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	E
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	6.6	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	1.4	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 104 % 76-134 " " " "

Surrogate: Toluene-d8 104 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 103 % 77-127 " " " "

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-19 (E407104-13) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 100 % 76-134 " " " "

Surrogate: Toluene-d8 103 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 100 % 77-127 " " " "

SG-15R (E407104-14) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14

1,1-Difluoroethane (LCC)	4400	3600	ppbv	1	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	E
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	8.5	1.0	"	"	"	"	"	"	
Tetrachloroethene	1.4	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 101 % 76-134 " " " "

Surrogate: Toluene-d8 107 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 106 % 77-127 " " " "

TRC Environmental - MI
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Project: TRC072814-16
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Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-01 (E407104-15) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	5	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	
Vinyl chloride	ND	5.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	5.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	10	"	"	"	"	"	"	
1,1-Dichloroethane	ND	5.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	5.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	28	5.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	5.0	"	"	"	"	"	"	
Trichloroethene	890	5.0	"	"	"	"	"	"	
Tetrachloroethene	140	5.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 103 % 76-134 " " " "

Surrogate: Toluene-d8 103 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 102 % 77-127 " " " "

SG-02 (E407104-16) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	10	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	
Vinyl chloride	ND	10	"	"	"	"	"	"	
1,1-Dichloroethene	ND	10	"	"	"	"	"	"	
trans-1,2-Dichloroethene	47	20	"	"	"	"	"	"	
1,1-Dichloroethane	31	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	120	10	"	"	"	"	"	"	
1,1,1-Trichloroethane	1300	10	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	10	"	"	"	"	"	"	
Trichloroethene	5600	100	"	100	"	"	04-Aug-14	"	
Tetrachloroethene	5400	100	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 98.4 % 76-134 " " 01-Aug-14 "

Surrogate: Toluene-d8 102 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 105 % 77-127 " " " "

TRC Environmental - MI
1540 Eisenhower Place
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Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-03R (E407104-17) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	E
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	12	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	80	1.0	"	"	"	"	"	"	
Tetrachloroethene	72	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 104 % 76-134 " " " "

Surrogate: Toluene-d8 103 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 105 % 77-127 " " " "

SG-04 (E407104-18) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	9900	3600	ppbv	1	EG43104	31-Jul-14	01-Aug-14	EPA TO-15	E
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	5.6	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 101 % 76-134 " " " "

Surrogate: Toluene-d8 102 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 106 % 77-127 " " " "

TRC Environmental - MI
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Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-08 (E407104-19) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EH40303	04-Aug-14	04-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	4.0	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	5.2	1.0	"	"	"	"	"	"	
Tetrachloroethene	2.2	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 106 % 76-134 " " " "

Surrogate: Toluene-d8 104 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 105 % 77-127 " " " "

SG-09 (E407104-20) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EH40303	04-Aug-14	04-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	23	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	99	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 106 % 76-134 " " " "

Surrogate: Toluene-d8 106 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 104 % 77-127 " " " "

TRC Environmental - MI
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Project: TRC072814-16
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Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-20 (E407104-21) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EH40303	04-Aug-14	04-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 105 % 76-134 " " " "

Surrogate: Toluene-d8 99.8 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 100 % 77-127 " " " "

SG-21 (E407104-22) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EH40706	07-Aug-14	07-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 112 % 76-134 " " " "

Surrogate: Toluene-d8 100 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 92.9 % 77-127 " " " "

TRC Environmental - MI
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Project: TRC072814-16
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Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
DUP-01 (E407104-23) Vapor Sampled: 23-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EH40706	07-Aug-14	07-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	8.6	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	300	1.0	"	"	"	"	"	"	
Tetrachloroethene	190	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 113 % 76-134 " " " "

Surrogate: Toluene-d8 102 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 95.1 % 77-127 " " " "

DUP-02 (E407104-24) Vapor Sampled: 24-Jul-14 Received: 28-Jul-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EH40706	07-Aug-14	07-Aug-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	3.9	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	5.2	1.0	"	"	"	"	"	"	
Tetrachloroethene	1.8	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 104 % 76-134 " " " "

Surrogate: Toluene-d8 103 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 98.9 % 77-127 " " " "

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Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EG43104 - TO-15

Blank (EG43104-BLK1)

Prepared & Analyzed: 31-Jul-14

1,1-Difluoroethane (LCC)	ND	3600	ppbv							
Vinyl chloride	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,1-Dichloroethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
1,2-Dichloroethane (EDC)	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.6		"	50.2		101	76-134			
<i>Surrogate: Toluene-d8</i>	50.8		"	49.8		102	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	53.1		"	50.2		106	77-127			

LCS (EG43104-BS1)

Prepared & Analyzed: 31-Jul-14

Vinyl chloride	17	1.0	ppbv	20.1		85.8	70-130			
1,1-Dichloroethene	18	1.0	"	20.1		87.7	70-130			
trans-1,2-Dichloroethene	16	2.0	"	20.1		81.2	70-130			
1,1-Dichloroethane	19	1.0	"	20.1		94.7	70-130			
cis-1,2-Dichloroethene	19	1.0	"	19.9		93.9	70-130			
1,1,1-Trichloroethane	20	1.0	"	20.2		99.3	70-130			
1,2-Dichloroethane (EDC)	19	1.0	"	20.1		95.2	70-130			
Trichloroethene	19	1.0	"	20.1		95.1	70-130			
Tetrachloroethene	19	1.0	"	20.1		95.6	70-130			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	50.4		"	50.2		101	76-134			
<i>Surrogate: Toluene-d8</i>	51.2		"	49.8		103	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	57.3		"	50.2		114	77-127			

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Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EG43104 - TO-15

LCS Dup (EG43104-BSD1)

Prepared & Analyzed: 31-Jul-14

Vinyl chloride	17	1.0	ppbv	20.1		84.0	70-130	2.11	25	
1,1-Dichloroethene	17	1.0	"	20.1		82.9	70-130	5.66	25	
trans-1,2-Dichloroethene	17	2.0	"	20.1		84.0	70-130	3.50	25	
1,1-Dichloroethane	19	1.0	"	20.1		94.7	70-130	0.00	25	
cis-1,2-Dichloroethene	19	1.0	"	19.9		93.7	70-130	0.268	25	
1,1,1-Trichloroethane	19	1.0	"	20.2		94.0	70-130	5.44	25	
1,2-Dichloroethane (EDC)	18	1.0	"	20.1		91.2	70-130	4.22	25	
Trichloroethene	18	1.0	"	20.1		91.5	70-130	3.89	25	
Tetrachloroethene	19	1.0	"	20.1		92.5	70-130	3.28	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>49.2</i>		<i>"</i>	<i>50.2</i>		<i>98.1</i>	<i>76-134</i>			
<i>Surrogate: Toluene-d8</i>	<i>51.2</i>		<i>"</i>	<i>49.8</i>		<i>103</i>	<i>78-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>55.9</i>		<i>"</i>	<i>50.2</i>		<i>111</i>	<i>77-127</i>			

Batch EH40303 - TO-15

Blank (EH40303-BLK1)

Prepared & Analyzed: 04-Aug-14

1,1-Difluoroethane (LCC)	ND	3600	ppbv							
Vinyl chloride	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,1-Dichloroethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
1,2-Dichloroethane (EDC)	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>49.8</i>		<i>"</i>	<i>50.2</i>		<i>99.2</i>	<i>76-134</i>			
<i>Surrogate: Toluene-d8</i>	<i>49.6</i>		<i>"</i>	<i>49.8</i>		<i>99.6</i>	<i>78-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>52.2</i>		<i>"</i>	<i>50.2</i>		<i>104</i>	<i>77-127</i>			

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Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EH40303 - TO-15

LCS (EH40303-BS1)

Prepared & Analyzed: 04-Aug-14

Vinyl chloride	16	1.0	ppbv	20.1		79.2	70-130			
1,1-Dichloroethene	15	1.0	"	20.1		75.3	70-130			
trans-1,2-Dichloroethene	13	2.0	"	20.1		63.4	70-130			QL-1L
1,1-Dichloroethane	16	1.0	"	20.1		81.7	70-130			
cis-1,2-Dichloroethene	15	1.0	"	19.9		76.6	70-130			
1,1,1-Trichloroethane	19	1.0	"	20.2		92.1	70-130			
1,2-Dichloroethane (EDC)	18	1.0	"	20.1		87.6	70-130			
Trichloroethene	16	1.0	"	20.1		81.8	70-130			
Tetrachloroethene	17	1.0	"	20.1		83.2	70-130			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	52.5		"	50.2		105	76-134			
<i>Surrogate: Toluene-d8</i>	51.2		"	49.8		103	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	54.9		"	50.2		109	77-127			

LCS Dup (EH40303-BSD1)

Prepared & Analyzed: 04-Aug-14

Vinyl chloride	17	1.0	ppbv	20.1		85.7	70-130	7.92	25	
1,1-Dichloroethene	15	1.0	"	20.1		76.7	70-130	1.77	25	
trans-1,2-Dichloroethene	14	2.0	"	20.1		69.4	70-130	9.07	25	QL-1L
1,1-Dichloroethane	17	1.0	"	20.1		82.3	70-130	0.790	25	
cis-1,2-Dichloroethene	16	1.0	"	19.9		79.2	70-130	3.29	25	
1,1,1-Trichloroethane	18	1.0	"	20.2		88.6	70-130	3.79	25	
1,2-Dichloroethane (EDC)	17	1.0	"	20.1		87.1	70-130	0.514	25	
Trichloroethene	17	1.0	"	20.1		83.0	70-130	1.57	25	
Tetrachloroethene	17	1.0	"	20.1		83.8	70-130	0.715	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.4		"	50.2		102	76-134			
<i>Surrogate: Toluene-d8</i>	50.5		"	49.8		101	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	54.9		"	50.2		109	77-127			

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EH40706 - TO-15

Prepared & Analyzed: 07-Aug-14

Blank (EH40706-BLK1)

1,1-Difluoroethane (LCC)	ND	3600	ppbv							
Vinyl chloride	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,1-Dichloroethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
1,2-Dichloroethane (EDC)	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	55.3		"	50.2		110	76-134			
<i>Surrogate: Toluene-d8</i>	50.6		"	49.8		102	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	49.6		"	50.2		98.7	77-127			

LCS (EH40706-BS1)

Prepared & Analyzed: 07-Aug-14

Vinyl chloride	17	1.0	ppbv	20.1		82.5	70-130			
1,1-Dichloroethene	17	1.0	"	20.1		84.8	70-130			
trans-1,2-Dichloroethene	14	2.0	"	20.1		67.9	70-130			QL-1L
1,1-Dichloroethane	16	1.0	"	20.1		80.7	70-130			
cis-1,2-Dichloroethene	15	1.0	"	19.9		77.7	70-130			
1,1,1-Trichloroethane	19	1.0	"	20.2		94.0	70-130			
1,2-Dichloroethane (EDC)	19	1.0	"	20.1		94.3	70-130			
Trichloroethene	17	1.0	"	20.1		84.6	70-130			
Tetrachloroethene	17	1.0	"	20.1		83.1	70-130			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	55.2		"	50.2		110	76-134			
<i>Surrogate: Toluene-d8</i>	50.4		"	49.8		101	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	53.4		"	50.2		106	77-127			

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EH40706 - TO-15

LCS Dup (EH40706-BSD1)

Prepared & Analyzed: 07-Aug-14

Vinyl chloride	17	1.0	ppbv	20.1		85.3	70-130	3.45	25	
1,1-Dichloroethene	16	1.0	"	20.1		79.8	70-130	6.11	25	
trans-1,2-Dichloroethene	14	2.0	"	20.1		67.4	70-130	0.810	25	QL-1L
1,1-Dichloroethane	17	1.0	"	20.1		83.5	70-130	3.40	25	
cis-1,2-Dichloroethene	16	1.0	"	19.9		79.9	70-130	2.74	25	
1,1,1-Trichloroethane	19	1.0	"	20.2		94.2	70-130	0.264	25	
1,2-Dichloroethane (EDC)	19	1.0	"	20.1		92.7	70-130	1.65	25	
Trichloroethene	17	1.0	"	20.1		84.8	70-130	0.294	25	
Tetrachloroethene	18	1.0	"	20.1		87.7	70-130	5.36	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>54.7</i>		<i>"</i>	<i>50.2</i>		<i>109</i>	<i>76-134</i>			
<i>Surrogate: Toluene-d8</i>	<i>51.0</i>		<i>"</i>	<i>49.8</i>		<i>102</i>	<i>78-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>52.0</i>		<i>"</i>	<i>50.2</i>		<i>104</i>	<i>77-127</i>			

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Notes and Definitions

- QL-1L The LCS and/or LCSD recoveries fell below the established control specifications for this analyte. Any result for this compound is qualified and should be considered biased low.
- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
- A The concentration was above the calibration range but below the reporting limit.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

TRC Environmental - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC072814-16
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
11-Aug-14 09:04

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory (Certification # L11-175) in accordance with the DoD-ELAP program. H&P is approved by the State of Arizona under Certification Numbers AZM758 and AZ0779. H&P is approved as an Environmental Laboratory in conformance with the Environmental Laboratory Accreditation Program (CA) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste for the following methods:

Certificate# 2741, 2743, 2579, 2754 & 2740 approved for EPA 8260 and LUFT GC/MS
Certificate# 2742, 2745, & 2741 approved for LUFT
Certificate# 2745 & 2742 approved for EPA 418.1

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the National Environmental Accreditation Conference Standards for the category Environmental Analysis Air and Emissions for the following analytes and methods:

Hexachlorobutadiene by EPA TO-15 & TO-14A	1,3-Dichlorobenzene by EPA TO-15 & TO-14A
1,2,4-Trichlorobenzene by EPA TO-15 & TO-14A	Trichlorofluoromethane by EPA TO-14A
1,2-Dichlorobenzene by EPA TO-15 & TO-14A	Naphthalene by H&P SOP TO-15/GC-MS
Dichlorotetrafluoroethane by EPA TO-14A	1,2-Dibromoethane (EDB) by EPA TO-15 & TO-14A
1,4-Dichlorobenzene by EPA TO-15 & TO-14A	1,2-Dibromo-3-chloropropane by EPA TO-15
Benzene by EPA TO-15 & TO-14A	1,3-Butadiene by EPA TO-15
Chlorobenzene by EPA TO-15 & TO-14A	1,1,2-Trichlorotrifluoroethane by EPA TO-14A
Ethyl benzene by EPA TO-15 & TO-14A	Carbon disulfide by EPA TO-15
Styrene by EPA TO-15 & TO-14A	1,4-Dioxane by EPA TO-15
Toluene by EPA TO-15 & TO-14A	
Total Xylenes by EPA TO-15	
1,1,1-Trichloroethane by EPA TO-15 & TO-14A	
1,1,2,2-Tetrachloroethane by EPA TO-15 & TO-14A	
1,1,2-Trichloroethane by EPA TO-15 & TO-14A	
1,1-Dichloroethane by EPA TO-15 & TO-14A	
1,1-Dichloroethene by EPA TO-15 & TO-14A	
1,2-Dichloroethane by EPA TO-15 & TO-14A	
1,2-Dichloropropane by EPA TO-15 & TO-14A	
Benzyl Chloride by EPA TO-15 & TO-14A	
Bromoform by EPA TO-15	
Bromomethane by EPA TO-15 & TO-14A	
Carbon tetrachloride by EPA TO-15 & TO-14A	
Chloroethane by EPA TO-15 & TO-14A	
Chloroform by EPA TO-15 & TO-14A	
Chloromethane by EPA TO-15 & TO-14A	
cis-1,2-Dichloroethene by EPA TO-15 & TO-14A	
cis-1,3-Dichloropropene by EPA TO-15 & TO-14A	
Methylene chloride by EPA TO -15 & TO-14A	
Tetrachloroethane by EPA TO-15 & TO-14A	
trans-1,2-Dichloroethene by EPA TO-15	
trans-1,3-Dichloropropene by EPA TO-15 & TO-14A	
Trichloroethene by EPA TO-15 & TO-14A	
Vinyl chloride by EPA TO -15	
2-Butanone by EPA TO-15	
4-Methyl-2-Pentanone by EPA TO-15	
Hexane by EPA TO-15	
Methyl tert-butyl ether by EPA TO-15	
Vinyl acetate by EPA TO-15	

This certification applies to samples analyzed in summa canisters.

Lab Client and Project Information		
Lab Client/Consultant:	TRC Solutions	Project Name / #: 004308.0001 Phase 1
Lab Client Project Manager:	Stacy Metz	Project Location: Tecumseh, MI
Lab Client Address:	1540 Eisenhower PI	Report E-Mail(s): rsortor@trcsolutions.com
Lab Client City, State, Zip:	Ann Arbor, MI 48108	smetz@trcsolutions.com
Phone Number:	734-585-7825	
Reporting Requirements	Turnaround Time	Sampler Information
<input type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input checked="" type="checkbox"/> Level IV <input checked="" type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> 5-7 day Stnd <input type="checkbox"/> 24-Hr Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Mobile Lab <input type="checkbox"/> 48-Hr Rush <input type="checkbox"/> Other: _____	Sampler(s): <u>Michael N. Sotter</u> Signature: <u>Michael N. Sotter</u> Date: <u>7/25/14</u>

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>7/23/14</u>	Control #: <u>140535.01</u>
H&P Project # <u>TRC072814-16</u>	
Lab Work Order # <u>E407104</u>	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: <u>11167</u>	Temp: <u>RT</u>
Outside Lab:	
Receipt Notes/Tracking #: <u>7706 9311 3723</u> <u>7706 9311 3355</u>	
Lab PM Initials: <u>SN</u>	

Additional Instructions to Laboratory:

Check if Project Analyte List is included:
* Preferred VOC units (please choose one):
 µg/L µg/m³ ppbv ppmv

Purchase Order #54219
Project Analyte List: **PCE, TCE, 1,1-DCE, 1,2-cis-DCE, 1,2-trans-DCE, vinyl chloride, 1,1,1-TCA, 1,1-DCA, 1,2-DCA and the tracer 1,1-DFA**

SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List		VOCs Short List / Project List		Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15 <input type="checkbox"/> TO-17m	TPHV as Gas <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	TPHV as Diesel (sorbet tube) <input type="checkbox"/> TO-17m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SV/m <input type="checkbox"/> TO-15m	Leak Check Compound <input checked="" type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2	VOCs Per Additional Instructions <input type="checkbox"/> 8260SV <input checked="" type="checkbox"/> TO-15	
								<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15	<input type="checkbox"/> 8260SV	<input type="checkbox"/> TO-15										
S6-11	NA	7/23/14	1450-1504	SV	1L Summa	172	-1.75													X	X
S6-13		7/23/14	1527-1530			445	-0.84														
S6-19		7/23/14	1551-1609			434	-1.59														
S6-15R		7/23/14	1634-1646			431	-2.63														
S6-01		7/24/14	1132-1200			185	-1.85														
S6-02		7/24/14	1328-1357			200	-1.97														
S6-03R		7/24/14	1414-1435			363	-2.05														
S6-04		7/24/14	1459-1510			175	-1.57														
S6-08		7/24/14	1539-1618			422	-1.15														
S6-09		7/24/14	1614-1624			412	-2.65														

Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:
Approved/Relinquished by:	Company:	Date:	Time:	Received by: <u>Chungyue</u>	Company: <u>H&P</u>	Date: <u>7/28/14</u>	Time: <u>14:00</u>
Approved/Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Lab Client and Project Information		
Lab Client/Consultant:	TRC Solutions	Project Name / #: 004308.0001 Phase 1
Lab Client Project Manager:	Stacy Metz	Project Location: Tecumseh, MI
Lab Client Address:	1540 Eisenhower Pl	Report E-Mail(s): rsortor@trcsolutions.com
Lab Client City, State, Zip:	Ann Arbor, MI 48108	smetz@trcsolutions.com
Phone Number:	734-585-7825	
Reporting Requirements	Turnaround Time	Sampler Information
<input type="checkbox"/> Standard Report <input type="checkbox"/> Level III <input checked="" type="checkbox"/> Level IV <input checked="" type="checkbox"/> Excel EDD <input type="checkbox"/> Other EDD: _____ <input type="checkbox"/> CA Geotracker Global ID: _____	<input checked="" type="checkbox"/> 5-7 day Stnd <input type="checkbox"/> 24-Hr Rush <input type="checkbox"/> 3-day Rush <input type="checkbox"/> Mobile Lab <input type="checkbox"/> 48-Hr Rush <input type="checkbox"/> Other: _____	Sampler(s): <u>Rachel Sortor</u> Signature: <u>Rachel T. Sortor</u> Date: <u>7/25/14</u>

Sample Receipt (Lab Use Only)	
Date Rec'd: <u>7/23/14</u>	Control #: <u>140535.d</u>
H&P Project # <u>TRC072814-16</u>	
Lab Work Order # <u>E407104</u>	
Sample Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below	
Receipt Gauge ID: <u>11167</u>	Temp: <u>RT</u>
Outside Lab:	
Receipt Notes/Tracking #: <u>7706 9311 3723</u> <u>7706 9311 3355</u> Lab PM Initials: <u>SN</u>	

Additional Instructions to Laboratory:		Purchase Order #54219		Project Analyte List: <i>PCE, TCE, 1,1-DCE, 1,2-cis-DCE, 1,2-trans-DCE, vinyl chloride, 1,1,1-TCA, 1,1-DCA, 1,2-DCA and the tracer 1,1-DFA</i>		VOCs Standard Full List		VOCs Short List / Project List		Oxygenates		Naphthalene		TPHv as Gas		TPHv as Diesel (sorber tube)		Aromatic/Aliphatic Fractions		Leak Check Compound		Methane by EPA 8015m		Fixed Gases by ASTM D1945		VOCs Per Additional Instructions	
<input checked="" type="checkbox"/> Check if Project Analyte List is Included: * Preferred VOC units (please choose one): <input type="checkbox"/> µg/L <input type="checkbox"/> µg/m ³ <input checked="" type="checkbox"/> ppbv <input type="checkbox"/> ppmv						<input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15 <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15		<input type="checkbox"/> Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15		<input type="checkbox"/> Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15 <input type="checkbox"/> TO-17m		<input type="checkbox"/> TPHv as Gas <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m		<input type="checkbox"/> TPHv as Diesel (sorber tube) <input type="checkbox"/> TO-17m		<input type="checkbox"/> Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m		<input checked="" type="checkbox"/> Leak Check Compound <input type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He		<input type="checkbox"/> Methane by EPA 8015m		<input type="checkbox"/> Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2		<input type="checkbox"/> VOCs Per Additional Instructions <input checked="" type="checkbox"/> 8260SV <input checked="" type="checkbox"/> TO-15			
SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac																				
SG-20	NA	7/24/14	1647-1713	SV	1L Summa	183	-1.19																				
SG-21		7/24/14	1658-1715			435	-0.77																				
DUP-01		7/23/14	XXXX			420	-1.51																				
DUP-02		7/24/14	XXXX			410	-0.89																				
Approved/Relinquished by: <u>Rachel T. Sortor</u>		Company: <u>TRC</u>	Date: <u>7/25/14</u>	Time: <u>1040</u>	Received by: <u>Fed Ex</u>		Company: <u>Fed Ex</u>	Date: <u>7/25/14</u>	Time: <u>1040</u>	Approved/Relinquished by: <u>Neungyeon</u>		Company: <u>H&P</u>	Date: <u>7/23/14</u>	Time: <u>14:00</u>	Approved/Relinquished by:		Company:	Date:	Time:								

08 October 2014

Ms. Stacy Metz
TRC Solutions - MI
1540 Eisenhower Place
Ann Arbor, MI 48108



H&P Project: TRC092514-11
Client Project: 004308.0001 Phase 1 / Tecumseh, MI

Dear Ms. Stacy Metz:

Enclosed is the analytical report for the above referenced project. The data herein applies to samples as received by H&P Mobile Geochemistry, Inc. on 25-Sep-14 which were analyzed in accordance with the attached Chain of Custody record(s).

The results for all sample analyses and required QA/QC analyses are presented in the following sections and summarized in the documents:

- Sample Summary
- Case Narrative (if applicable)
- Sample Results
- Quality Control Summary
- Notes and Definitions / Appendix
- Chain of Custody

Unless otherwise noted, all analyses were performed and reviewed in compliance with our Quality Systems Manual and Standard Operating Procedures. This report shall not be reproduced, except in full, without the written approval of H&P Mobile Geochemistry, Inc.

We at H&P Mobile Geochemistry, Inc. sincerely appreciate the opportunity to provide analytical services to you on this project. If you have any questions or concerns regarding this analytical report, please contact me at your convenience at 760-804-9678.

Sincerely,

A handwritten signature in cursive script that reads "Janis Villarreal".

Janis Villarreal
Laboratory Director

H&P Mobile Geochemistry, Inc. operates under CA Environmental Lab Accreditation Program Numbers 2579, 2740, 2741, 2742, 2743, 2745 and 2754. National Environmental Laboratory Accreditation Conference (NELAC) Standards Lab #11845

TRC Solutions - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC092514-11
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
08-Oct-14 14:29

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
SG-03R	E409117-01	Vapor	22-Sep-14	25-Sep-14
SG-02	E409117-02	Vapor	22-Sep-14	25-Sep-14

TRC Solutions - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC092514-11
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
08-Oct-14 14:29

DETECTIONS SUMMARY

Sample ID: **SG-03R**

Laboratory ID: **E409117-01**

Analyte	Result	Reporting Limit	Units	Method	Notes
No Detections Reported					

Sample ID: **SG-02**

Laboratory ID: **E409117-02**

Analyte	Result	Reporting Limit	Units	Method	Notes
1,1-Difluoroethane (LCC)	16000	3600	ppbv	EPA TO-15	E
trans-1,2-Dichloroethene	38	20	ppbv	EPA TO-15	
1,1-Dichloroethane	15	10	ppbv	EPA TO-15	
cis-1,2-Dichloroethene	71	10	ppbv	EPA TO-15	
1,1,1-Trichloroethane	770	10	ppbv	EPA TO-15	
Trichloroethene	5000	10	ppbv	EPA TO-15	
Tetrachloroethene	2500	10	ppbv	EPA TO-15	

TRC Solutions - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC092514-11
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
08-Oct-14 14:29

Volatile Organic Compounds by EPA TO-15

H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Dilution Factor	Batch	Prepared	Analyzed	Method	Notes
SG-03R (E409117-01) Vapor Sampled: 22-Sep-14 Received: 25-Sep-14									
1,1-Difluoroethane (LCC)	ND	3600	ppbv	1	EJ40105	01-Oct-14	02-Oct-14	EPA TO-15	
Vinyl chloride	ND	1.0	"	"	"	"	"	"	
1,1-Dichloroethene	ND	1.0	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	2.0	"	"	"	"	"	"	
1,1-Dichloroethane	ND	1.0	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	1.0	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	1.0	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	1.0	"	"	"	"	"	"	
Trichloroethene	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	1.0	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 109 % 76-134 " " " "

Surrogate: Toluene-d8 110 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 95.5 % 77-127 " " " "

SG-02 (E409117-02) Vapor Sampled: 22-Sep-14 Received: 25-Sep-14									
1,1-Difluoroethane (LCC)	16000	3600	ppbv	10	EJ40105	01-Oct-14	02-Oct-14	EPA TO-15	E
Vinyl chloride	ND	10	"	"	"	"	"	"	
1,1-Dichloroethene	ND	10	"	"	"	"	"	"	
trans-1,2-Dichloroethene	38	20	"	"	"	"	"	"	
1,1-Dichloroethane	15	10	"	"	"	"	"	"	
cis-1,2-Dichloroethene	71	10	"	"	"	"	"	"	
1,1,1-Trichloroethane	770	10	"	"	"	"	"	"	
1,2-Dichloroethane (EDC)	ND	10	"	"	"	"	"	"	
Trichloroethene	5000	10	"	"	"	"	"	"	
Tetrachloroethene	2500	10	"	"	"	"	"	"	

Surrogate: 1,2-Dichloroethane-d4 98.6 % 76-134 " " " "

Surrogate: Toluene-d8 102 % 78-125 " " " "

Surrogate: 4-Bromofluorobenzene 93.5 % 77-127 " " " "

TRC Solutions - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC092514-11
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
08-Oct-14 14:29

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EJ40105 - TO-15

Blank (EJ40105-BLK1)

Prepared & Analyzed: 01-Oct-14

1,1-Difluoroethane (LCC)	ND	3600	ppbv							
Vinyl chloride	ND	1.0	"							
1,1-Dichloroethene	ND	1.0	"							
trans-1,2-Dichloroethene	ND	2.0	"							
1,1-Dichloroethane	ND	1.0	"							
cis-1,2-Dichloroethene	ND	1.0	"							
1,1,1-Trichloroethane	ND	1.0	"							
1,2-Dichloroethane (EDC)	ND	1.0	"							
Trichloroethene	ND	1.0	"							
Tetrachloroethene	ND	1.0	"							

<i>Surrogate: 1,2-Dichloroethane-d4</i>	54.3		"	50.2		108	76-134			
<i>Surrogate: Toluene-d8</i>	52.0		"	49.8		104	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	48.7		"	50.2		96.9	77-127			

LCS (EJ40105-BS1)

Prepared & Analyzed: 01-Oct-14

Vinyl chloride	17	1.0	ppbv	20.1		84.4	70-130			
1,1-Dichloroethene	19	1.0	"	20.1		95.8	70-130			
trans-1,2-Dichloroethene	16	2.0	"	20.1		79.7	70-130			
1,1-Dichloroethane	20	1.0	"	20.1		100	70-130			
cis-1,2-Dichloroethene	20	1.0	"	19.9		98.7	70-130			
1,1,1-Trichloroethane	19	1.0	"	20.2		93.2	70-130			
1,2-Dichloroethane (EDC)	19	1.0	"	20.1		94.1	70-130			
Trichloroethene	19	1.0	"	20.1		94.7	70-130			
Tetrachloroethene	16	1.0	"	20.1		80.6	70-130			

<i>Surrogate: 1,2-Dichloroethane-d4</i>	51.8		"	50.2		103	76-134			
<i>Surrogate: Toluene-d8</i>	51.2		"	49.8		103	78-125			
<i>Surrogate: 4-Bromofluorobenzene</i>	51.0		"	50.2		101	77-127			

TRC Solutions - MI
1540 Eisenhower Place
Ann Arbor, MI 48108

Project: TRC092514-11
Project Number: 004308.0001 Phase 1 / Tecumseh, MI
Project Manager: Ms. Stacy Metz

Reported:
08-Oct-14 14:29

Volatile Organic Compounds by EPA TO-15 - Quality Control
H&P Mobile Geochemistry, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch EJ40105 - TO-15

LCS Dup (EJ40105-BSD1)

Prepared & Analyzed: 01-Oct-14

Vinyl chloride	18	1.0	ppbv	20.1		87.6	70-130	3.77	25	
1,1-Dichloroethene	20	1.0	"	20.1		98.8	70-130	3.07	25	
trans-1,2-Dichloroethene	18	2.0	"	20.1		87.2	70-130	9.07	25	
1,1-Dichloroethane	20	1.0	"	20.1		101	70-130	0.446	25	
cis-1,2-Dichloroethene	20	1.0	"	19.9		98.5	70-130	0.204	25	
1,1,1-Trichloroethane	19	1.0	"	20.2		92.3	70-130	0.909	25	
1,2-Dichloroethane (EDC)	19	1.0	"	20.1		93.7	70-130	0.371	25	
Trichloroethene	19	1.0	"	20.1		93.6	70-130	1.21	25	
Tetrachloroethene	16	1.0	"	20.1		79.8	70-130	0.993	25	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>51.6</i>		<i>"</i>	<i>50.2</i>		<i>103</i>	<i>76-134</i>			
<i>Surrogate: Toluene-d8</i>	<i>50.1</i>		<i>"</i>	<i>49.8</i>		<i>101</i>	<i>78-125</i>			
<i>Surrogate: 4-Bromofluorobenzene</i>	<i>51.2</i>		<i>"</i>	<i>50.2</i>		<i>102</i>	<i>77-127</i>			

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Reported:
08-Oct-14 14:29

Notes and Definitions

- E The concentration indicated for this analyte is an estimated value above the calibration range of the instrument. This value is considered an estimate (CLP E-flag).
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

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Reported:
08-Oct-14 14:29

Appendix

H&P Mobile Geochemistry, Inc. is approved as an Environmental Testing Laboratory (Certification # L11-175) in accordance with the DoD-ELAP program. H&P is approved by the State of Arizona under Certification Numbers AZM758 and AZ0779. H&P is approved as an Environmental Laboratory in conformance with the Environmental Laboratory Accreditation Program (CA) for the category of Volatile and Semi-Volatile Organic Chemistry of Hazardous Waste for the following methods:

Certificate# 2741, 2743, 2579, 2754 & 2740 approved for EPA 8260 and LUFT GC/MS
Certificate# 2742, 2745, & 2741 approved for LUFT
Certificate# 2745 & 2742 approved for EPA 418.1

H&P Mobile Geochemistry, Inc. is approved as an Environmental Laboratory in conformance with the National Environmental Accreditation Conference Standards for the category Environmental Analysis Air and Emissions for the following analytes and methods:

Hexachlorobutadiene by EPA TO-15 & TO-14A	1,3-Dichlorobenzene by EPA TO-15 & TO-14A
1,2,4-Trichlorobenzene by EPA TO-15 & TO-14A	Trichlorofluoromethane by EPA TO-14A
1,2-Dichlorobenzene by EPA TO-15 & TO-14A	Naphthalene by H&P SOP TO-15/GC-MS
Dichlorotetrafluoroethane by EPA TO-14A	1,2-Dibromoethane (EDB) by EPA TO-15 & TO-14A
1,4-Dichlorobenzene by EPA TO-15 & TO-14A	1,2-Dibromo-3-chloropropane by EPA TO-15
Benzene by EPA TO-15 & TO-14A	1,3-Butadiene by EPA TO-15
Chlorobenzene by EPA TO-15 & TO-14A	1,1,2-Trichlorotrifluoroethane by EPA TO-14A
Ethyl benzene by EPA TO-15 & TO-14A	Carbon disulfide by EPA TO-15
Styrene by EPA TO-15 & TO-14A	1,4-Dioxane by EPA TO-15
Toluene by EPA TO-15 & TO-14A	
Total Xylenes by EPA TO-15	
1,1,1-Trichloroethane by EPA TO-15 & TO-14A	
1,1,2,2-Tetrachloroethane by EPA TO-15 & TO-14A	
1,1,2-Trichloroethane by EPA TO-15 & TO-14A	
1,1-Dichloroethane by EPA TO-15 & TO-14A	
1,1-Dichloroethene by EPA TO-15 & TO-14A	
1,2-Dichloroethane by EPA TO-15 & TO-14A	
1,2-Dichloropropane by EPA TO-15 & TO-14A	
Benzyl Chloride by EPA TO-15 & TO-14A	
Bromoform by EPA TO-15	
Bromomethane by EPA TO-15 & TO-14A	
Carbon tetrachloride by EPA TO-15 & TO-14A	
Chloroethane by EPA TO-15 & TO-14A	
Chloroform by EPA TO-15 & TO-14A	
Chloromethane by EPA TO-15 & TO-14A	
cis-1,2-Dichloroethene by EPA TO-15 & TO-14A	
cis-1,3-Dichloropropene by EPA TO-15 & TO-14A	
Methylene chloride by EPA TO -15 & TO-14A	
Tetrachloroethane by EPA TO-15 & TO-14A	
trans-1,2-Dichloroethene by EPA TO-15	
trans-1,3-Dichloropropene by EPA TO-15 & TO-14A	
Trichloroethene by EPA TO-15 & TO-14A	
Vinyl chloride by EPA TO -15	
2-Butanone by EPA TO-15	
4-Methyl-2-Pentanone by EPA TO-15	
Hexane by EPA TO-15	
Methyl tert-butyl ether by EPA TO-15	
Vinyl acetate by EPA TO-15	

This certification applies to samples analyzed in summa canisters.

Lab Client and Project Information			
Lab Client/Consultant:	TRC Solutions	Project Name / #:	004308.0001 Phase 1
Lab Client Project Manager:	Stacy Metz	Project Location:	Tecumseh, MI
Lab Client Address:	1540 Eisenhower Pl	Report E-Mail(s):	rsortor@trcsolutions.com
Lab Client City, State, Zip:	Ann Arbor, MI 48108		smetz@trcsolutions.com
Phone Number:	734-585-7825		
Reporting Requirements		Turnaround Time	
<input type="checkbox"/> Standard Report	<input type="checkbox"/> Level III	<input checked="" type="checkbox"/> Level IV	
<input checked="" type="checkbox"/> Excel EDD	<input type="checkbox"/> Other EDD: _____	<input checked="" type="checkbox"/> 5-7 day Stnd	<input type="checkbox"/> 24-Hr Rush
<input type="checkbox"/> CA Geotracker Global ID: _____		<input type="checkbox"/> 3-day Rush	<input type="checkbox"/> Mobile Lab
		<input type="checkbox"/> 48-Hr Rush	<input type="checkbox"/> Other: _____
Sampler Information		Sampler(s): Stacy Metz	
		Signature: <i>[Signature]</i>	
		Date: _____	

Sample Receipt (Lab Use Only)	
Date Rec'd:	9/25 Control #: 140696.01
H&P Project #:	TRC 052514-11
Lab Work Order #:	E409117
Sample Intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> See Notes Below
Receipt Gauge ID:	11167 Temp: 22°C
Outside Lab:	
Receipt Notes/Tracking #:	FEDEX
	7712 5432 6153 Lab PM Initials: KB

Additional Instructions to Laboratory:				Purchase Order #54219														
<input checked="" type="checkbox"/> Check if Project Analyte List is Included: * Preferred VOC units (please choose one): <input type="checkbox"/> µg/L <input type="checkbox"/> µg/m ³ <input checked="" type="checkbox"/> ppbv <input type="checkbox"/> ppmv				Project Analyte List: PCE, TCE, 1,1-DCE, 1,2-cis-DCE, 1,2-trans-DCE, vinyl chloride, 1,1,1-TCA, 1,1-DCA, 1,2-DCA and the tracer 1,1-DFA														
SAMPLE NAME	FIELD POINT NAME (if applicable)	DATE mm/dd/yy	TIME 24hr clock	SAMPLE TYPE Indoor Air (IA), Ambient Air (AA), Subslab (SS), Soil Vapor (SV)	CONTAINER SIZE & TYPE 400mL/1L/6L Summa or Tedlar or Tube	CONTAINER ID (###)	Lab use only: Receipt Vac	VOCs Standard Full List <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	VOCs Short List / Project List <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Oxygenates <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15	Naphthalene <input type="checkbox"/> 8260SV <input type="checkbox"/> TO-15 <input type="checkbox"/> TO-17m	TPHV as Gas <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m	TPHV as Diesel (sorbet tube) <input type="checkbox"/> TO-17m	Aromatic/Aliphatic Fractions <input type="checkbox"/> 8260SVm <input type="checkbox"/> TO-15m	Leak Check Compound <input checked="" type="checkbox"/> DFA <input type="checkbox"/> IPA <input type="checkbox"/> He	Methane by EPA 8015m	Fixed Gases by ASTM D1945 <input type="checkbox"/> CO2 <input type="checkbox"/> O2 <input type="checkbox"/> N2	VOCs Per Additional Instructions <input type="checkbox"/> 8260SV <input checked="" type="checkbox"/> TO-15
SG-03R	NA	09/22/14		SV	1L Summa	194	-0.89								X			X
SG-02	↓	↓	15:38	↓	↓	191	-0.90								X			X
Approved/Relinquished by:	<i>[Signature]</i>	Company:	TRC	Date:	9/23/14	Time:	16:25	Received by:	Fed Ex	Company:	H&P	Date:	9/25/14	Time:	10:00			
Approved/Relinquished by:		Company:		Date:		Time:		Received by:		Company:		Date:		Time:				
Approved/Relinquished by:		Company:		Date:		Time:		Received by:		Company:		Date:		Time:				

*Approval constitutes as authorization to proceed with analysis and acceptance of conditions on back

Technical Memorandum

Attachment 2 Data Quality Assurance

Data Quality Assurance Summary

Leak Testing – July 2014

Analytical results for the tracer 1,1-difluoroethane (1,1-DFA) were compared to the threshold concentration of 0.05-percent by volume. The 1,1-DFA concentration exceeded the 0.05-percent by volume at two of the samples collected: SG-12R and SG-14R. These data indicate the presence of a significant leak; therefore the VOC data are not reported. All other data are considered usable.

Laboratory Data – July 2014

Twenty-two soil gas samples and two field duplicates were collected by TRC between July 22, 2014 and July 24, 2014. Samples were analyzed by H&P Mobile Geochemistry, Inc. (H&P), located in Carlsbad, California, for VOCs by USEPA Method TO-15 following protocols specified in the QAPP. TRC performed data validation on the VOC laboratory data. Overall, the data quality objectives and laboratory completeness goals for the project were met, and the data are usable. The procedures specified in the methods were implemented, and the data package contained all of the deliverables necessary for validation of the analytical data. The complete laboratory data validation report is attached.

Data from most locations were consistent with historic data. However, although data validation indicates that all data, with the exceptions of those locations where a significant leak was detected (SG-12R and SG-14R), are usable, TRC staff noted that the concentrations at soil gas sample point SG-03R were anomalous. Trichloroethene which had not been detected at that location previously was reported at 80 ppbv. Similarly high concentrations, inconsistent with historical data, were reported for tetrachloroethene and 1,1,1-trichloroethane.² A re-sample event was scheduled to confirm (or not) these data. As discussed previously soil gas concentrations typically peak during summer months, therefore concentrations are typically expected to be similar or lower in September when compared to concentrations in July. Given the demonstrated temporal variability in soil gas, a sample was also collected at SG-02 during that event to assess the potential effect of temporal variability on soil gas concentrations between the July 2014 sample event and the September 2014 re-sample event. Data from SG-02 were used to estimate the factor by which concentrations may have changed due to temporal variability. Taking into account this temporal variability, if measured concentrations at SG-03R do not confirm the concentrations measured during the July 2014 sample event, the July 2014 sample data for SG-03R will be

² Note that tetrachloroethene, 1,1,1-trichloroethane, and/or trichloroethene were also detected at soil gas sample points SG-04, SG-15R, and TVP-02s where concentrations of these compounds are typically not detected. The detected concentrations were low enough that an evaluation such as that completed for SG-03R could not be used to conclusively invalidate these data. These concentrations are below applicable soil gas screening levels and do not trigger further action. These detections, in the absence of additional data confirming the reported concentrations, should be considered suspect and should not, in isolation, be used to trigger further action.

considered invalid, and they will be eliminated from future data tables and trend evaluations.

Leak Testing – September 2014

Analytical results for the tracer 1,1-DFA were compared to the threshold concentration of 0.05-percent by volume. The 1,1-DFA concentration did not exceed 0.05-percent by volume in any of the samples collected. All data are considered usable.

Laboratory Data – September 2014

Two soil gas samples were collected by TRC on September 22, 2014. Samples were analyzed by H&P, located in Carlsbad, California, for VOCs by USEPA Method TO-15 following protocols specified in the QAPP. TRC had not received the data validation report from the laboratory at the time of this report; however data are consistent with historical data (excluding the July 2014 sample at SG-03R). When available, TRC will perform data validation on the VOC laboratory data. Laboratory data will be assessed for data quality objectives and laboratory completeness goals to verify that the data are usable. Applicable data flags, if any, will be added to future data tables.

No CVOCs were detected at SG-03R in September 2014 indicating that the data collected in July 2014 for SG-03R are not valid. This determination is described in detail below. As expected, a comparison of data collected at SG-02 in July 2014 to data collected in September 2014 indicates a decrease in soil gas concentrations between the two sample events. The decrease in concentration was calculated for each detected compound at SG-02. Concentrations decreased by 11 to 54-percent. In July 2014 reported concentrations for SG-03R ranged from 12 to 80 ppbv. Assuming a 54-percent decrease in concentration, the detected concentrations at SG-03R should have ranged from 6.5 to 43 ppbv. Even applying a factor of safety of 2, the minimum expected concentrations in September 2014 at SG-03R should have been 3.2 to 22 ppbv. Yet consistent with historical data, no CVOCs were detected, indicating that the July 2014 data for SG-03R are invalid.

Laboratory Data Validation

July 2014 Soil Gas Sample Event Former Tecumseh Products Company Site Tecumseh, Michigan

Twenty-four soil gas samples, including 2 field duplicates, were collected from July 22 to 24, 2014 and analyzed by H&P Mobile Geochemistry, Inc., located in Carlsbad, California. The samples were analyzed for volatile organic compounds using USEPA Method TO-15 following procedures specified in the Quality Assurance Project Plan (QAPP) for the Tecumseh Products Company Site in Tecumseh, Michigan. The laboratory results were reported in laboratory report TRC072814-16. TRC validated the laboratory data. The following sections summarize the data validation procedure and the results of the validation.

Validation Procedure

The analytical data were validated using the USEPA National Functional Guidelines for Organic Data Review (USEPA, 2013) and the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air (USEPA, 1999). The USEPA National Functional Guidelines for Organic Data Review were written for solid and aqueous samples. Professional judgment was used in applying the guidance to soil gas sample matrix. The data validation included a review of the duplicate and blank results from the laboratory, as well as verification that the sample holding times were met. TRC reviewed additional QC information to check for appropriate matrix performance using the analytical methods specified by the laboratory. The procedures TRC used to evaluate data in general included the following items:

- Checked technical holding times for analyses
- Reviewed data for blanks, laboratory duplicates, and laboratory control samples
- Determined field precision from blind field duplicate data
- Assessed the usability of the data

The data validation report addresses the following items:

- Usability of the data if QC results suggest potential problems with all or some of the data
- Potential sample contamination due to blank contributions
- Actions regarding specific QC criteria exceedances

TRC reviewed internal standard areas and retention times, method blanks, field duplicate relative percent differences (RPDs), Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) recoveries and RPDs, and holding times. In addition, the 24-hour calibration clock was checked for each sample.

Findings

The data quality objectives and laboratory completeness goals for the project were met, and the data are usable. The procedures specified in the methods were implemented, and the data packages were found to contain all of the deliverables necessary for validation of the analytical data. The discussion that follows describes the QA/QC results and evaluation.

- The laboratory met the technical holding time of 30 days for all samples.
- The 24-hour calibration clock was not exceeded for any sample.
- Internal standard areas and retention times were reviewed and found to be within acceptable QC limits according to the USEPA National Functional Guidelines for Organic Data Review (USEPA, 2013).
- Surrogate recoveries met QC limits for all samples.
- Contaminants were not detected in the method blanks.
- The laboratory performed one LCS/LCSD per analytical batch. LCS/LCSD recoveries for trans-1,2-dichloroethene were low for batches EH40303 (63.4/69.4%) and EH40706 (67.9/67.4%) compared to a standard of 70-130%. Trans-1,2-dichloroethene was not detected for any associated samples and it has not been historically detected in these samples (SG-14R, SG-08, SG-09, SG-20, SG-21, and duplicates). Therefore, no data interpretation issues have been identified.
- Two field duplicate sample pairs were collected. DUP-01 corresponded with SG-07, and DUP-02 corresponded with SG-08. Calculated RPDs for all compounds in sample pair SG-08/DUP-02 were less than or equal to 20-percent. 1,1,1-Trichloroethane in sample pair SG-07/ DUP-01 did not meet acceptance criteria (>20-percent). The detected concentrations are greater than 5x the reporting limit; therefore, "j" flags are assigned to 1,1,1-trichloroethane in these samples.
- It should be noted that the laboratory flagged the 1,1-difluoroethane detections in the following samples as estimated because the values exceeded the calibration limit: SG-14R, SG-12R, SG-11, SG-13, SG-15R, SG-03R, and SG-04.

Corrective Action

The following corrective action was taken:

- The internal standards data were missing from the original laboratory reports. The laboratory issued the internal standards data separately.

Prepared by: Jennifer Meek

Reviewed by: Terry Hertz

Appendix D

Tables of VOC Data for BTEX Investigation Locations

Table 1
 Summary of Detected Volatile Organic Compounds in Soil at BTEX Investigation Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte		1,1-Dichloroethane	cis-1,2-Dichloroethene	Toluene ⁽¹⁾	1,1,1-Trichloroethane	Trichloroethene	Total Xylenes ⁽¹⁾
Residential DWP Criteria		18	1.4	16	4.0	0.10	5.6
GSIP Criteria		15	12	5.4	1.8	4.0 ⁽²⁾	0.82
Residential DC Criteria		27,000	2,500	250	500,000	110	410,000
Non-Residential DC Criteria		87,000	8,000	250	1,000,000	660	1,000,000
Residential SVIAI Criteria		230	22	250	250	1.0	6,300
Non-Residential SVIAI Criteria		430	41	250	4,600	1.9	12,000
Units		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B-58 (3-4')	4/1/2011	<0.059	<0.059	<0.059	<0.059	<0.059	<0.18
B-58 (6-7')	4/1/2011	<0.055	<0.055	<0.055	0.12	0.066	<0.17
B-59 (3-4')	4/1/2011	<0.057	<0.057	<0.057	<0.057	<0.057	<0.17
B-59 (6-7')	4/1/2011	0.18	<0.055	<0.055	0.12	0.067	<0.16
B-60 (3-4')	4/1/2011	<0.057	<0.057	<0.057	<0.057	<0.057	<0.17
B-60 (6-7')	4/1/2011	0.31	0.26	<0.054	0.57	0.30	<0.16
B-61 (3-4')	4/1/2011	<0.056	<0.056	<0.056	0.073	0.071	<0.17
B-61 (6-7')	4/1/2011	0.13	0.052	0.18	0.39	0.34	0.43
B-62 (1-2')	4/1/2011	<0.049	<0.049	0.14	<0.049	<0.049	<0.15
B-62 (3-4')	4/1/2011	<0.055	<0.055	<0.055	<0.055	<0.055	<0.16
B-63 (3-4')	4/1/2011	<0.051	<0.051	<0.051	0.21	0.26	<0.15
B-63 (6-7')	4/1/2011	0.46	0.52	<0.054	3.2	2.6	<0.16

Notes:

Residential Drinking Water Protection (DWP) Criteria, Groundwater to Surface Water Interface Protection (GSIP) Criteria, Residential and Non-Residential Direct Contact (DC) Criteria and Residential and Non-Residential Soil Volatilization to Indoor Air Inhalation (SVIAI) Criteria from MDEQ RRD Part 201 Generic Cleanup to Indoor Air Inhalation (SVIAI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013.

mg/kg = milligrams per kilogram

Bold font denotes concentrations detected above laboratory reporting limits

Denotes concentrations above one or more criteria

1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

Table 2
 Summary of Detected Volatile Organic Compounds in Groundwater at BTEX Investigation Locations
 Former Tecumseh Products Company Site
 Tecumseh, Michigan

Analyte	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Toluene ⁽¹⁾	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
Residential DW Criteria	430	880	7.0	70	100	700	1,000	200	5.0	2.0	10,000
Non-Residential DW Criteria	1,700	2,500	7.0	70	100	700	1,000	200	5.0	2.0	10,000
Residential GWSL for Vapor Intrusion	44,000	4,300	370	83	360	700	36,000	17,000	10	2.8	10,000
Non-Residential GWSL for Vapor Intrusion	1.8E+05	18,000	1,600	350	1,500	2,600	1.5E+05	71,000	41	52	10,000
GSI Criteria	1,100 ⁽²⁾	740	130	620	1,500 ⁽²⁾	18	270	89	200 ⁽²⁾	13 ⁽²⁾	41
Groundwater Contact Criteria	4.4E+05	2.4E+06	11,000	2.0E+05	2.2E+05	1.7E+05	5.3E+05	1.3E+06	13,000 ⁽⁴⁾	1,000	1.9E+05
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L

Sample Location and Screen Interval	Sample Collection Date	Approx. Depth to Groundwater (ft) ⁽³⁾	Chloroethane	1,1-Dichloroethane	1,1-Dichloroethene ⁽¹⁾	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Ethylbenzene ⁽¹⁾	Toluene ⁽¹⁾	1,1,1-Trichloroethane	Trichloroethene	Vinyl Chloride	Total Xylenes ⁽¹⁾
B-52 (7-9')	2/23/2011	7.0*	<2500	930	<500	520	<500	4,400	85,000	2,900	2,900	<500	43,000
B-52 (13-15')	2/23/2011	7.0*	<50	57	<10	71	<10	430	120	<10	30	270	1,326
B-52 (20-22')	2/23/2011	7.0*	<25	<5.0	<5.0	140	16	<5.0	<5.0	<5.0	440	<5.0	<15
B-58 (7-12')	4/1/2011	7.0*	<10	66	<10	46	<10	620	16	84	90	<10	5,300
B-59 (7-12')	4/1/2011	7.25*	970	680	<250	580	<250	2,500	41,000	1,400	960	<250	24,000
B-60 (7-12')	4/1/2011	7.25*	1,300	2,100	<500	1,500	<500	4,700	55,000	4,900	1,900	<500	48,000
B-61 (7-12')	4/1/2011	7.0*	<500	<500	<500	<500	<500	5,200	61,000	1,000	1,200	<500	41,000
B-62 (7-12')	4/1/2011	7.0*	<1.0	13	2.5	46	1.2	1.4	<1.0	190	590	<1.0	<3.0
B-63 (7-12')	4/1/2011	7.0*	<200	<200	<200	<200	<200	3,800	21,000	<200	210	<200	30,000
B-63 (7-12') DUP-01	4/1/2011	7.0*	<200	<200	<200	<200	<200	3,800	21,000	<200	<200	<200	31,000
B-64 (7-12')	4/1/2011	7.25*	<250	1,000	<250	450	<250	9,300	18,000	1,200	570	<250	59,000
B-65 (7-12')	4/1/2011	7.0*	<50	<50	<50	140	<50	3,200	90	<50	<50	56	23,000
B-66 (7-12')	4/1/2011	7.0*	<50	110	<50	<50	<50	2,500	<50	<50	<50	<50	28,000
B-67 (7-12')	4/1/2011	7.0*	<5.0	34	<5.0	83	<5.0	140	<5.0	75	58	9.6	1,300

Notes:

Health-Based Residential and Non-Residential Drinking Water (DW) Criteria, and Groundwater/Surface Water Interface (GSI) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, December 30, 2013. Groundwater Contact (GC) Criteria from MDEQ RRD Part 201 Generic Cleanup Criteria/Part 213 Risk Based Cleanup Levels, September 28, 2012. Groundwater Screening Levels (GWSLs) for Vapor Intrusion were taken from the MDEQ Guidance Document for the Vapor Intrusion Pathway, May 2013.

ug/L = micrograms per liter

Bold font denotes concentrations detected above laboratory reporting limits

* An asterisk indicates that the observed depth to groundwater intersects or is near an overlying clay unit that may act as a localized confining unit. The true piezometric surface may have a depth less than the recorded depth to groundwater.

Green background Denotes concentrations above one or more criteria

1) Compound may exhibit characteristic ignitability as defined in 40 C.F.R. § 261.21

2) Criterion is not protective for surface water used as a drinking water source as described in footnote (X) of MDEQ Op Memo 1 Part 201, Attachment 1.

3) The approximate depth to groundwater is taken from soil boring logs. For sample locations with no soil boring log, approximate depth to groundwater is estimated using depth to groundwater data from nearby monitoring well and soil boring locations.

4) At the request of USEPA, a site-specific groundwater contact criteria for trichloroethene (TCE) was recalculated to reflect revised TCE toxicity data which were published by USEPA on September 28, 2011.