Stantec Consulting Services Inc.
61 Commercial Street Suite 100, Rochester NY 14614-1009

December 13, 2019
File: 190500014

**Attention: Todd Caffoe, P.E.**
New York State Department of Environmental Conservation
Division of Environmental Remediation
6274 East Avon-Lima Road
Avon NY 14414-9519

**Reference: Periodic Review Report**
**Ward Street Site, BCA Site No. C828117**
**and 8-28 Ward Street Site, BCA Site No. C828136**
**Rochester, New York**

Dear Todd,

On behalf of Germanow-Simon Corporation (Germanow-Simon), Stantec Consulting Services Inc. (Stantec) has prepared the attached Periodic Review Report and completed the Institutional and Engineering Control Certification (IC/EC) Forms for the period November 15, 2018 to November 15, 2019 to fulfill Germanow-Simon's obligation as a Volunteer under the Brownfield Cleanup Agreement (BCA) for its properties known as the Ward Street Site (*BCA Site #C828117*) and the 8-28 Ward Street Site (*BCA Site #C828136*). These adjacent sites are located on Ward Street in the City of Rochester, Monroe County, New York.

In summary, the report concludes that groundwater conditions continue to improve; accordingly we are recommending modifying the groundwater monitoring program to a biannual frequency, and also discontinuing sampling in one monitoring well where VOCs remain below groundwater standards.

Please do not hesitate to call should you have any questions or require further information.

Regards,

**Stantec Consulting Services Inc.**

**Michael P. Storonsky**
Managing Principal
585-413-5266
mike.storonsky@stantec.com

**Kevin Ignaszak** P.E.
Principal
585-413-5355
kevin.ignaszak@stantec.com

Attachment: *Periodic Review Report – Ward Street Site No. C828117 and No. C282136*

c: John Dole, Germanow-Simon

# PERIODIC REVIEW REPORT

# BROWNFIELD CLEANUP PROGRAM
# WARD STREET SITE (SITE NO. C828117)
# and
# 8-28 WARD STREET (SITE NO. C828136)

**December 13, 2019**

**Prepared on behalf of:**

Germanow-Simon Corporation
408 St. Paul Street
Rochester, New York 14601

**Prepared by:**

Stantec Consulting Services Inc.
61 Commercial Street, Suite 100
Rochester, New York 14614

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# 1.0 INTRODUCTION AND OVERVIEW

Stantec Consulting Services Inc. (Stantec) has prepared this Periodic Review Report (PRR) and the attached Institutional Control/Engineering Control (IC/EC) forms (Appendix A) to summarize Site Management (SM) activities at the contiguous Ward Street and 8-28 Ward Street Brownfield Cleanup Program sites (the Sites) for the period November 15, 2018 to November 15, 2019.

The PRR was prepared on behalf of Germanow-Simon Corporation (Germanow-Simon), the owner of the Sites, to fulfill the PRR requirements of the Brownfield Cleanup Program (BCP) of the New York State Department of Environmental Conservation (NYSDEC or the Department). The Ward Street Site is identified by NYSDEC as BCP Site No. C828117. The 8-28 Ward Street Site is identified as BCP Site No. C828136.

The Sites are located in the City of Rochester, Monroe County, New York along the north side of Ward Street between the intersection of Ward Street with St. Paul Street on the southwest and Emmett Street on the northeast. A map showing the locations of the Sites is presented on Figure 1.

## 1.1 SUMMARY OF SITE CONTAMINATION AND REMEDIAL HISTORY

Germanow-Simon and the Department agreed to pursue a program of environmental investigation and cleanup activities at the Sites to address past releases of industrial and dry-cleaning solvents and petroleum products that resulted in subsurface contamination by volatile organic compounds (VOCs). The BCP activities led to the implementation of a Multi-Phase Vacuum Extraction (MPVE) cleanup system for the Sites. MPVE is a contaminant remediation technology that uses a vacuum pump and extraction wells to simultaneously remove VOCs from subsurface soils, soil vapor and groundwater. The layout of the former MPVE system is provided in Figure 2 (Well Locations).

Construction, installation, and commissioning of the MPVE system at the Ward Street Site were completed in October 2006. The 8-28 Ward Street Site component of the MPVE system was added in October 2008. With NYSDEC approval, the MPVE system was shut down on February 22, 2011 and has not been restarted since that time. At that time, the previously installed sub-slab depressurization system (SSDS) beneath the Building B Annex Area was reactivated (as it had been during previous sampling or MPVE maintenance-related shut-down periods).

In accordance with the NYSDEC-approved *Remedial Program Supplement, Enhanced Reductive Dechlorination Work Plan*, dated March 2011 (Stantec, 2011) and NYSDEC's November 14, 2011 approval letter, an *in-situ* bioremediation groundwater polishing program was initiated in November/December 2011. This was followed by a supplemental injection program for Enhanced Reductive Dechlorination (ERD), which was proposed in correspondence dated October 2012, approved by NYSDEC on November 6, 2012, and conducted in November 2012. The results of that event were summarized in Stantec's December 21, 2012 *Enhanced Reductive Dechlorination Supplemental Injection Program Summary Repor*t.

Because groundwater in the former Lilac Laundry area was found to meet the Department's groundwater quality standards (refer to *Ward Street Site Semi-Annual Progress Report #8, Ward Street Site (Site #C828117) and 8-28 Ward Street Site (Site #C828136), Rochester, New York* (Stantec, February 2011), and in preparation for site improvements, and with NYSDEC approval, the following wells were decommissioned in October 2011 at the Ward Street Site: MW-3, -5, -9, -9R, -20, -21, -32, -213, -214, -215, -216, -217, -218, and -219. In addition, since no significant groundwater impacts were present on

the 8-28 Ward Street Site, and in preparation for site improvements, and with NYSDEC approval, the following wells were decommissioned in October 2011 at the 8-28 Ward Street Site: GQ1/MW-1, GQ2/MW-2, GQ4/MW-4, GQ8/MW-5, MW-19, -45, -46, -46R, and -47.

The results of the groundwater sampling event conducted in October 2013 indicated that significant dissolved-phase VOC reduction had occurred within the treatment area. Based on this observed reduction since the commencement of remedial measures, and the continued success of the ERD process, it was proposed in the 2015 PRR to: (1) discontinue the ERD groundwater treatment program; (2) reduce the number of wells that are monitored; (3) reduce the number of analytes that are monitored; and (4) reduce the frequency of monitoring. The PRR proposed that an annual groundwater sampling event be performed involving wells MW-16, -16R, -23, -23R, -105, -207R with analysis for VOCs by USEPA Method 8260 and total organic carbon (TOC) by USEPA Method 5310. This revised sampling and analysis approach was accepted in the NYSDEC February 4, 2016 letter to Germanow-Simon; a copy of the letter was included in Appendix B of the 2016 PRR.

The results of the annual groundwater sampling event completed in June 2015 showed that anaerobic and reducing geochemical conditions had been maintained at the wells sampled. Results at wells MW-16 and -23R indicated that the “parent” compounds tetrachloroethylene (PCE) and trichloroethylene (TCE) were below detection limits. Concentrations of daughter products at MW-16 had increased, suggesting that degradation was progressing but was incomplete. The only contaminant of concern detected at MW-23R was cis-dichloroethylene (cis-DCE) and the concentration was below the groundwater standard for that compound. Decreased concentrations were observed for all contaminants of concern at MW-105. However, increases in contaminants of concern were observed at MW-16R, -23, and -207R. After discussion with NYSDEC, it was proposed to complete another round of groundwater monitoring at these six wells in the spring of 2016 to assess the progress of the ERD process.

The groundwater parameters measured in the field during the March 2016 sampling event indicated that anaerobic and reducing geochemical conditions had been maintained or improved since 2015 at all sampled wells. This indicated that the ERD injection performed in November 2012 continued to promote an environment suitable for the breakdown of chlorinated VOCs. Measured groundwater parameters are provided on Table 2. The VOC data (Table 1) indicated that ERD continued under, and downgradient from, the Building B Annex shipping/receiving area. Low and decreasing concentrations of parent VOC compounds, PCE and TCE, were observed in MW-105; and only ‘daughter’ products, cis- and trans-1,2-Dichloroethene (DCE) and vinyl chloride (VC), were observed downgradient at wells MW-16 and -16R. VOC concentrations at downgradient well MW-207R remained generally similar to those observed during the previous round of groundwater sampling in June 2015 with only “daughter” VOC compounds detected.

In 2016, favorable conditions at the 8-28 Ward Street Site were maintained within the bedrock zone as VOC concentrations were at or below laboratory detection limits for all compounds at MW-23R. The results from MW-23, however, showed increases in PCE and TCE concentrations compared to levels observed prior to the initial injection activities. The increases in the concentrations of parent compounds were indicative of additional residual source material that had not been effectively treated by past remedial efforts in the area of MW-23. The groundwater results were forwarded to the Department on April 14, 2016 (Appendix B of the 2016 PRR).

Following discussion with the Department, Stantec performed a two-day Geoprobe investigation (May 23-24, 2016) to investigate the potential source and extent of impacted soil in the vicinity of MW-23 which

was contributing to the groundwater results. The investigation was summarized in the 2016 PRR; based on the results, Stantec recommended performing an on-Site remedial excavation of source material. This remedial approach would be supplemented with the placement in the excavation of sodium lactate as an electron-donor to further facilitate the breakdown of residual contamination in groundwater within, and downgradient of the source area. The results of the soil boring program and the recommended remedial approach were proposed to the Department both in correspondence dated October 27, 2016 and the December 15, 2016 PRR. Included as a part of the remedial approach set forth in the 2016 PRR, the next groundwater monitoring event was proposed to be completed three months after completion of the excavation program.

As detailed in the December 2017 PRR, a relatively small, supplemental excavation of TCE-impacted source-area soils was performed in October 2017 on the southern boundary of the 8-28 Ward Street site, immediately north of Ward Street. An application of sodium lactate was placed in the excavation prior to backfill to facilitate *in situ* bioremediation via ERD of residual groundwater impacts. Due to the timing of the excavation program, and the commitment to conduct the next groundwater monitoring event three months after completion of the excavation program, no groundwater monitoring was performed in 2017. Instead, it was performed in January 2018. Annual groundwater sampling continues to be performed, as discussed below.

## 1.2 SITE MANAGEMENT REQUIREMENTS

Site Management activities were implemented in accordance with the Department-approved Site Management Plans (SMPs) for each site. The SMPs for the Sites include the following required Institutional and Engineering Controls (ICs/ECs):

- Use of the Sites for commercial and industrial purposes is allowed as long as the following long-term controls are employed:
    - The MPVE system is operated in accordance with a Department-approved Operation, Maintenance & Monitoring (OM&M) plan until remedial requirements are achieved to the satisfaction of the Department. *(Note: this is no longer required; see below)*
    - An SSDS constructed in conjunction with the MPVE system is operated continuously in the Building B Annex Area to mitigate the potential for soil vapor intrusion (SVI) when the MPVE system is shut down.
    - Impervious surfaces covering specific areas of the Sites (building floor slabs and parking lot pavements) are maintained.
    - NYSDEC approval must be obtained in advance for activities which breach impervious surfaces or disturb soils in those same areas of the Sites, and those activities must be performed in accordance with the SMPs.
    - NYSDEC approval must be obtained in advance for use of groundwater for any purpose at the Sites.
- The Sites may not be used for purposes with a higher level of use than the commercial and industrial purposes described above.
- An environmental easement granted to the Department must be maintained on the property deeds and any subsequent instrument of land conveyance, lease, license, or other instruments granting rights of use of the Sites. At the request of the NYSDEC, the separate environmental

easement mapping for the two sites was combined into a single Environmental Easement map dated August 1, 2012.

- Annually (or as otherwise directed by the Department), Germanow-Simon must certify to the Department the continued presence and effectiveness of the controls described above.

The MPVE system OM&M Plan for the Sites specified a program of maintenance activities and provided for monthly system performance monitoring, periodic groundwater monitoring, and annual indoor/outdoor air testing. Indoor air testing was previously conducted in the Building B Annex and Building B along with outdoor testing to obtain background conditions; however, due to NYSDEC's approval in 2014 to forego this testing, it is no longer conducted. The OM&M Plan specifies periodic reporting on OM&M activities, monitoring results and remedial progress. However, with NYSDEC approval, the MPVE system was shut down on February 22, 2011 and it has not been operated since; the system was subsequently decommissioned. Therefore, OM&M activities related to the MPVE system have not been required since it was shut down. The SSDS was commissioned on February 22, 2011 and has operated continuously since. The facility manager has confirmed its continued proper operation.

Due to building expansion/renovation and site improvement activities at the Sites during the September 15, 2011 to September 15, 2012 reporting period, the SMPs for both Sites were revised. Revised versions of these documents were submitted to the NYSDEC along with the PRR for that reporting period.

## 1.3 EFFECTIVENESS OF THE REMEDIAL PROGRAM

The IC/ECs required under the SM program remained in place and were effective.

## 1.4 COMPLIANCE

Compliance with the SMPs for both Sites was maintained throughout the reporting period. On November 26, 2019, Stantec inspected the Site and made the following observations:

- The SSDS system was operating as intended.
- The Site cover materials (building floor slabs, asphalt pavement, concrete sidewalks and landscaped perimeter areas) are in excellent conditions and are well-maintained. No areas of disturbed or degraded site cover were observed. Some minor areas of bare soil were observed in the grass-covered, landscaped areas along the east and south Site perimeters; however, these are flat areas and no evidence of significant erosion were observed.

## 1.5 RECOMMENDATIONS

As noted in Section 1.2, the SMPs for both Sites were revised in 2012. It is recommended that the requirements specified within the updated SMPs continue to be fulfilled, with two exceptions:

- Given the positive results of the October 2019 groundwater sampling event, and the fact that no further remedial actions are planned at this time, we recommend that the groundwater monitoring be modified to a bi-annual event.
- Since VOCs in MW-23R have been below groundwater standards during each sampling event since 2015, we recommend discontinuing the sampling of this well.

This is discussed further in Section 4.0 below.

# 2.0 REMEDY PERFORMANCE, EFFECTIVENESS, AND PROTECTIVENESS

An annual monitoring event (as recommended in the 2018 PRR, and accepted by NYSDEC; see Appendix B) was performed on October 8, 2019. NYSDEC was notified in advance (see email, Appendix B). The following six wells were sampled: MW-16, 16R, -23, -23R, -105, and -207R. As with previous sampling events, low-flow sampling methodology was employed.

The analytical results are summarized on Table 1, along with all historical results for these six wells. Table 2 provides a summary of the field parameters measured in groundwater during the sampling events. Figures 3A through 3F present time-series plots of individual VOC concentrations for these six wells.

The following observations are made relative to groundwater levels and quality, based on the results of the 2019 sampling event:

- Groundwater levels showed only a slight drop (typically 0.1 to 0.3 ft) between October 2018 and October 2019.
- Field parameters measured during both sampling events indicate anaerobic groundwater conditions, with dissolved oxygen (DO) levels below 0.26 mg/L. All measured oxidation/reduction potential (ORP) values remain below zero, which continues to indicate reducing conditions.
- Wells MW-23 (overburden) and MW-23R (bedrock) are located in close proximity to the excavation (and associated sodium lactate application) performed in 2017. MW-23 had exhibited an increase in some of the VOCs of concern in the 2016 sampling event, most notably a significant “spike” in PCE. PCE concentrations in both 2018 sampling events showed a decrease; the October 2018 concentration had returned to its lowest detected level since 2013. Reduction in the concentrations of PCE, TCE and VC were observed in the 2019 results. PCE and TCE are at their lowest concentrations in this well since October 2013.

  VOCs in well MW-23R have been below groundwater standards and essentially remained at non-detect levels since 2015.

  These results continue to indicate the source excavation and lactate placement performed in late 2017 have had a positive effect on groundwater quality in this area.
- Well MW-16R, located on the southern edge of the remedial area, exhibited an increase in concentrations of cis-1,2-DCE and VC between 2013 and 2018; however, both compounds dropped in concentration in the October 2019 event. Cis-1,2-DCE showed an increase and VC showed a drop in the 2019 sampling. PCE and TCE also showed a drop in the October 2018 event but had a slight increase in the 2019 sampling. These concentrations are all well below the historic highs for these compounds.

  Well MW-16, located adjacent to MW-16R exhibited decreases in concentrations of cis-1,2-DCE and VC in the 2019 results. All other compounds were at non-detect levels.

- MW-105 has shown detection of several VOCs but levels have remained relatively consistent for the last four sampling events. Cis-1,2-DCE and trans-1,2-DCE showed slight increases in the October 2019 event, while TCE and VC showed notable decreases.
- Well MW-207R (the easternmost well location in these sampling events) showed noteworthy drops in the concentrations of cis-1,2-DCE and VC in 2019, continuing the decrease observed in the October 2018 event. Trans-1,2-DCE was reported at a concentration lower than the January 2018 results and comparable to the 2016 concentration. Other VOCs of interest were below detection levels.

# 3.0 COMPLIANCE WITH IC/EC REQUIREMENTS AND THE OM&M PLAN

During the reporting period, compliance with the required ICs and ECs was maintained.

- Use of the Sites has been limited to the industrial manufacturing and support activities conducted by the Germanow-Simon Corporation and its affiliated enterprises. There has been no change in Site use or operations.
- In accordance with NYSDEC approval, the MPVE system was operated until February 22, 2011, at which time it was shut down indefinitely. The MVPE system was decommissioned, cleaned out, and disconnected from the sewer during the 2014 reporting period.
- The sub-slab depressurization system (SSDS) constructed in conjunction with the MPVE system has continuously operated since February 2011 in the Building B Annex Area to mitigate the potential for soil vapor intrusion (SVI).
- No groundwater use has occurred at the Sites.
- The environmental easement granted to the Department has been maintained on the property deeds and any subsequent instrument of land conveyance, lease, license, or other instruments granting rights of use of the Sites.

Signed and stamped forms certifying the continued presence and effectiveness of the ICs and ECs described above are presented in Appendix A.

The MPVE system OM&M Plan for the Sites specifies a program of maintenance activities, provides for monthly system performance monitoring and periodic groundwater monitoring, and annual indoor/outdoor air testing. The OM&M Plan specifies periodic reporting on OM&M activities, monitoring results and remedial progress. However, because the MPVE system was shut down permanently in 2011, activities or certification related to this specific EC have not been required since then.

Sampling results from February 22, 2013 indicated that the SSDS system, which has been operating continuously since the MPVE system was shut down, continued to successfully mitigate potential SVI at the Building B Annex. Based on these results and discussion with and subsequent approval by NYSDEC, annual indoor and outdoor air sampling was discontinued in 2015. The system has been checked annually since 2015 to confirm proper operation.

# 4.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

The monitoring results indicate that some of the VOCs present in each sampled well decreased between October 2018 and October 2019. Any increases in VOC concentrations observed were relatively small in magnitude and these concentrations remain well below any historic highs. No significant “spikes” were

observed, and the high concentration of PCE in well MW-23R observed in 2016 has returned to normal low levels. Accordingly, we recommend that the groundwater monitoring program be reduced to a biannual frequency. In addition, given the absence of VOCs at concentrations above groundwater standards in well MW-23R dating back to 2015, we recommend discontinuing the sampling of this well. If approved by NYSDEC, the next sampling would be performed in the third quarter of 2021. Submittal of the next PRR would mirror this biannual schedule (December 2021).

# TABLES

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | MW16 | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 27-Sep-11 | 3-Feb-12 | 2-Mar-12 | 5-Jun-12 | 5-Sep-12 | 23-Jan-13 | 11-Apr-13 | 3-Jul-13 | 9-Oct-13 | 9-Oct-13 | 17-Jun-15 | 9-Mar-16 | 10-Jan-18 | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | | WSR-MW-16-GW-18 | WSR-MW-16-GW-19 | WSR-MW-16-GW-20 | WSR-MW-16-GW-21 | WSR-MW-16-GW-22 | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | 828-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | MW-16 | WSR-MW-16-GW |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P11-4090 | 12:0472 | 12:0936 | 12:2364 | 12:3668 | 13:0353 | 131259 | 132490 | 133891 | 133926 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 14083 | 12:0472-06 | 12:0936-02 | 12:2364-06 | 12:3668-05 | 130353-05 | 131259-05 | 132490-06 | 133891-05 | 133926-05 | 152493-03 | 160970-03 | 180096-02 | 184937-04 | 194958-02 |
| Sample Type | Units | TOGS | | | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | 10 U | 10.0 U | 10.0 U | - | 13.6 J | 10.0 U | 10.0 U | 25.0 U | 50.0 U | 25.0 U |
| Benzene | µg/L | 1[A] | ***35.0 U*** | ***35.0 U*** | ***35.0 U*** | ***35.0 U*** | ***35.0 U*** | 0.70 U | 0.700 U | 0.700 U | - | 1 U | 1.00 U | 1.00 U | ***2.50 U*** | ***5.00 U*** | ***2.50 U*** |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | 5.0 U | 5.00 U | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | 10.0 U | 5.00 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 12.5 U | 25.0 U | 12.5 U |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Butylbenzene, n- | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | 10.0 U | 5.00 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Chlorobromomethane | µg/L | 5--[A] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | - | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | ***12.5 U*** | ***25.0 U*** | ***12.5 U*** |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | 500 U | 10 U | 10.0 U | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Chloromethane | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Cyclohexane | µg/L | n/v | 500 U | 500 U | 500 U | 500 U | - | 10 U | 10.0 U | 10.0 U | - | 10.0 U | 10.0 U | 10.0 U | 25.0 U | 50.0 U | 25.0 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | - | ***10 U*** | ***10.0 U*** | ***10.0 U*** | - | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***25.0 U*** | ***50.0 U*** | ***25.0 U*** |
| Dibromochloromethane | µg/L | 50[B] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | 10.0 U | 5.00 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Dichloroethane, 1,1- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | **1,790[A]** | **8,600[A]** | **2,770[A]** | **2,720[A]** | **772[A]** | **8.3[A]** | **23.6[A]** | **9.39[A]** | - | 2.89 | **165[A]** | **118[A]** | **256[A]** | **391[A]** | **295[A]** |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | **24.3[A]** | 4.89 | - | **13.3[A]** | **8.33[A]** | 2.43 | 4.40 J | ***10.0 U*** | 3.69 J |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | 2.0 U | 2.00 U | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | 2.0 U | 2.00 U | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_{sg}$[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_{sg}$[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | 20 U | 20.0 U | 20.0 U | - | R | 20.0 U | 20.0 U | 50.0 U | 100 U | 50.0 U |
| Ethylbenzene | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 12.5 U | 25.0 U | 12.5 U |
| Isopropylbenzene | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 100 U | 100 U | 100 U | 100 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | 10.0 U | 5.00 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | 33 | 10.0 U | 10.0 U | - | 9.98 J | 10.0 U | 10.0 U | 25.0 U | 50.0 U | 25.0 U |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 250 U | 250 U | 250 U | 250 U | 250 U | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 12.5 U | 25.0 U | 12.5 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | 10.0 U | 5.00 U |
| Methylcyclohexane | µg/L | n/v | 100 U | 100 U | 100 U | 100 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | 10.0 U | 5.00 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | ***12.5 U*** | ***25.0 U*** | ***12.5 U*** |
| Naphthalene | µg/L | 10[A] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | ***12.5 U*** | ***25.0 U*** | ***12.5 U*** |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | **2,390[A]** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Toluene | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | - | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | ***12.5 U*** | ***25.0 U*** | ***12.5 U*** |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** | - | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | ***12.5 U*** | ***25.0 U*** | ***12.5 U*** |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***5.00 U*** | ***10.0 U*** | ***5.00 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | **1,140[A]** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | ***250 U*** | ***100 U*** | ***100 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | 250 U | - | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | ***100 U*** | ***100 U*** | **183[A]** | **945[A]** | **879[A]** | **13[A]** | **81.8[A]** | **6.65[A]** | - | **3.52[A]** | **140[A]** | **135[A]** | **365[A]** | **914[A]** | **430[A]** |
| Xylene, m & p- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Xylene, o- | µg/L | 5--[A] | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***100 U*** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 5.00 U | ***10.0 U*** | 5.00 U |
| Total VOC | µg/L | n/v | 5,320 | 8,600 | 2,953 | 3,665 | 1,651 | 54.3 | 129.7 | 20.93 | - | 43.29 | 313.33 | 255.43 | 625.4 | 1,305 | 728.69 |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | 0.010 U | **0.048[A]** | 0.013 | 0.024 | - | - | **0.0432[A]** | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | **3.42[A]** | **20.8[A]** | **2.35[A]** | **19.3[A]** | - | - | **16.9 L[A]** | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | 0.294 | 0.117 | 0.155 | 0.109 | - | - | 0.218 L | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | **1,270[A]** | **1,250[A]** | **407[A]** | **1,280[A]** | **2,290[A]** | **2,000[A]** | **1,160[A]** | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | 5.2 | 122 | 8.5 | 8.9 | 20.5 | 750 | 144 | 92.0 | 41.0 | - | 15 | 10.8 | 12.6 | 2.5 | 5.5 |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | MW16R | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 28-Sep-11 | 5-Jan-12 | 3-Feb-12 | 1-Mar-12 | 1-Mar-12 | 5-Jun-12 | 5-Sep-12 | 23-Jan-13 | 11-Apr-13 | 3-Jul-13 | 9-Oct-13 | 9-Oct-13 | 18-Jun-15 | 9-Mar-16 | 10-Jan-18 | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | | WSR-MW-16R-GW-18 | WSR-MW-16R-GW-19 | WSR-MW-16R-GW-20 | WSR-MW-16R-GW-21 | WSR-MW-DUP-GW-21 | WSR-MW-16R-GW-22 | WSR-MW-16R-GW-23 | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | 828-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | MW-16R | WSR-MW-16R-GW |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P11-4106 | P12-0069 | 12:0472 | 12:0906 | 12:0906 | 12:2364 | 12:3668 | 13:0353 | 131259 | 132490 | 133891 | 133926 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 14149 | 12:0069-02 | 12:0472-07 | 12:0906-05 | 12:0906-06 Field Duplicate | 12:2364-05 | 12:3668-04 | 130353-04 | 131259-04 | 132490-05 | 133891-04 | 133926-04 | 152493-05 | 160970-04 | 180096-03 | 184937-03 | 194958-03 |
| Sample Type | Units | TOGS | | | | | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | 50.0 U | 25.0 U | ***500 U*** | ***100 U*** | ***100 U*** | ***500 U*** | ***500 U*** | ***250 U*** | ***100 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** |
| Benzene | µg/L | 1[A] | ***3.50 U*** | ***1.75 U*** | ***35.0 U*** | ***7.00 U*** | ***7.00 U*** | ***35.0 U*** | ***35.0 U*** | ***18 U*** | ***7.00 U*** | ***7.00 U*** | - | ***10 U*** | ***10.0 U*** | ***25.0 U*** | ***25.0 U*** | ***25.0 U*** | ***25.0 U*** |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | - | ***130 U*** | ***50.0 U*** | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 10.0 U | 5.00 U | ***100 U*** | 20.0 U | 20.0 U | ***100 U*** | ***100 U*** | 50 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 25.0 U | 12.5 U | ***250 U*** | 50.0 U | 50.0 U | ***250 U*** | ***250 U*** | ***130 U*** | 50.0 U | 50.0 U | - | 50.0 U | 50.0 U | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Butylbenzene, n- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 25.0 U | 12.5 U | ***100 U*** | 20.0 U | 20.0 U | ***100 U*** | ***100 U*** | 50 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chlorobromomethane | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***250 U*** | ***50.0 U*** | ***50.0 U*** | ***250 U*** | - | ***130 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | - | 500 U | 250 U | 100 U | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chloromethane | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Cyclohexane | µg/L | n/v | 50.0 U | 25.0 U | 500 U | 100 U | 100 U | 500 U | - | 250 U | 100 U | 100 U | - | 100 U | 100 U | 250 U | 250 U | 250 U | 250 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***50.0 U*** | ***25.0 U*** | ***500 U*** | ***100 U*** | ***100 U*** | ***500 U*** | - | ***250 U*** | ***100 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** |
| Dibromochloromethane | µg/L | 50[B] | 10.0 U | 5.00 U | ***100 U*** | 20.0 U | 20.0 U | ***100 U*** | ***100 U*** | 50 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethane, 1,1- | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | **1,150[A]** | **110[A]** | **3,810[A]** | **2,260[A]** | **2,360[A]** | **2,630[A]** | **1,410[A]** | **1,000[A]** | **841[A]** | **664[A]** | - | **77.7[A]** | **1,520[A]** | **1,610[A]** | **3,330[A]** | **1,080[A]** | **1,420[A]** |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | **10.6[A]** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | **36.0[A]** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | - | - | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | - | ***50 U*** | ***20.0 U*** | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | - | ***50 U*** | ***20.0 U*** | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_5$[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | - | - | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_5$[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | - | - | 500 U | 200 U | 200 U | - | R | 200 U | 500 U | 500 U | 500 U | 500 U |
| Ethylbenzene | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 25.0 U | 12.5 U | ***250 U*** | 50.0 U | 50.0 U | ***250 U*** | ***250 U*** | ***130 U*** | 50.0 U | 50.0 U | - | 50.0 U | 50.0 U | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Isopropylbenzene | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 10.0 U | 5.00 U | 100 U | 20.0 U | 20.0 U | 100 U | - | 50 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | 50.0 U | 25.0 U | ***500 U*** | ***100 U*** | ***100 U*** | ***500 U*** | ***500 U*** | ***250 U*** | ***100 U*** | ***100 U*** | - | ***100 UJ*** | ***100 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 25.0 U | 12.5 U | 250 U | 50.0 U | 50.0 U | 250 U | 250 U | 130 U | 50.0 U | 50.0 U | - | 50.0 U | 50.0 U | 125 U | 125 U | 125 U | 125 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | 10.0 U | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Methylcyclohexane | µg/L | n/v | 10.0 U | 5.00 U | 100 U | 20.0 U | 20.0 U | 100 U | - | 50 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***250 U*** | ***50.0 U*** | ***50.0 U*** | ***250 U*** | ***250 U*** | ***130 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Naphthalene | µg/L | 10[A] | ***25.0 U*** | ***12.5 U*** | ***250 U*** | ***50.0 U*** | ***50.0 U*** | ***250 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***250 U*** | ***50.0 U*** | ***50.0 U*** | ***250 U*** | ***250 U*** | ***130 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | **832[A]** | **299[A]** | ***100 U*** | **65.4[A]** | **64.4[A]** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | **694[A]** | ***50.0 U*** | **99.7[A]** | ***50.0 U*** | **45.1 J[A]** |
| Toluene | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***250 U*** | ***50.0 U*** | ***50.0 U*** | ***250 U*** | - | ***130 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***250 U*** | ***50.0 U*** | ***50.0 U*** | ***250 U*** | - | ***130 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***10.0 U*** | ***5.00 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | **651[A]** | **57.1[A]** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | **167[A]** | ***20.0 U*** | - | ***20.0 U*** | **350[A]** | ***50.0 U*** | **204[A]** | ***50.0 U*** | **53.1[A]** |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | ***25.0 U*** | ***12.5 U*** | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | - | 250 U | - | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | **23.3[A]** | ***5.00 U*** | **717[A]** | **997[A]** | **1,030[A]** | **1,060[A]** | **790[A]** | **1,100[A]** | **558[A]** | **1,040[A]** | - | **33.1[A]** | **537[A]** | **961[A]** | **1,130[A]** | **973[A]** | **634[A]** |
| Xylene, m & p- | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Xylene, o- | µg/L | 5--[A] | ***10.0 U*** | 5.00 U | ***100 U*** | ***20.0 U*** | ***20.0 U*** | ***100 U*** | ***100 U*** | ***50 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Total VOC | µg/L | n/v | 2,666.9 | 466.1 | 4,527 | 3,322.4 | 3,454.4 | 3,690 | 2,200 | 2,100 | 1,566 | 1,704 | - | 110.8 | 3,137 | 2,571 | 4,763.7 | 2,053 | 2,152.2 |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | - | - | 0.0100 U | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | **1.81[A]** | 0.100 U | **0.381[A]** | **1.00[A]** | **1.05[A]** | **2.68[A]** | - | - | 0.144 L | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | 0.068 | 0.015 U | 0.072 | 0.287 | 0.242 | 0.109 | - | - | 0.146 L | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | **461[A]** | **675[A]** | **1,070[A]** | **590[A]** | **598[A]** | **659[A]** | **758[A]** | **820[A]** | **340[A]** | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | 4.3 | 4.4 | 5.7 | 3.9 | 5.7 | 4.2 | 16.2 | 230 | 49.6 | 42.0 | 11.0 | - | 3.9 | 10.3 | 5.49 | 3.5 | 1.0 |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | MW23 | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 28-Sep-11 | 5-Jan-12 | 6-Feb-12 | 2-Mar-12 | 5-Jun-12 | 5-Jun-12 | 6-Sep-12 | 24-Jan-13 | 10-Apr-13 | 5-Jul-13 | 10-Oct-13 | 10-Oct-13 | 10-Oct-13 | 17-Jun-15 | 9-Mar-16 | 10-Jan-18 | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | | WSR-MW-23-GW-7 | 828-MW-23-GW-8 | 828-MW-23-GW-9 | 828-MW-23-GW-10 | 828-MW-23-GW-11 | 828-MW-DUP-GW-11 | 828-MW-23-GW-12 | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-DUP-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | MW-23 | 828-MW-23-GW |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P11-4106 | P12-0069 | 12:0488 | 12:0936 | 12:2364 | 12:2364-03 | 12:3694 | 13:0365 | 131242 | 132505 | 133909 | 133925 | 133925 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 14150 | 12:0069-06 | 12:0488-02 | 12:0936-05 | 12:2364-02 | Field Duplicate | 12:3694-05 | 130365-05 | 131242-02 | 132505-03 | 133909-01 | 133925-02 | Field Duplicate | 152493-02 | 160970-01 | 180096-05 | 184937-01 | 194958-05 |
| Sample Type | Units | TOGS | | | | | | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | ***100 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***1,000 U*** | ***1,000 U*** | ***1,000 U*** | ***1,000 U*** | ***100 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***100 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** |
| Benzene | µg/L | 1[A] | ***7.00 U*** | ***35.0 U*** | ***35.0 U*** | ***35.0 U*** | ***70.0 U*** | ***70.0 U*** | ***70.0 U*** | ***70 U*** | ***7.00 U*** | ***7.00 U*** | - | ***10 U*** | ***10 U*** | ***10.0 U*** | ***25.0 U*** | ***25.0 U*** | ***25.0 U*** | ***25.0 U*** |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | - | ***500 U*** | ***50.0 U*** | - | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 20.0 U | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 50.0 U | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | 50.0 U | 50.0 U | - | 50.0 U | 50.0 U | 50.0 U | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Butylbenzene, n- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 50.0 U | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chlorobromomethane | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | - | ***500 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | - | 1,000 U | 1,000 U | 100 U | - | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Chloromethane | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Cyclohexane | µg/L | n/v | 100 U | 500 U | 500 U | 500 U | 1,000 U | 1,000 U | - | 1,000 U | 100 U | 100 U | - | 100 U | 100 U | 100 U | 250 U | 250 U | 250 U | 250 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***100 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***1,000 U*** | ***1,000 U*** | - | ***1,000 U*** | ***100 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***100 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** |
| Dibromochloromethane | µg/L | 50[B] | 20.0 U | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethane, 1,1- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | **4,130[A]** | **10,900[A]** | **5,120[A]** | **5,240[A]** | **3,940[A]** | **8,900[A]** | **242[A]** | **862[A]** | - | **86.8 J[A]** | **142 J[A]** | **1,040[A]** | **1,110[A]** | **2,540[A]** | **1,020[A]** | **1,170[A]** |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | - | - | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | - | ***200 U*** | ***20.0 U*** | - | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | - | ***200 U*** | ***20.0 U*** | - | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_0$[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | - | - | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_0$[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | - | - | 2,000 U | 200 U | 200 U | - | R | R | 200 U | 500 U | 500 U | 500 U | 500 U |
| Ethylbenzene | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 50.0 U | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | 50.0 U | 50.0 U | - | 50.0 U | 50.0 U | 50.0 U | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Isopropylbenzene | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 20.0 U | 100 U | 100 U | 100 U | 200 U | 200 U | - | 200 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | ***100 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***1,000 U*** | ***1,000 U*** | ***1,000 U*** | ***1,000 U*** | ***100 U*** | ***100 U*** | - | ***100 UJ*** | ***100 UJ*** | ***100 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***250 U*** |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 50.0 U | 250 U | 250 U | 250 U | 500 U | 500 U | 500 U | 500 U | 50.0 U | 50.0 U | - | 50.0 U | 50.0 U | 50.0 U | 125 U | 125 U | 125 U | 125 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Methylcyclohexane | µg/L | n/v | 20.0 U | 100 U | 100 U | 100 U | 200 U | 200 U | - | 200 U | 20.0 U | 20.0 U | - | 20.0 U | 20.0 U | 20.0 U | 50.0 U | 50.0 U | 50.0 U | 50.0 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Naphthalene | µg/L | 10[A] | ***50.0 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***500 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | **2,240[A]** | **4,010[A]** | **2,500[A]** | **107[A]** | **1,150[A]** | **1,130[A]** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | **663[A]** | **4,810[A]** | **3,200[A]** | **404[A]** | **83.3[A]** |
| Toluene | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | - | ***500 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***250 U*** | ***250 U*** | ***500 U*** | ***500 U*** | - | ***500 U*** | ***50.0 U*** | ***50.0 U*** | - | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***125 U*** | ***125 U*** | ***125 U*** | ***125 U*** |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | **36.4[A]** | ***100 U*** | **407[A]** | ***100 U*** | **562[A]** | **549[A]** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | **251[A]** | **1,060[A]** | **423[A]** | **76.6[A]** | **28.1 J[A]** |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | ***50.0 U*** | ***250 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | - | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | - | 500 U | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | **1,090[A]** | **1,130[A]** | **1,110[A]** | **970[A]** | **154[A]** | **636[A]** | - | **241 J[A]** | **399 J[A]** | **73.3[A]** | ***50.0 U*** | **140[A]** | **105[A]** | **97.5[A]** |
| Xylene, m & p- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Xylene, o- | µg/L | 5--[A] | ***20.0 U*** | ***100 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***200 U*** | ***20.0 U*** | ***20.0 U*** | - | ***20.0 U*** | ***20.0 U*** | ***20.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** | ***50.0 U*** |
| Total VOC | µg/L | n/v | 2,276.4 | 4,010 | 7,037 | 11,007 | 7,922 | 8,049 | 5,050 | 9,870 | 396 | 1,498 | - | 327.8 | 541 | 2,027.3 | 6,980 | 6,303 | 1,605.6 | 1,378.9 |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | 0.010 U | 0.010 U | 0.018 | 0.014 | 0.021 | 0.021 | - | - | 0.0217 | - | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | 0.100 U | **111[A]** | **23.3[A]** | **12.5[A]** | **15.7[A]** | **15.5[A]** | - | - | **13.2 L[A]** | - | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | 0.226 | **4.07[A]** | 0.161 | **0.523[A]** | 0.165 | 0.189 | - | - | **0.445 L[A]** | - | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | **1,450[A]** | **1,660[A]** | **1,090[A]** | **1,090[A]** | **1,130[A]** | **1,150[A]** | **1,120[A]** | **1,300[A]** | **1,000[A]** | - | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | 3.7 | 1,880 | 118 | 68.4 | 6.0 | 6.0 | 64.3 | 560 | 165 | 23.0 | 8.50 | - | - | 3.5 | 9.17 J | 6.67 | 2.8 | 3.6 |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | MW23R | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 28-Sep-11 | 5-Jan-12 | 6-Feb-12 | 2-Mar-12 | 5-Jun-12 | 6-Sep-12 | 24-Jan-13 | 10-Apr-13 | 5-Jul-13 | 10-Oct-13 | 10-Oct-13 | 17-Jun-15 | 9-Mar-16 | 10-Jan-18 | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | | WSR-MW-23R-GW-7 | 828-MW-23R-GW-8 | 828-MW-23R-GW-9 | 828-MW-23R-GW-10 | 828-MW-23R-GW-11 | 828-MW-23R-GW-12 | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | MW-23R | 828-MW-23R-GW |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P11-4106 | P12-0069 | 12:0488 | 12:0936 | 12:2364 | 12:3694 | 13:0365 | 131242 | 132505 | 133909 | 133925 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 14151 | 12:0069-05 | 12:0488-03 | 12:0936-06 | 12:2364-04 | 12:3694-06 | 130365-04 | 131242-03 | 132505-02 | 133909-02 | 133925-04 | 152493-01 | 160970-02 | 180096-06 | 184937-02 | 194958-06 |
| Sample Type | Units | TOGS | | | | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 30.6 | 10 U | 10.0 U | 11.1 | - | 18.3 J | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Benzene | µg/L | 1[A] | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.70 U | 0.700 U | 0.700 U | - | 1 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | 5.0 U | 5.00 U | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Butylbenzene, n- | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chlorobromomethane | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | 10.0 U | 10 U | 10.0 U | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chloromethane | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Cyclohexane | µg/L | n/v | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | - | 10 U | 10.0 U | 10.0 U | - | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | - | ***10 U*** | ***10.0 U*** | ***10.0 U*** | - | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** |
| Dibromochloromethane | µg/L | 50[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethane, 1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | **63.8[A]** | **82.4[A]** | **17.4[A]** | **13.1[A]** | **32.6[A]** | **5.30[A]** | **5.8[A]** | **5.83[A]** | 4.81 | - | **9.16[A]** | 1.46 J | 1.86 J | 1.94 J | 2.00 U | 1.11 J |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | - | - | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | 2.0 U | 2.00 U | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | 2.0 U | 2.00 U | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_b$[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | - | - | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_b$[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | - | 20 U | 20.0 U | 20.0 U | - | R | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U |
| Ethylbenzene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Isopropylbenzene | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | 10.0 U | 10.0 U | 11.9 | 10.0 U | 10.0 U | 10.0 U | **130[B]** | **80.7[B]** | **76.9[B]** | - | **107 J[B]** | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methylcyclohexane | µg/L | n/v | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 1.59 J | 1.37 J | 2.00 U | 2.00 U | 2.00 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Naphthalene | µg/L | 10[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Toluene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | 5.0 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | 5.00 U | - | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | **2.21[A]** | 2.00 U | 2.00 U | 2.00 U | **5.95[A]** | **3.46[A]** | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Xylene, m & p- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Xylene, o- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Total VOC | µg/L | n/v | 66.01 | 82.4 | 29.3 | 13.1 | 38.55 | 39.36 | 135.8 | 86.53 | 92.81 | - | 134.46 | 3.05 | 3.23 | 1.94 | ND | 1.11 |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | - | - | 0.0100 U | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | **0.819[A]** | **3.04[A]** | **7.52[A]** | **3.08[A]** | **4.21[A]** | - | - | **3.08 L[A]** | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | 0.040 | 0.129 | 0.053 | 0.081 M | 0.034 | - | - | 0.0702 L | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | **417[A]** | **392[A]** | **751[A]** | **766[A]** | **458[A]** | **568[A]** | **1,200[A]** | **529[A]** | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | 3.6 | 38.4 | 33.0 | 31.1 | 4.0 | 58.6 | 670 | 368 | 86.0 | 175 | - | 6.8 | 12.0 | 6.17 | 2.9 | 0.97 |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | MW105 | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 28-Sep-11 | 4-Jan-12 | 2-Feb-12 | 29-Feb-12 | 4-Jun-12 | 4-Sep-12 | 22-Jan-13 | 11-Apr-13 | 2-Jul-13 | 8-Oct-13 | 8-Oct-13 | 18-Jun-15 | 10-Mar-16 | 10-Jan-18 | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | | WSR-MW-105-GW-12 | WSR-MW-105-GW-13 | WSR-MW-105-GW-14 | WSR-MW-105-GW-15 | WSR-MW-105-GW-16 | WSR-MW-105-GW-17 | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | MW-105 | WSR-MW-105-GW |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P11-4106 | P12-0041 | 12:0443 | 12:0868 | 12:2335 | 12:3644 | 13:0329 | 131259 | 132471 | 133887 | 133927 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 14152 | 12:0041-02 | 12:0443-02 | 12:0868-02 | 12:2335-05 | 12:3644-02 | 130329-05 | 131259-02 | 132471-02 | 133887-01 | 133927-02 | 152493-07 | 160970-06 | 180096-01 | 184937-06 | 194958-01 |
| Sample Type | Units | TOGS | | | | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | 50.0 U | 50.0 U | 35.4 B | 20.0 U | 10.0 U | 20.0 U | 50 U | 32.8 | 10.0 U | - | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 20.0 U |
| Benzene | µg/L | 1[A] | ***3.50 U*** | ***3.50 U*** | ***1.75 U*** | ***1.40 U*** | 0.700 U | ***1.40 U*** | ***3.5 U*** | 0.700 U | 0.700 U | - | 1 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | ***2.00 U*** |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | ***25 U*** | 5.00 U | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 10.0 U | 10.0 U | 5.00 U | 4.00 U | 2.00 U | 4.00 U | 10 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 25.0 U | 25.0 U | 12.5 U | 10.0 U | 5.00 U | 10.0 U | 25 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Butylbenzene, n- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 25.0 U | 25.0 U | 12.5 U | 4.00 U | 2.00 U | 4.00 U | 10 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Chlorobromomethane | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | ***10.0 U*** | 5.00 U | - | ***25 U*** | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | ***10.0 U*** |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | 20.0 U | 50 U | 10.0 U | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Chloromethane | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Cyclohexane | µg/L | n/v | 50.0 U | 50.0 U | 25.0 U | 20.0 U | 10.0 U | - | 50 U | 10.0 U | 10.0 U | - | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 20.0 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | ***20.0 U*** | ***10.0 U*** | - | ***50 U*** | ***10.0 U*** | ***10.0 U*** | - | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** |
| Dibromochloromethane | µg/L | 50[B] | 10.0 U | 10.0 U | 5.00 U | 4.00 U | 2.00 U | 4.00 U | 10 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | 2.00 U | ***4.00 U*** | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | ***4.00 U*** |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | 2.00 U | ***4.00 U*** | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | ***4.00 U*** |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | 2.00 U | ***4.00 U*** | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | ***4.00 U*** |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Dichloroethane, 1,1- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | ***2.00 U*** | ***4.00 U*** | ***10 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***4.00 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | **480[A]** | **179[A]** | **220[A]** | **155[A]** | **81.9[A]** | **145[A]** | **210[A]** | **159[A]** | **83.6[A]** | - | **151[A]** | **111[A]** | **129[A]** | **131[A]** | **188[A]** | **212[A]** |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | **358[A]** | **134[A]** | **183[A]** | **120[A]** | **59.0[A]** | **115[A]** | **120[A]** | **83.6[A]** | **86.4[A]** | - | **196[A]** | **130[A]** | **115[A]** | **100[A]** | **98.9[A]** | **111[A]** |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | ***2.00 U*** | ***4.00 U*** | - | - | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***4.00 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | ***10 U*** | 2.00 U | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | ***10 U*** | 2.00 U | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4[B][A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | ***2.00 U*** | ***4.00 U*** | - | - | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***4.00 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4[B][A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | ***2.00 U*** | ***4.00 U*** | ***10 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***4.00 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | - | 100 U | 20.0 U | 20.0 U | - | R | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 40.0 U |
| Ethylbenzene | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | ***2.00 U*** | - | ***10 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***4.00 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 25.0 U | 25.0 U | 12.5 U | 10.0 U | 5.00 U | 10.0 U | 25 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U |
| Isopropylbenzene | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 10.0 U | 10.0 U | 5.00 U | 4.00 U | 2.00 U | - | 10 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | 50.0 U | 50.0 U | 25.0 U | 20.0 U | 10.0 U | 20.0 U | **110[B]** | 32.2 | 10.0 U | - | 10.0 UJ | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 20.0 U |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 25.0 U | 25.0 U | 12.5 U | 10.0 U | 5.00 U | 10.0 U | 25 U | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 10.0 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | 10.0 U | 10.0 U | 5.00 U | 4.00 U | 2.00 U | - | 10 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Methylcyclohexane | µg/L | n/v | 10.0 U | 10.0 U | 5.00 U | 4.00 U | 2.00 U | - | 10 U | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | ***10.0 U*** | 5.00 U | ***10.0 U*** | ***25 U*** | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | ***10.0 U*** |
| Naphthalene | µg/L | 10[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 10.0 U | 5.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | ***10.0 U*** | 5.00 U | ***10.0 U*** | ***25 U*** | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | ***10.0 U*** |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | **6.71[A]** | 4.92 | **5.21[A]** | **5.59[A]** | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 1.38 J | 2.36 | 2.93 | 3.37 | 2.15 J |
| Toluene | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | ***10.0 U*** | 5.00 U | - | ***25 U*** | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | ***10.0 U*** |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | ***10.0 U*** | 5.00 U | - | ***25 U*** | 5.00 U | 5.00 U | - | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | ***10.0 U*** |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | ***2.00 U*** | ***4.00 U*** | ***10 U*** | ***2.00 U*** | ***2.00 U*** | - | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***4.00 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | **431[A]** | **221[A]** | **264[A]** | **200[A]** | **139[A]** | **229[A]** | **230[A]** | **13.9[A]** | **20.3[A]** | - | **16.8[A]** | **9.94[A]** | **10.1[A]** | **15.2[A]** | **23.5[A]** | **14.2[A]** |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | - | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***12.5 U*** | 4.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | 10.0 U | - | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | ***10.0 U*** | ***10.0 U*** | ***5.00 U*** | ***4.00 U*** | 2.00 U | ***4.00 U*** | ***10 U*** | **23.6[A]** | **18.8[A]** | - | **78.3[A]** | **48.5[A]** | **55.5[A]** | **48.7[A]** | **75.8[A]** | **46.6[A]** |
| Xylene, m & p- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Xylene, o- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | 5.00 U | 4.00 U | 2.00 U | 4.00 U | ***10 U*** | 2.00 U | 2.00 U | - | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 4.00 U |
| Total VOC | µg/L | n/v | 1,269 | 534 | 709.11 | 479.92 | 285.11 | 494.59 | 670 | 345.1 | 209.1 | - | 442.1 | 300.82 | 311.96 | 297.83 | 389.57 | 385.95 |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | 0.010 U | 0.010 U | 0.010 U | 0.010 U | 0.010 U | - | - | 0.0194 | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | 0.100 U | 0.100 U | 0.100 U | 0.100 U | 0.100 U | - | - | **3.91 L[A]** | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | 0.092 | 0.021 | 0.033 | 0.041 | 0.015 U | - | - | 0.0860 L | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | **318[A]** | **346[A]** | **352[A]** | **342[A]** | **356[A]** | **361[A]** | **1,100[A]** | **302[A]** | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | 3.2 | 3 | 3.2 | 2.9 | 3.3 | 3.2 | 1,200 | 164 | 12.0 | 4.70 | - | 2.5 | 6.14 | 3.52 | 2.0 | 1.6 |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | MW207R | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 27-Sep-11 | 27-Sep-11 | 6-Feb-12 | 2-Mar-12 | 6-Jun-12 | 6-Sep-12 | 24-Jan-13 | 12-Apr-13 | 5-Jul-13 | 10-Oct-13 | 10-Oct-13 | 18-Jun-15 | 10-Mar-16 | 10-Jan-18 | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | | WSR-MW-207R-GW-12 | WSR-MW-Dup-GW-13 | WSR-MW-207R-GW-13 | WSR-MW-207R-GW-14 | WSR-MW-207R-GW-15 | WSR-MW-207R-GW-16 | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R | WSR-MW-207R-GW |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P11-4089 | P11-4089 | 12:0488 | 12:0936 | 12:2392 | 12:3694 | 13:0365 | 131283 | 132505 | 133909 | 133925 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 14074 | 14075 | 12:0488-04 | 12:0936-03 | 12:2392-03 | 12:3694-02 | 130365-02 | 131283-04 | 132505-04 | 133909-04 | 133925-06 | 152493-06 | 160970-05 | 180096-04 | 184937-05 | 194958-04 |
| Sample Type | Units | TOGS | | Field Duplicate | | | | | | | | | | | | | | |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | 50.0 U | 50.0 U | ***100 U*** | ***100 U*** | 50.0 U | 50.0 U | 50 U | 50.0 U | ***200 U*** | - | ***200 U*** | ***200 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***100 U*** |
| Benzene | µg/L | 1[A] | ***3.50 U*** | ***3.50 U*** | ***7.00 U*** | ***7.00 U*** | ***3.50 U*** | ***3.50 U*** | ***3.5 U*** | ***3.50 U*** | ***14.0 U*** | - | ***20 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***10.0 U*** |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | ***25 U*** | ***25.0 U*** | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 10.0 U | 10.0 U | 20.0 U | 20.0 U | 10.0 U | 10.0 U | 10 U | 10.0 U | 40.0 U | - | 40.0 U | 40.0 U | 20.0 U | 20.0 U | 40.0 U | 20.0 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 25.0 U | 25.0 U | 50.0 U | 50.0 U | 25.0 U | 25.0 U | 25 U | 25.0 U | ***100 U*** | - | ***100 U*** | ***100 U*** | 50.0 U | 50.0 U | ***100 U*** | 50.0 U |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Butylbenzene, n- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 25.0 U | 25.0 U | 20.0 U | 20.0 U | 10.0 U | 10.0 U | 10 U | 10.0 U | 40.0 U | - | 40.0 U | 40.0 U | 20.0 U | 20.0 U | 40.0 U | 20.0 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Chlorobromomethane | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | - | ***25 U*** | ***25.0 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***50.0 U*** | ***50.0 U*** | ***100 U*** | ***50.0 U*** |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | 50.0 U | 50 U | 50.0 U | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Chloromethane | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Cyclohexane | µg/L | n/v | 50.0 U | 50.0 U | 100 U | 100 U | 50.0 U | - | 50 U | 50.0 U | 200 U | - | 200 U | 200 U | 100 U | 100 U | 200 U | 100 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***50.0 U*** | ***50.0 U*** | ***100 U*** | ***100 U*** | ***50.0 U*** | - | ***50 U*** | ***50.0 U*** | ***200 U*** | - | ***200 U*** | ***200 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***100 U*** |
| Dibromochloromethane | µg/L | 50[B] | 10.0 U | 10.0 U | 20.0 U | 20.0 U | 10.0 U | 10.0 U | 10 U | 10.0 U | 40.0 U | - | 40.0 U | 40.0 U | 20.0 U | 20.0 U | 40.0 U | 20.0 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichloroethane, 1,1- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | **908[A]** | **913[A]** | **1,330[A]** | **1,480[A]** | **432[A]** | **98.4[A]** | **500[A]** | **250[A]** | **193[A]** | - | ***40.0 U*** | **537[A]** | **690[A]** | **1,940[A]** | **1,070[A]** | **932[A]** |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | **22.7[A]** | **22.3[A]** | ***20.0 U*** | ***20.0 U*** | **13.9[A]** | **26.0[A]** | **24[A]** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | **14.7 J[A]** | **25[A]** | ***40.0 U*** | **15.5 J[A]** |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | - | - | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | ***10 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | ***10 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_{5}$[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | - | - | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_{5}$[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | - | 100 U | 100 U | 400 U | - | R | 400 U | 200 U | 200 U | 400 U | 200 U |
| Ethylbenzene | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 25.0 U | 25.0 U | 50.0 U | 50.0 U | 25.0 U | 25.0 U | 25 U | 25.0 U | ***100 U*** | - | ***100 U*** | ***100 U*** | 50.0 U | 50.0 U | ***100 U*** | 50.0 U |
| Isopropylbenzene | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 10.0 U | 10.0 U | 20.0 U | 20.0 U | 10.0 U | - | 10 U | 10.0 U | 40.0 U | - | 40.0 U | 40.0 U | 20.0 U | 20.0 U | 40.0 U | 20.0 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | 50.0 U | 50.0 U | ***100 U*** | ***100 U*** | 50.0 U | 50.0 U | **140[B]** | **61.0[B]** | ***200 U*** | - | ***200 UJ*** | ***200 U*** | ***100 U*** | ***100 U*** | ***200 U*** | ***100 U*** |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 25.0 U | 25.0 U | 50.0 U | 50.0 U | 25.0 U | 25.0 U | 25 U | 25.0 U | 100 U | - | 100 U | 100 U | 50.0 U | 50.0 U | 100 U | 50.0 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | 10.0 U | 10.0 U | ***20.0 U*** | ***20.0 U*** | 10.0 U | - | 10 U | 10.0 U | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Methylcyclohexane | µg/L | n/v | 10.0 U | 10.0 U | 20.0 U | 20.0 U | 10.0 U | - | 10 U | 10.0 U | 40.0 U | - | 40.0 U | 40.0 U | 20.0 U | 20.0 U | 40.0 U | 20.0 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | ***25.0 U*** | ***25 U*** | ***25.0 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***50.0 U*** | ***50.0 U*** | ***100 U*** | ***50.0 U*** |
| Naphthalene | µg/L | 10[A] | ***25.0 U*** | ***25.0 U*** | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | ***25.0 U*** | ***25 U*** | ***25.0 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***50.0 U*** | ***50.0 U*** | ***100 U*** | ***50.0 U*** |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | **132[A]** | **130[A]** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | **19[A]** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Toluene | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | - | ***25 U*** | ***25.0 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***50.0 U*** | ***50.0 U*** | ***100 U*** | ***50.0 U*** |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***50.0 U*** | ***50.0 U*** | ***25.0 U*** | - | ***25 U*** | ***25.0 U*** | ***100 U*** | - | ***100 U*** | ***100 U*** | ***50.0 U*** | ***50.0 U*** | ***100 U*** | ***50.0 U*** |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | **182[A]** | **184[A]** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | **55[A]** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | **20.5 J[A]** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | ***25.0 U*** | ***25.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | 25.0 U | - | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | **203[A]** | **213[A]** | **1,010[A]** | **936[A]** | **627[A]** | **184[A]** | **1,000[A]** | **327[A]** | **1,850[A]** | - | **451[A]** | **829[A]** | **582[A]** | **2,000[A]** | **1,700[A]** | **1,140[A]** |
| Xylene, m & p- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Xylene, o- | µg/L | 5--[A] | ***10.0 U*** | ***10.0 U*** | ***20.0 U*** | ***20.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10 U*** | ***10.0 U*** | ***40.0 U*** | - | ***40.0 U*** | ***40.0 U*** | ***20.0 U*** | ***20.0 U*** | ***40.0 U*** | ***20.0 U*** |
| Total VOC | µg/L | n/v | 1,447.7 | 1,462.3 | 2,340 | 2,416 | 1,072.9 | 308.4 | 1,738 | 638 | 2,043 | - | 451 | 1,386.5 | 1,286.7 | 3,965 | 2,770 | - |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | - | - | 0.010 U | 0.014 | 0.010 U | - | - | 0.0100 U | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | - | - | 0.100 U | 0.100 U | 0.100 U | - | - | 0.100 U | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | - | - | 0.045 | 0.145 | 0.057 | - | - | 0.0207 | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | - | - | **543[A]** | **439[A]** | **538[A]** | **531[A]** | **840[A]** | **493[A]** | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | - | - | 18.5 | 8.7 | 9.4 | 1.7 | 530 | 131 | 28.0 | 18.4 | - | 4.1 | 11.7 | 5.91 | 3.5 | 2.1 |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | Trip Blank | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 4-Jan-12 | 5-Jan-12 | 2-Feb-12 | 3-Feb-12 | 6-Feb-12 | 29-Feb-12 | 1-Mar-12 | 2-Mar-12 | 4-Jun-12 | 5-Jun-12 | 6-Jun-12 | 4-Sep-12 | 5-Sep-12 | 6-Sep-12 | 22-Jan-13 | 23-Jan-13 | 24-Jan-13 | 10-Apr-13 | 11-Apr-13 | 12-Apr-13 | 2-Jul-13 | 3-Jul-13 | 5-Jul-13 |
| Sample ID | | | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | P12-0041 | P12-0069 | 12:0443 | 12:0472 | 12:0488 | 12:0868 | 12:0906 | 12:0936 | 12:2335 | 12:2364 | 12:2392 | 12:3644 | 12:3668 | 12:3694 | 13:0329 | 13:0353 | 13:0365 | 131242 | 131259 | 131283 | 132471 | 132490 | 132505 |
| Laboratory Sample ID | | | 12:0041-01 | 12:0069-01 | 12:0443-01 | 12:0472-01 | 12:0488-01 | 12:0868-01 | 12:0906-01 | 12:0936-01 | 12:2335-01 | 12:2364-01 | 12:2392-01 | 12:3644-01 | 12:3668-01 | 12:3694-01 | 130329-01 | 130353-01 | 130365-01 | 131242-01 | 131259-01 | 131283-01 | 132471-01 | 132490-01 | 132505-01 |
| Sample Type | Units | TOGS | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank |
| **Volatile Organic Compounds** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Acetone | µg/L | 50[B] | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 28.1 B | 10.0 U | 10.0 U | 10 U | 10 U | 10 U | 13.3 | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Benzene | µg/L | 1[A] | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.70 U | 0.70 U | 0.70 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U | 0.700 U |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Butylbenzene, n- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chlorobromomethane | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | - | - | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | - | - | - | - | - | - | 10.0 U | 10.0 U | 10.0 U | - | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chloromethane | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Cyclohexane | µg/L | n/v | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | - | - | - | 10 U | 10 U | 10 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | - | - | - | ***10 U*** | ***10 U*** | ***10 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** |
| Dibromochloromethane | µg/L | 50[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethane, 1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.0 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.0 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_{p}$[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.0 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_{p}$[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.0 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dioxane, 1,4- | µg/L | n/v | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 20 U | 20 U | 20 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U |
| Ethylbenzene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | - | - | - | ***2.0 U*** | ***2.0 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Isopropylbenzene | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10 U | 10 U | 10 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methylcyclohexane | µg/L | n/v | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Naphthalene | µg/L | 10[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Toluene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | - | - | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | - | - | - | 5.0 U | 5.0 U | 5.0 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.0 U*** | ***2.0 U*** | ***2.0 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | - | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | - | - | - | - | - | - | 5.00 U | 5.00 U | 5.00 U | - | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Xylene, m & p- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Xylene, o- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.0 U | 2.0 U | 2.0 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Total VOC | µg/L | n/v | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND | 28.1 | ND | ND | ND | ND | ND | 13.3 | ND | ND | 0 | 0 | 0 |
| **Miscellaneous Parameters** | | | | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

See notes on last page.

**Table 1**
**Summary of Volatile Organic Compounds in Groundwater – September 2011 to October 2019**
**PERIODIC REVIEW REPORT, WARD STREET SITES**
**GERMANOW-SIMON CORPORATION**
**ROCHESTER, NY**

| Sample Location | | | Trip Blank | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Sample Date | | | 8-Oct-13 | 9-Oct-13 | 10-Oct-13 | 17-Jun-15 | 9-Mar-16 | 10-Jan-18 | 16-Oct-18 | 3-Oct-19 |
| Sample ID | | | Trip Blank | Trip Blank | Trip Blank | TRIP-06172015, T-633 | Trip Blank (T-693) | Trip Blank T-803 | Trip Blank | Trip Blank |
| Sampling Company | | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| Laboratory | | | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH | PARAROCH |
| Laboratory Work Order | | | 133927 | 133926 | 133925 | 152493 | 160970 | 180096 | 184937 | 194958 |
| Laboratory Sample ID | | | 133927-01 | 133926-01 | 133925-01 | 152493-04 | 160970-07 | 180096-07 | 184937-07 | 194958-07 |
| Sample Type | Units | TOGS | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank | Trip Blank |
| **Volatile Organic Compounds** | | | | | | | | | | |
| Acetone | µg/L | 50[B] | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Benzene | µg/L | 1[A] | 1 U | 1 U | 1 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U | 1.00 U |
| Bromobenzene | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Bromodichloromethane | µg/L | 50[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Bromoform (Tribromomethane) | µg/L | 50[B] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Bromomethane (Methyl bromide) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Butylbenzene, n- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Butylbenzene, sec- (2-Phenylbutane) | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Butylbenzene, tert- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Carbon Disulfide | µg/L | 60[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Carbon Tetrachloride (Tetrachloromethane) | µg/L | 5[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chlorobenzene (Monochlorobenzene) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chlorobromomethane | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Chloroethane (Ethyl Chloride) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chloroethyl Vinyl Ether, 2- | µg/L | n/v | - | - | - | - | - | - | - | - |
| Chloroform (Trichloromethane) | µg/L | 7[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Chloromethane | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Cyclohexane | µg/L | n/v | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Dibromo-3-Chloropropane, 1,2- (DBCP) | µg/L | 0.04[A] | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** | ***10.0 U*** |
| Dibromochloromethane | µg/L | 50[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,2- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,3- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorobenzene, 1,4- | µg/L | 3[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichlorodifluoromethane (Freon 12) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethane, 1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethane, 1,2- | µg/L | 0.6[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloroethene, 1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethene, cis-1,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloroethene, trans-1,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Dichloropropane, 1,2- | µg/L | 1[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloropropane, 1,3- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Dichloropropane, 2,2- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Dichloropropene, cis-1,3- | µg/L | 0.4$_p$[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dichloropropene, trans-1,3- | µg/L | 0.4$_p$[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Dioxane, 1,4- | µg/L | n/v | R | R | R | 20.0 U | 20.0 U | 20.0 U | 20.0 U | 20.0 U |
| Ethylbenzene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Ethylene Dibromide (Dibromoethane, 1,2-) | µg/L | 0.0006[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Hexanone, 2- (Methyl Butyl Ketone) | µg/L | 50[B] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Isopropylbenzene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Isopropyltoluene, p- (Cymene) | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Methyl Acetate | µg/L | n/v | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methyl Ethyl Ketone (MEK) (2-Butanone) | µg/L | 50[B] | 10.0 UJ | 10.0 UJ | 10.0 UJ | 10.0 U | 10.0 U | 10.0 U | 10.0 U | 10.0 U |
| Methyl Isobutyl Ketone (MIBK) | µg/L | n/v | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10[B] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methylcyclohexane | µg/L | n/v | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Methylene Chloride (Dichloromethane) | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Naphthalene | µg/L | 10[A] | - | - | - | - | - | - | - | - |
| Propylbenzene, n- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Styrene | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Tetrachloroethane, 1,1,2,2- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Tetrachloroethene (PCE) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Toluene | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorobenzene, 1,2,3- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Trichlorobenzene, 1,2,4- | µg/L | 5--[A] | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U | 5.00 U |
| Trichloroethane, 1,1,1- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichloroethane, 1,1,2- | µg/L | 1[A] | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** | ***2.00 U*** |
| Trichloroethene (TCE) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorofluoromethane (Freon 11) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trichlorotrifluoroethane (Freon 113) | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Trimethylbenzene, 1,2,4- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Trimethylbenzene, 1,3,5- | µg/L | 5--[A] | - | - | - | - | - | - | - | - |
| Vinyl Acetate | µg/L | n/v | - | - | - | - | - | - | - | - |
| Vinyl Chloride | µg/L | 2[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Xylene, m & p- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Xylene, o- | µg/L | 5--[A] | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U | 2.00 U |
| Total VOC | µg/L | n/v | ND | ND | ND | ND | ND | ND | ND | ND |
| **Miscellaneous Parameters** | | | | | | | | | | |
| Arsenic | mg/L | 0.025[A] | - | - | - | - | - | - | - | - |
| Iron | mg/L | 0.3[A] | - | - | - | - | - | - | - | - |
| Manganese | mg/L | 0.3[A] | - | - | - | - | - | - | - | - |
| Sodium | mg/L | 20[A] | - | - | - | - | - | - | - | - |
| Total Organic Carbon | mg/L | n/v | - | - | - | - | - | - | - | - |

**Notes:**

| | |
|---|---|
| TOGS | NYSDEC TOGS 1.1.1 (Reissued June 1998 with errata in January 1999 and addenda in April 2000 and June 2004) |
| [A] | TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Standards |
| [B] | TOGS 1.1.1 - Table 1 - Ambient Water Quality Standards and Guidance Values, Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1); Guidance |
| **6.5[A]** | Concentration exceeds the indicated standard. |
| 15.2 | Measured concentration did not exceed the indicated standard. |
| ***0.50 U*** | Laboratory reporting limit was greater than the applicable standard. |
| 0.03 U | Analyte was not detected at a concentration greater than the laboratory reporting limit. |
| n/v | No standard/guideline value. |
| - | Parameter not analyzed / not available. |
| - | The standard for Iron and Manganese is 500 ug/L, which applies to the sum of these substances. As individual standards, the standard is 300 ug/L. |
| -- | The principal organic contaminant standard for groundwater of 5 ug/L (described elsewhere in the TOGS table) applies to this substance. |
| p | Applies to the sum of cis- and trans-1,3-dichloropropene. |
| B | Indicates analyte was found in associated blank, as well as in the sample. |
| J | The reported result is an estimated value. |
| L | Detection limit adjustment for sample matrix effects. |
| M | Denotes matrix spike recoveries outside QC limits. Matrix bias indicated. |
| ND | Not detected. |
| R | The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified. |
| UJ | Indicates estimated non-detect. |

# Table 2
## SUMMARY OF FIELD PARAMETERS IN GROUNDWATER - SEPTEMBER 2011 TO OCTOBER 2019

**Ward Street Sites**
**Germanow-Simoan Corporation**
**Rochester, NY**

| Area of interest | | On-Site Area 1: Building B Annex | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | MW105 | | | | | | | | | | | | | | |
| Sample Date | | 28-Sep-11 | 4-Jan-12 | 2-Feb-12 | 29-Feb-12 | 4-Jun-12 | 4-Sep-12 | 22-Jan-13 | 11-Apr-13 | 2-Jul-13 | 8-Oct-13 | 18-Jun-15* | 10-Mar-16 | 10-Jan-18* | 24-Oct-18 | 08-Oct-19* |
| Sample ID | | WSR-MW-105-GW-12 | WSR-MW-105-GW-13 | WSR-MW-105-GW-14 | WSR-MW-105-GW-15 | WSR-MW-105-GW-16 | WSR-MW-105-GW-17 | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW | WSR-MW-105-GW |
| Sampling Company | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| **Field Parameters** | **Units** | | | | | | | | | | | | | | | |
| Color (Visual) | none | clear | clear | clear | clear | clear | cloudy | clear | Black precipitate | clear with some brown precipitate | clear | cloudy | clear | slightly cloudy | | brown turbid (after bailing) |
| Conductivity, Field | mS/cm | 2.50 | 2.72 | 0.267 | 2.36 | 0.318 | 2.60 | 4.66 | 2.71 | 2.55 | 2.76 | 2.24 | 2.31 | 2.08 | 2.02 | 2.039 |
| Dissolved Oxygen, Field | mg/L | 0.00 | 0.53 | 0.00 | 0.25 | 0.97 | 0.53 | 0.17 | 0.79 | 0.32 | 0.21 | 0.42 | 0.35 | 0.33 | 0.48 | 0.26 |
| Odor | none | none | no odor | no odor | no odor | sulfur odor | no odor | sulfur odor | Strong sulfur odor | none | none | none | slight sulfur | none | none | none |
| Oxidation Reduction Potential | mV | 111 | 227 | 297 | 235 | -132 | 195.3 | -199.2 | -219.6 | -152.6 | -70.2 | -28.0 | -90.2 | -27.5 | -91.8 | -8.4 |
| pH, Field | S.U. | 6.87 | 7.25 | 7.28 | 7.33 | 7.09 | 7.16 | 6.90 | 7.37 | 8.47 | 7.26 | 7.18 | 7.22 | 7.14 | 7.19 | 7.18 |
| Temperature, Field | deg C | 20.46 | 20.49 | 19.22 | 20.43 | 19.4 | 21.3 | 18.9 | 18.7 | 19.6 | 19.4 | 19.2 | 19.6 | 20.0 | 21.2 | 20.7 |
| Turbidity, Field | NTU | 58.5 | 31.3 | 3.44 | 9.75 | 4.41 | 17.6 | 4.99 | 4.36 | 5.56 | 3.56 | 47.8 | 13.0 | 20.3 | 25.8 | 91.19 |
| Volume Purged | gal | 0.6 | 3 ~ | 3.5 ~ | 2.0 | 1.0 | 1.1 | 2.7 | 1.3 | 1.35 | 1.0 | 0.3 | 1.3 | 1.2 | 0.7 | 0.6 |

**See Notes on Last Page**

# Table 2
## SUMMARY OF FIELD PARAMETERS IN GROUNDWATER - SEPTEMBER 2011 TO OCTOBER 2019

**Ward Street Sites**
**Germanow-Simoan Corporation**
**Rochester, NY**

| Area of interest | | On-Site Area 1: Building B Annex | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | MW207R | | | | | | | | | | | | | |
| Sample Date | | 27-Sep-11 | 6-Feb-12 | 2-Mar-12 | 6-Jun-12 | 6-Sep-12 | 24-Jan-13 | 12-Apr-13 | 5-Jul-13 | 10-Oct-13 | 18-Jun-15 | 10-Mar-16 | 10-Jan-18* | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | WSR-MW-207R-GW-12 | WSR-MW-207R-GW-13 | WSR-MW-207R-GW-14 | WSR-MW-207R-GW-15 | WSR-MW-207R-GW-16 | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW | WSR-MW-207R-GW |
| Sampling Company | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| **Field Parameters** | **Units** | | | | | | | | | | | | | | |
| Color (Visual) | none | clear | clear w/ black flecks | clear w/ black flecks | clear | clear w/ black flecks | murky w/ black flecks | Black precipitate | clear with black precipitate | clear with black particulates | slightly yellow | clear | clear | clear | clear with black, fine suspended material |
| Conductivity, Field | mS/cm | 0.50 | 0.541 | 4.32 | 0.490 | 4.59 | 49.93 | 3.85 | 4.00 | 3.57 | 3.84 | 3.48 | 3.36 | 3.60 | 4.648 |
| Dissolved Oxygen, Field | mg/L | 0.7 | 0.00 | 0.00 | 0.62 | 0.41 | 0.36 | 0.74 | 0.15 | 0.14 | 0.67 | 0.4 | 0.10 | 0.18 | 0.12 |
| Odor | none | sulfur odor | odor | sulfur odor | strong sulfur odor | sulfur | sulfur odor | odor | strong sulfur odor | strong sulfur odor | sulfur odor | sulfur odor | sulfur odor | strong sulfur odor | sulfur odor |
| Oxidation Reduction Potential | mV | -134 | -345 | -374 | -358 | -301.6 | -351.9 | -346.1 | -349.2 | -288.8 | -248.2 | -67.0 | -104.5 | -278.4 | -141.3 |
| pH, Field | S.U. | 6.93 | 6.73 | 7.22 | 6.68 | 6.87 | 6.77 | 8.04 | 6.78 | 6.93 | 6.79 | 7.00 | 6.93 | 7.06 | 6.76 |
| Temperature, Field | deg C | 17.9 | 14.27 | 13.28 | 15.9 | 20.1 | 14.0 | 11.7 | 18.7 | 18.6 | 15.0 | 14.2 | 14.0 | 16.0 | 16.2 |
| Turbidity, Field | NTU | 4.21 | -0.29 | 5.79 | 0.70 | 3.92 | 1.72 | 2.31 | 3.53 | 3.66 | 1.52 | 2.29 | 2.40 | 1.0 | 55.04** |
| Volume Purged | gal | 1.5 | 1.1 | 0.5 | 1.3 | 1.2 | 3.6 | 1.6 | 2.0 | 1.5 | 1.5 | 1.6 | 1.1 | 0.7 | 0.7 |

**See Notes on Last Page**

# Table 2
## SUMMARY OF FIELD PARAMETERS IN GROUNDWATER - SEPTEMBER 2011 TO OCTOBER 2019

**Ward Street Sites**
**Germanow-Simoan Corporation**
**Rochester, NY**

| Area of interest | | Off-Site Area 1: MW-16/ Ward Street | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | MW16 | | | | | | | | | | | | | |
| Sample Date | | 27-Sep-11 | 3-Feb-12 | 2-Mar-12 | 5-Jun-12 | 5-Sep-12 | 23-Jan-13 | 11-Apr-13 | 3-Jul-13 | 9-Oct-13 | 17-Jun-15* | 9-Mar-16 | 10-Jan-18* | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | WSR-MW-16-GW-18 | WSR-MW-16-GW-19 | WSR-MW-16-GW-20 | WSR-MW-16-GW-21 | WSR-MW-16-GW-22 | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW | WSR-MW-16-GW |
| Sampling Company | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| **Field Parameters** | **Units** | | | | | | | | | | | | | | |
| Color (Visual) | none | sl.red | clear | slightly cloudy | clear | clear | clear | clear with black precipitate | clear with black precipitate | clear with black specks | clear with black sulfide deposits | clear with black sulfide deposits | slightly cloudy with light to dark colored suspended material | none | clear with black suspended material |
| Conductivity, Field | mS/cm | 6.72 | 0.762 | 2.33 | 0.843 | 10.52 | 7.63 | 10.63 | 9.73 | 10.13 | 11.94 | 12.76 | 8.50 | 7.56 | 5.511 |
| Dissolved Oxygen, Field | mg/L | 0 | 0.0 | 0.00 | 1.09 | 0.40 | 0.51 | 0.8 | 0.19 | 0.10 | 0.35 | 0.13 | 0.17 | 0.26 | 0.13 |
| Odor | none | 0 | no odor | no odor | no odor | sulfur | sewage odor | Sulfur odor | slight sulfur odor | sulfur odor | none | sulfur odor | slight sulfur odor | none | slight sulfur odor |
| Oxidation Reduction Potential | mV | -107 | -259 | -181 | -291 | -319.5 | -208.0 | -361.2 | -207.6 | -188.0 | -150.0 | -120.2 | -115.1 | -164.4 | -140.3 |
| pH, Field | S.U. | 6.82 | 7.13 | 7.52 | 7.20 | 7.26 | 7.06 | 7.10 | 7.13 | 7.33 | 7.08 | 7.06 | 7.19 | 7.46 | 7.41 |
| Temperature, Field | deg C | 19.29 | 11.68 | 11.23 | 19.6 | 21.7 | 8.7 | 8.3 | 18.1 | 19.3 | 16.5 | 14.9 | 11.8 | 17.8 | 17.3 |
| Turbidity, Field | NTU | 30 | 11.1 | 17.6 | 37.0 | 7.11 | 1.01 | 4.55 | 8.59 | 11.4 | 8.98 | 11.55 | 15.0 | 1.89 | 17.27 |
| Volume Purged | gal | 0.9 | 3.0 | 1.9 | 0.5 | 1.1 | 2.8 | 3.3 | 1.3 | 0.8 | 1.0 | 1.1 | 0.4 | 0.3 | 1.2 |

**See Notes on Last Page**

# Table 2
## SUMMARY OF FIELD PARAMETERS IN GROUNDWATER - SEPTEMBER 2011 TO OCTOBER 2019

**Ward Street Sites**
**Germanow-Simoan Corporation**
**Rochester, NY**

| Area of interest | | Off-Site Area 1: MW-16/ Ward Street | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | MW16R | | | | | | | | | | | | | | |
| Sample Date | | 28-Sep-11 | 5-Jan-12 | 3-Feb-12 | 1-Mar-12 | 5-Jun-12 | 5-Sep-12 | 23-Jan-13 | 11-Apr-13 | 3-Jul-13 | 9-Oct-13 | 17-June-15* | 9-Mar-16 | 10-Jan-18* | 24-Oct-18 | 08-Oct-19 |
| Sample ID | | WSR-MW-16R-GW-18 | WSR-MW-16R-GW-19 | WSR-MW-16R-GW-20 | WSR-MW-16R-GW-21 | WSR-MW-16R-GW-22 | WSR-MW-16R-GW-23 | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW | WSR-MW-16R-GW |
| Sampling Company | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| **Field Parameters** | **Units** | | | | | | | | | | | | | | | |
| Color (Visual) | none | clear | clear | clear | clear w/ black flecks | clear | clear | murky | Slightly clouded | clear with black precipitate | clear with black precipitate | clear with black particulate | clear with black particulate | clear with fine light to dark suspended material | clear | mostly clear with dark suspended material |
| Conductivity, Field | mS/cm | 4.31 | 3.75 | 0.782 | 4.90 | 0.629 | 5.19 | 5.32 | 4.06 | 4.40 | 2.67 | 8.04 | 3.72 | 3.96 | 2.91 | 4.875 |
| Dissolved Oxygen, Field | mg/L | 1.12 | 2.63 | 0.00 | 0.00 | 1.00 | 0.16 | 0.90 | 0.76 | 0.25 | 0.14 | 0.16 | 0.11 | 0.34 | 1.35 | 0.14 |
| Odor | none | none | no odor | no odor | stale odor | no odor | sulfur | sulfur | Sulfur odor | slight sulfur odor | sulfur odor | none | none | sulfur odor | none | none |
| Oxidation Reduction Potential | mV | -62 | 104 | -247 | -196 | -247 | -328.6 | -346.8 | -313.9 | -354.5 | -264.3 | -205.9 | -144.3 | -143.1 | -155.9 | -163.5 |
| pH, Field | S.U. | 6.56 | 7.53 | 6.84 | 7.04 | 6.53 | 6.96 | 6.76 | 7.04 | 6.90 | 6.58 | 7.00 | 6.95 | 6.89 | 6.99 | 6.84 |
| Temperature, Field | deg C | 17.78 | 7.26 | 12.28 | 10.95 | 18.3 | 20.9 | 11.1 | 8.3 | 19.0 | 19.7 | 16.0 | 17.2 | 10.6 | 16.7 | 16.7 |
| Turbidity, Field | NTU | 37 | 44.3 | 12.7 | 29 | 15.0 | 11.48 | 3.97 | 13.9 | 12.50 | 6.42 | 9.79 | 3.76 | 14.1 | 3.92 | 26.33 |
| Volume Purged | gal | 1.0 | 0.6 | 2.7 | 2.1 | 0.8 | 1.9 | 1.2 | 2.8 | 2.0 | 1.1 | 0.3 | 1.4 | 0.8 | 1.6 | 1.3 |

**See Notes on Last Page**

# Table 2
## SUMMARY OF FIELD PARAMETERS IN GROUNDWATER - SEPTEMBER 2011 TO OCTOBER 2019

**Ward Street Sites**
**Germanow-Simoan Corporation**
**Rochester, NY**

| Area of interest | | 8-28 Ward St | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | MW23 | | | | | | | | | | | | | | |
| Sample Date | | 28-Sep-11 | 5-Jan-12 | 6-Feb-12 | 2-Mar-12 | 5-Jun-12 | 6-Sep-12 | 24-Jan-13 | 10-Apr-13 | 5-Jul-13 | 10-Oct-13 | 17-Jun-15* | 9-Mar-16 | 10-Jan-18* | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | WSR-MW-23-GW-7 | 828-MW-23-GW-8 | 828-MW-23-GW-9 | 828-MW-23-GW-10 | 828-MW-23-GW-11 | 828-MW-23-GW-12 | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW | 828-MW-23-GW |
| Sampling Company | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| **Field Parameters** | **Units** | | | | | | | | | | | | | | | |
| Color (Visual) | none | clear | clear | clear w/ black flecks | clear w/ black flecks | clear, no black flecks | clear/black pieces | clear w/ black flecks | Black precipitate | clear with black precipitate | clear with black precipitate | slightly yellow, brown particulate | | clear, few fine black suspended particles | clear | mostly clear with light-colored suspended material |
| Conductivity, Field | mS/cm | 7.37 | 7.12 | 0.596 | 6.06 | 0.828 | 6.62 | 4.66 | 4.38 | 3.48 | 5.96 | 4.34 | 5.21 | 4.39 | 3.72 | 3.919 |
| Dissolved Oxygen, Field | mg/L | 0.0 | 2.61 | 0.00 | 0.00 | 0.42 | 0.16 | 0.35 | 0.22 | 0.11 | 0.13 | 0.47 | 0.32 | 0.28 | 0.25 | 0.06 |
| Odor | none | none | no odor | no odor | no odor | no odor | no odor | sewage odor | No odor | slight sulfur odor | sulfur odor | none | none | none | none | none |
| Oxidation Reduction Potential | mV | 31 | -135 | -187 | -238 | -211 | -147.1 | -232.0 | -149.2 | -271.7 | -149.3 | -101.3 | -22.2 | -76.6 | -74.4 | -739.8 |
| pH, Field | S.U. | 6.66 | 6.73 | 7.09 | 7.57 | 6.71 | 7.04 | 7.09 | 7.13 | 6.44 | 6.93 | 7.13 | 7.09 | 7.04 | 7.08 | 6.84 |
| Temperature, Field | deg C | 14.63 | 11.85 | 6.47 | 12.18 | 13.8 | 21.0 | 11.0 | 9.8 | 18.1 | 15.3 | 15.8 | 12.7 | 11.8 | 14.7 | 17.2 |
| Turbidity, Field | NTU | 45 | 12.2 | 9.78 | 24 | 1.35 | 9.14 | 3.72 | 9.72 | 9.23 | 3.66 | 25.3 | 8.52 | 37.0 | 23.9 | 150 |
| Volume Purged | gal | 2.1 | 1.6 | 0.5 | 0.6 | 2.5 | 1.6 | 0.9 | 1.0 | 1.1 | 1.2 | 0.8 | 1.7 | 0.8 | 0.8 | 1.3 |

**See Notes on Last Page**

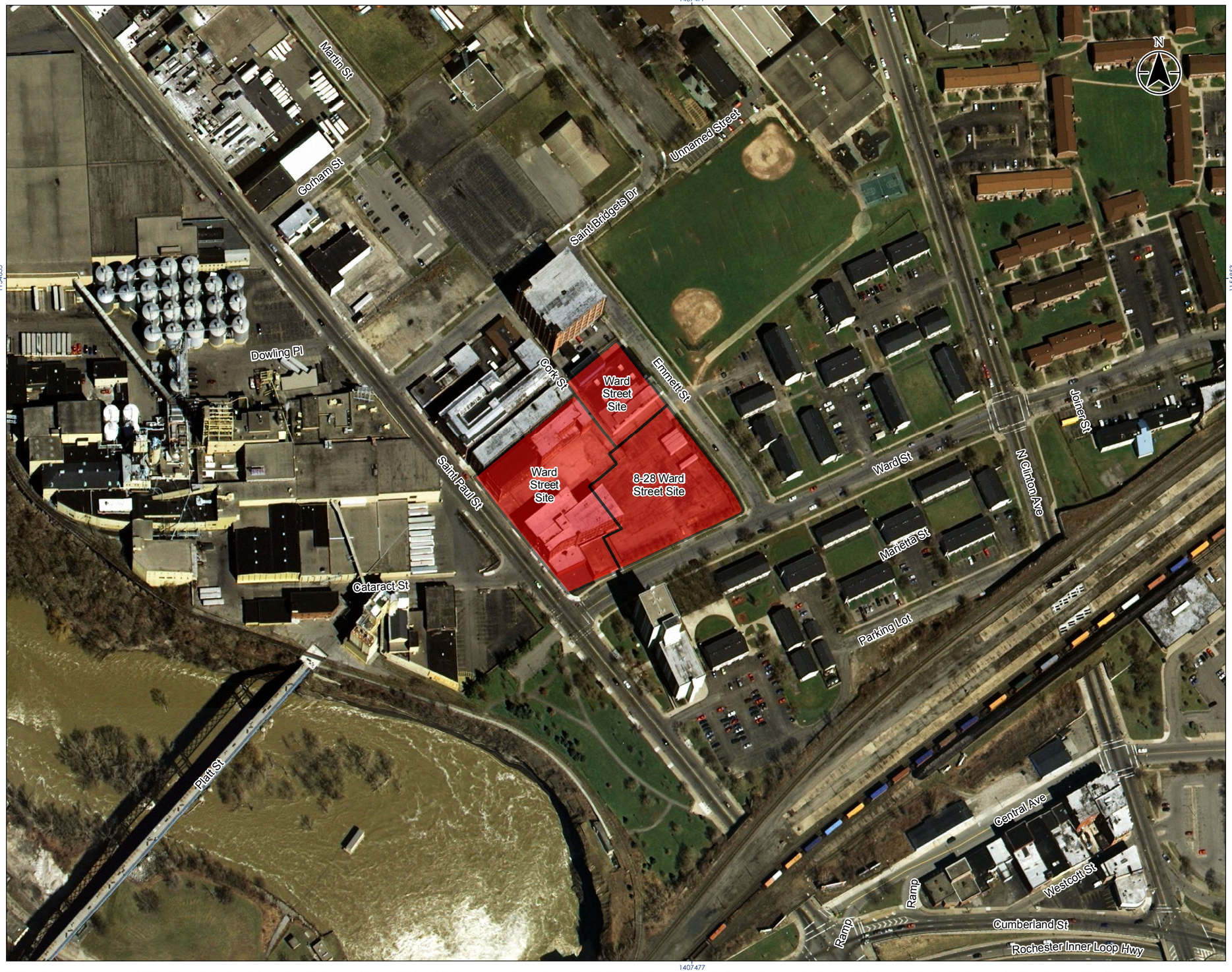
# Table 2
## SUMMARY OF FIELD PARAMETERS IN GROUNDWATER - SEPTEMBER 2011 TO OCTOBER 2019

**Ward Street Sites**
**Germanow-Simoan Corporation**
**Rochester, NY**

| Area of interest | | 8-28 Ward St | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | MW23R | | | | | | | | | | | | | | |
| Sample Date | | 28-Sep-11 | 5-Jan-12 | 6-Feb-12 | 2-Mar-12 | 5-Jun-12 | 6-Sep-12 | 24-Jan-13 | 10-Apr-13 | 5-Jul-13 | 10-Oct-13 | 17-Jun-15 | 9-Mar-16 | 10-Jan-18* | 24-Oct-18 | 8-Oct-19 |
| Sample ID | | WSR-MW-23R-GW-7 | 828-MW-23R-GW-8 | 828-MW-23R-GW-9 | 828-MW-23R-GW-10 | 828-MW-23R-GW-11 | 828-MW-23R-GW-12 | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW | 828-MW-23R-GW |
| Sampling Company | | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC | STANTEC |
| **Field Parameters** | **Units** | | | | | | | | | | | | | | | |
| Color (Visual) | none | clear | clear w/ black flecks | clear w/ black flecks | clear w/ black flecks | clear w/ black flecks | black | murky | 0 | clear with black precipitate | clear with black precipitate | clear, black sulfide deposits | clear, black sulfide deposits | clear, fine black suspended particles | | |
| Conductivity, Field | mS/cm | 3.44 | 4.24 | 0.671 | 7.03 | 0.635 | 4.74 | 6.34 | 6.52 | 6.45 | 5.28 | 5.18 | 4.78 | 4.14 | 3.86 | 3.896 |
| Dissolved Oxygen, Field | mg/L | 0.00 | 0.00 | 0.00 | 0.00 | 0.57 | 0.24 | 0.33 | 0.11 | 0.11 | 0.41 | 0.14 | 0.09 | 0.13 | 1.17 | 0.09 |
| Odor | none | none | no odor | odor | sulfur odor | no odor | sulfur | slight sulfur odor | 0 | strong sulfur odor | strong sulfur odor | sulfur odor | sulfur odor | sulfur odor | none | none |
| Oxidation Reduction Potential | mV | -23 | -168 | -262 | -317 | -211 | -375.3 | -438.3 | -358.9 | -408.0 | -347.1 | -307.0 | -138.5 | -190.7 | -122.2 | -173.9 |
| pH, Field | S.U. | 6.63 | 7.38 | 6.71 | 6.86 | 6.59 | 7.02 | 6.65 | 6.67 | 6.79 | 6.97 | 7.16 | 7.25 | 7.26 | 7.25 | 6.96 |
| Temperature, Field | deg C | 22.26 | 12.61 | 11.12 | 12.97 | 16.1 | 19.7 | 11.5 | 10.8 | 17.5 | 15.5 | 14.3 | 14.2 | 11.1 | 14.6 | 15.7 |
| Turbidity, Field | NTU | 3.3 | 6.24 | 1.04 | 11.3 | 3.27 | 0.92 | 1.60 | 1.25 | 0.82 | 3.84 | 2.87 | 3.58 | 8.97 | 1.88 | 3.97 |
| Volume Purged | gal | 0.7 | 1.3 | 1.7 | 2.2 | 1.1 | 1.4 | 1.5 | 2.3 | 2.3 | 0.9 | 1.8 | 1.5 | 0.75 | 0.3 | 1.7 |

**See Notes on Last Page**

# FIGURES




Stantec

**Legend**

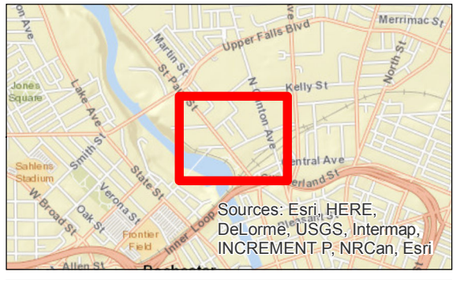
Site Boundary

0 0.03 0.06 Miles

1:2,400 (At original document size of 11x17)

**Notes**

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet
2. Base features produced under license with the Ontario Ministry of Natural Resources © Queen's Printer for Ontario, 2013.
3. Orthoimagery © First Base Solutions, 20xx.




Project Location
Ward Street
C. of Rochester, Monroe Co., NY

190500014
Prepared by MB on 2011-02-XX
Technical Review by AL on 2013-XX-XX
Independent Review by MPS

Client/Project

Ward Street Site (C828117) and
8-28 Ward Street Site (C828136)

Figure No.

**1**

Title

**Site Location Map**


Stantec

**Legend**

Well Network

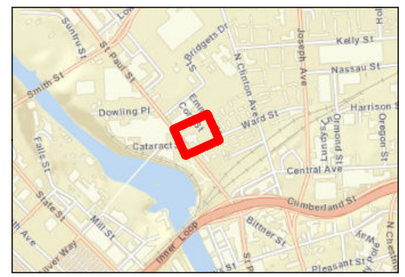
- Monitoring Well Sampled in January and October 2018
- Other Monitoring Well
- Extraction Well (inactive)
- Excavation Area (October 2017)
- 8-28 Ward Street Site Property Line
- Ward Street Site Property Line
- As-Built Trenching Limits

0 40 80 Feet

1:480 (At original document size of 11x17)

**Notes**

1. Coordinate System: NAD 1983 StatePlane New York West FIPS 3103 Feet.
2. Orthoimagery (2015) downloaded from gis.ny.gov. Key Map basemap: ArcGIS World Street Map.




Project Location
Ward Street
C. of Rochester, Monroe Co., NY

190501001
Prepared by LB on 2018-05-11
Technical Review by RJM on 2018-05-xx
Independent Review by MPS on 2018-05-xx

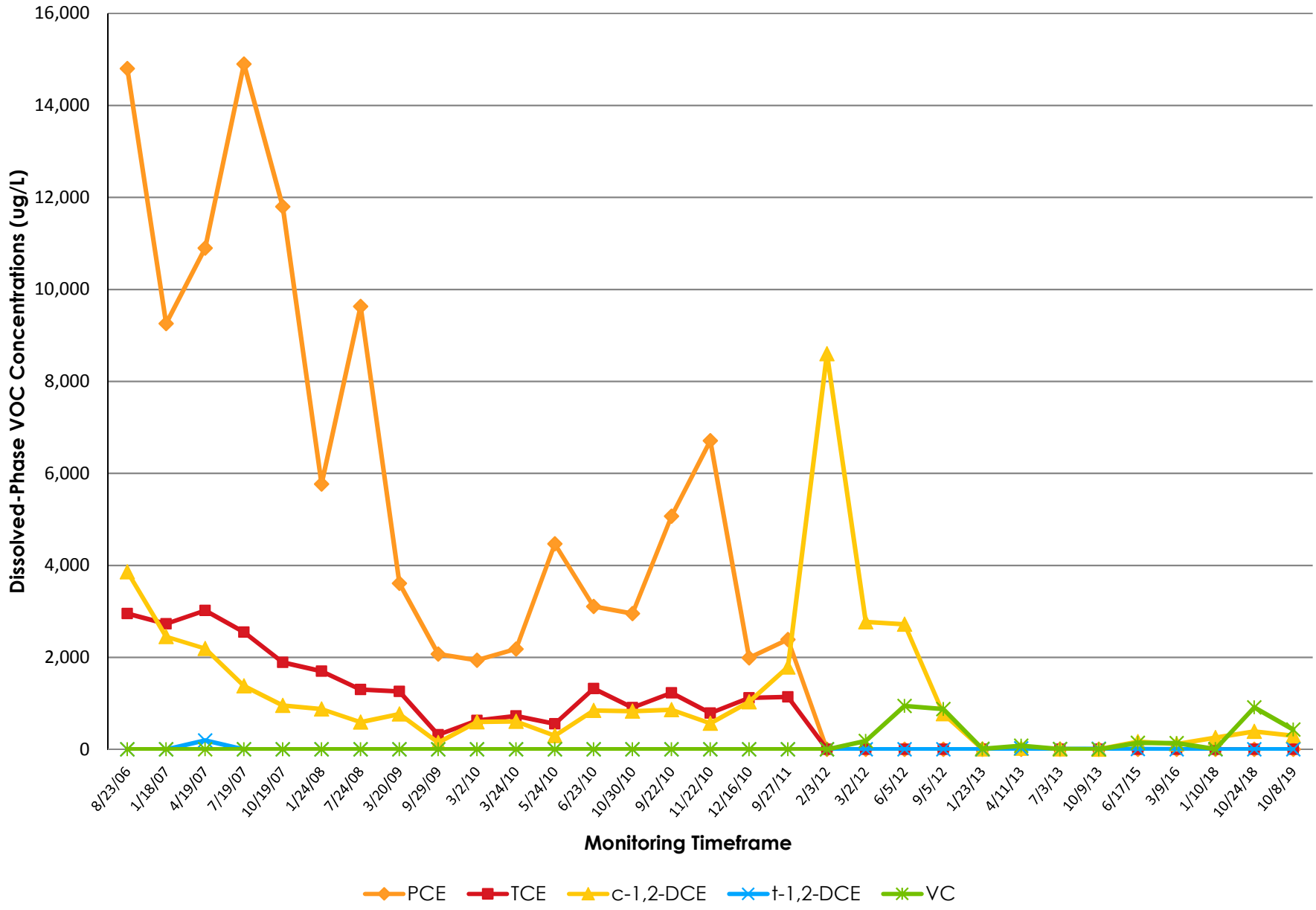
Client/Project
Groundwater Monitoring
Ward Street Site (C828117) and
8-28 Ward Street Site (C828136)

Figure No.
**2**

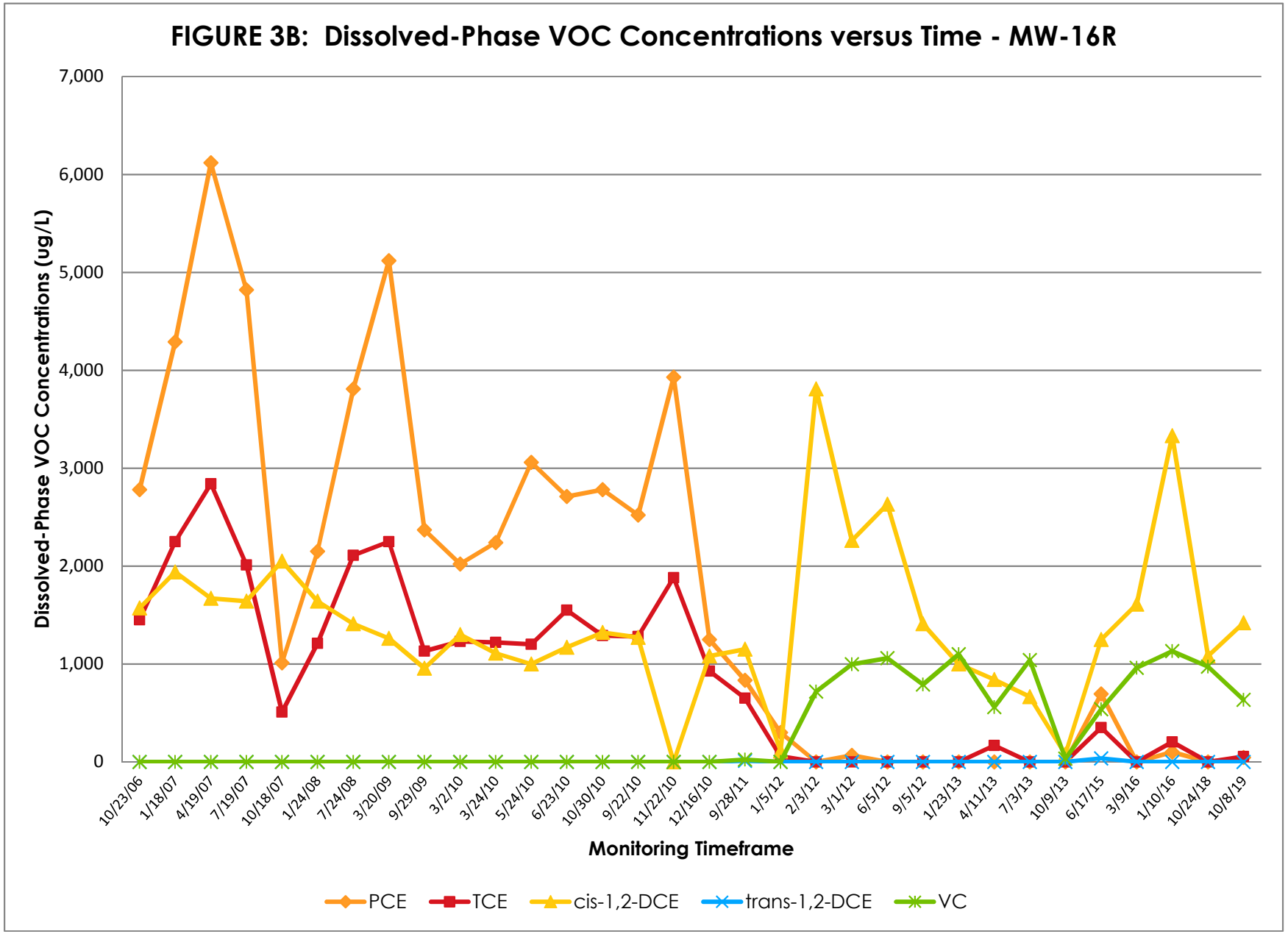
Title
**Well Locations**

J:\1405925\GIS\Locations Figures\Fig2-well locations_updated 20181129.mxd Revised: 2018-12-11 By: dates

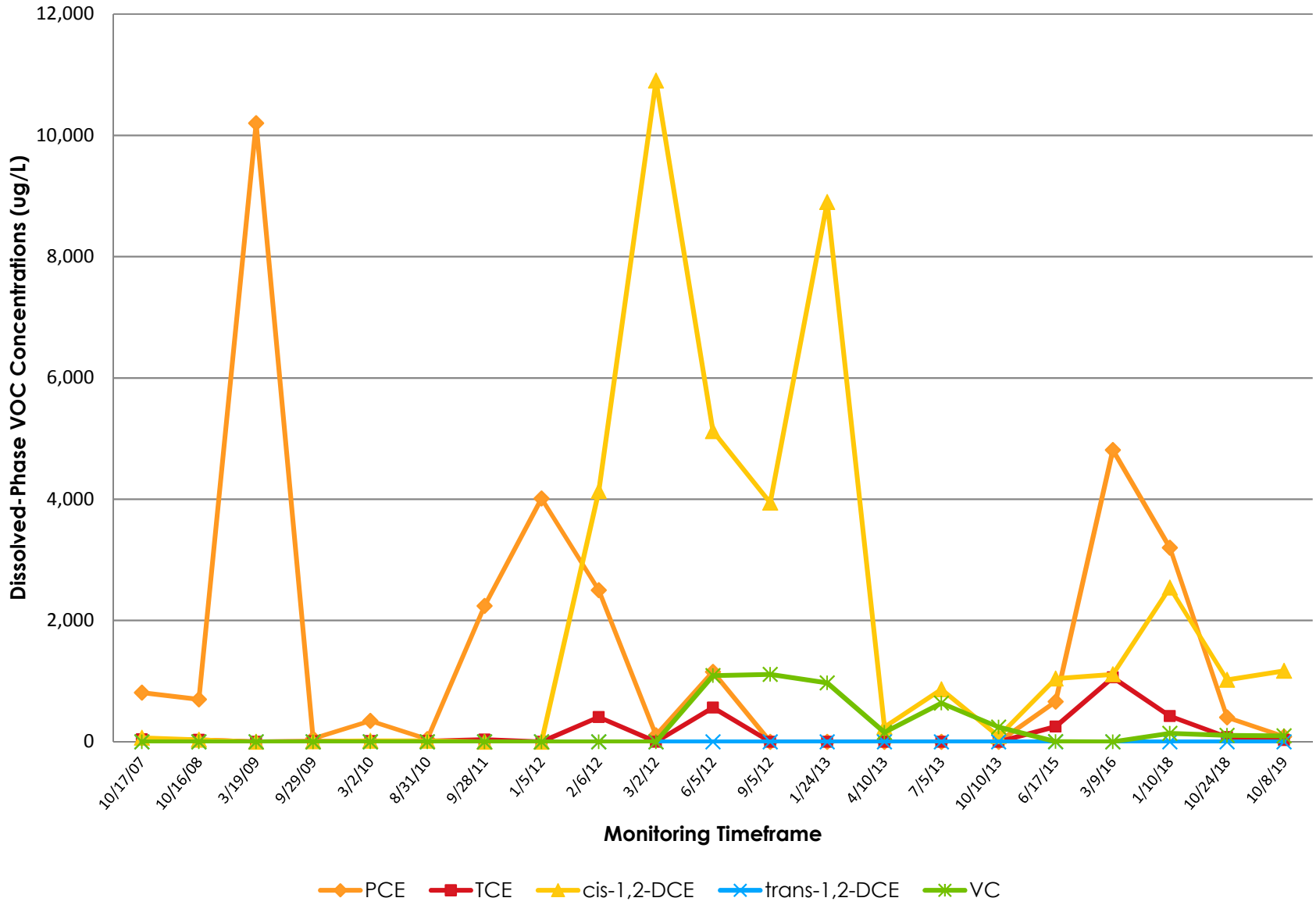
## FIGURE 3A: Dissolved-Phase VOC Concentrations versus Time - MW-16



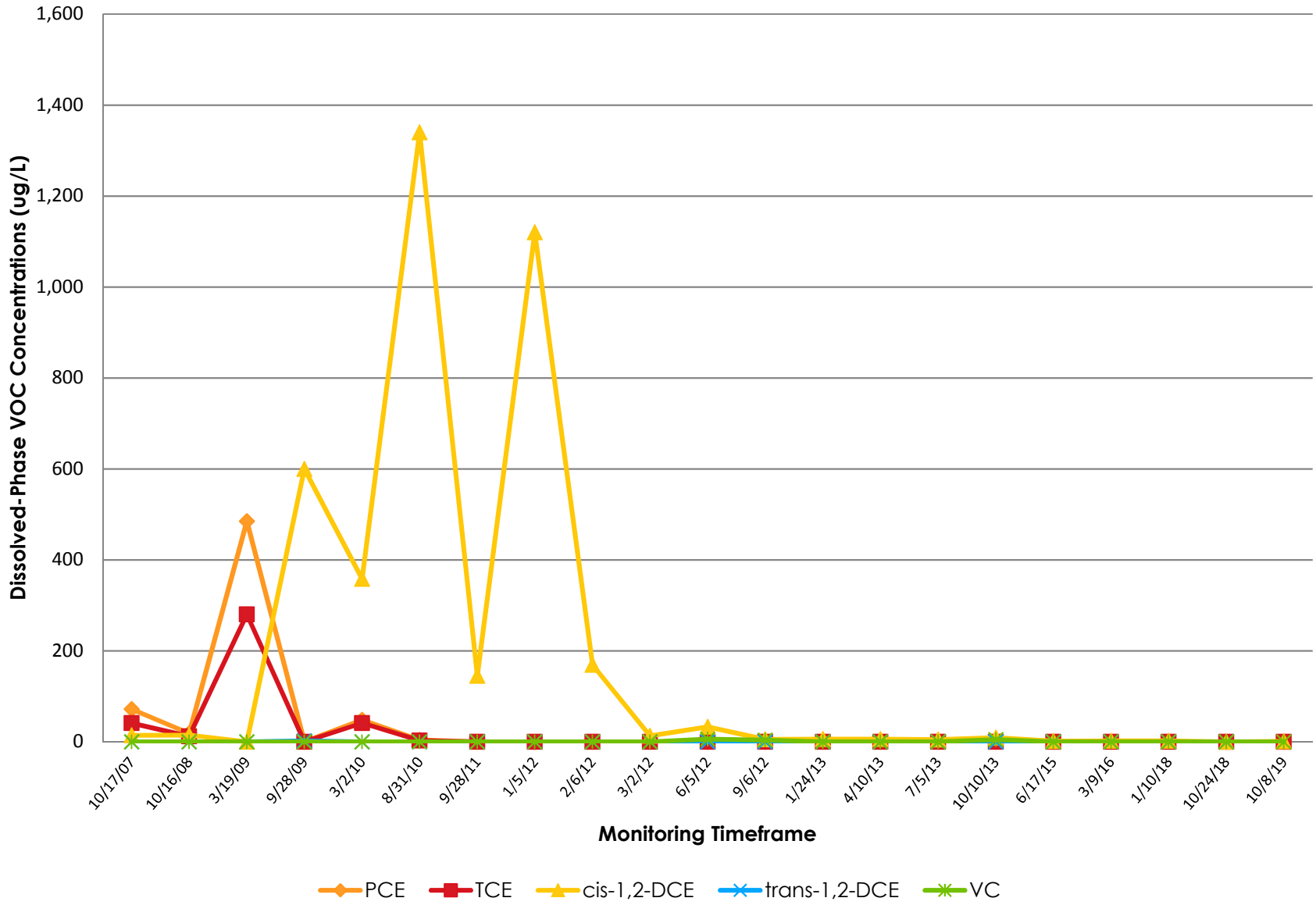
## FIGURE 3B: Dissolved-Phase VOC Concentrations versus Time - MW-16R



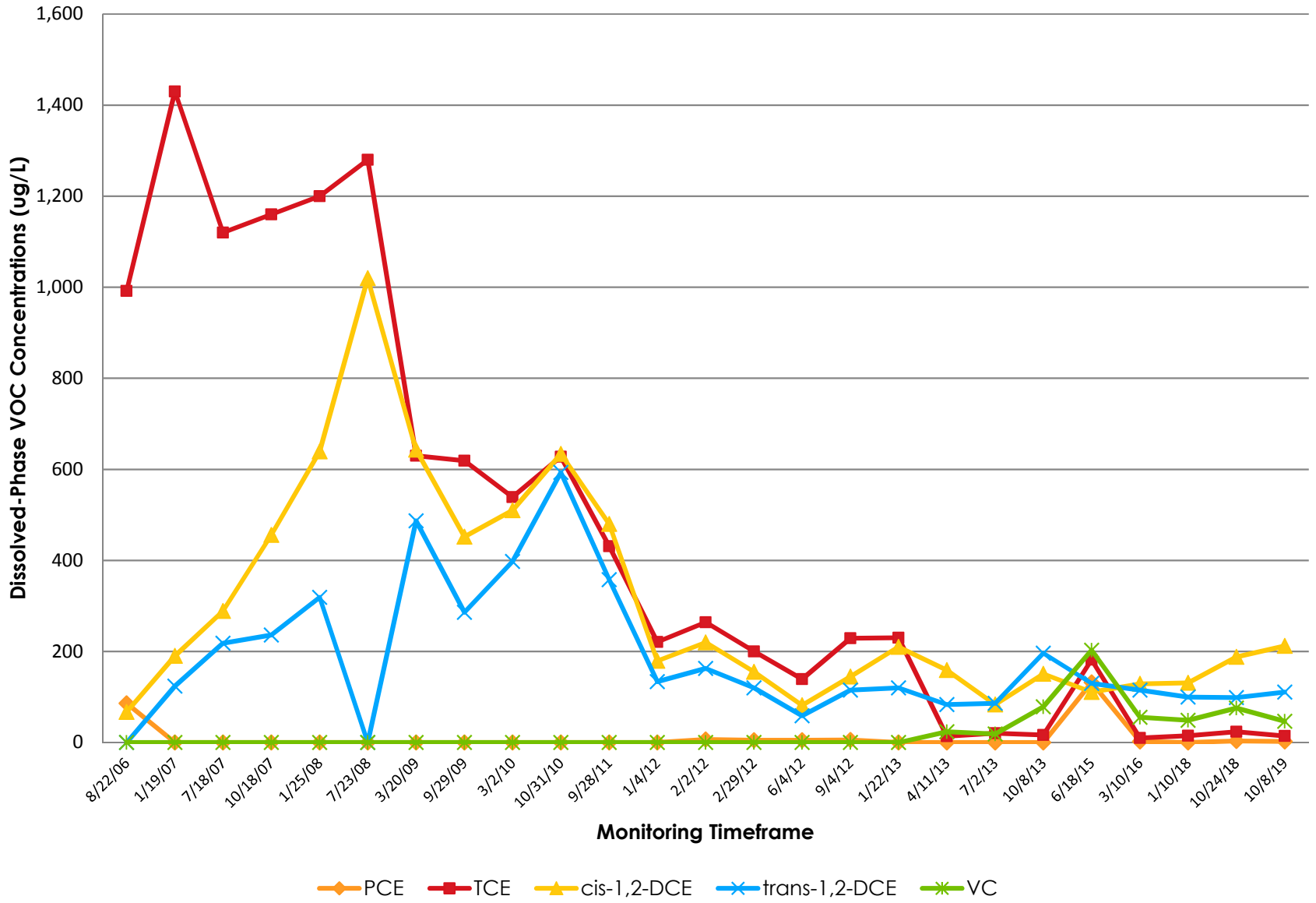
## FIGURE 3C: Dissolved-Phase VOC Concentrations versus Time - MW-23



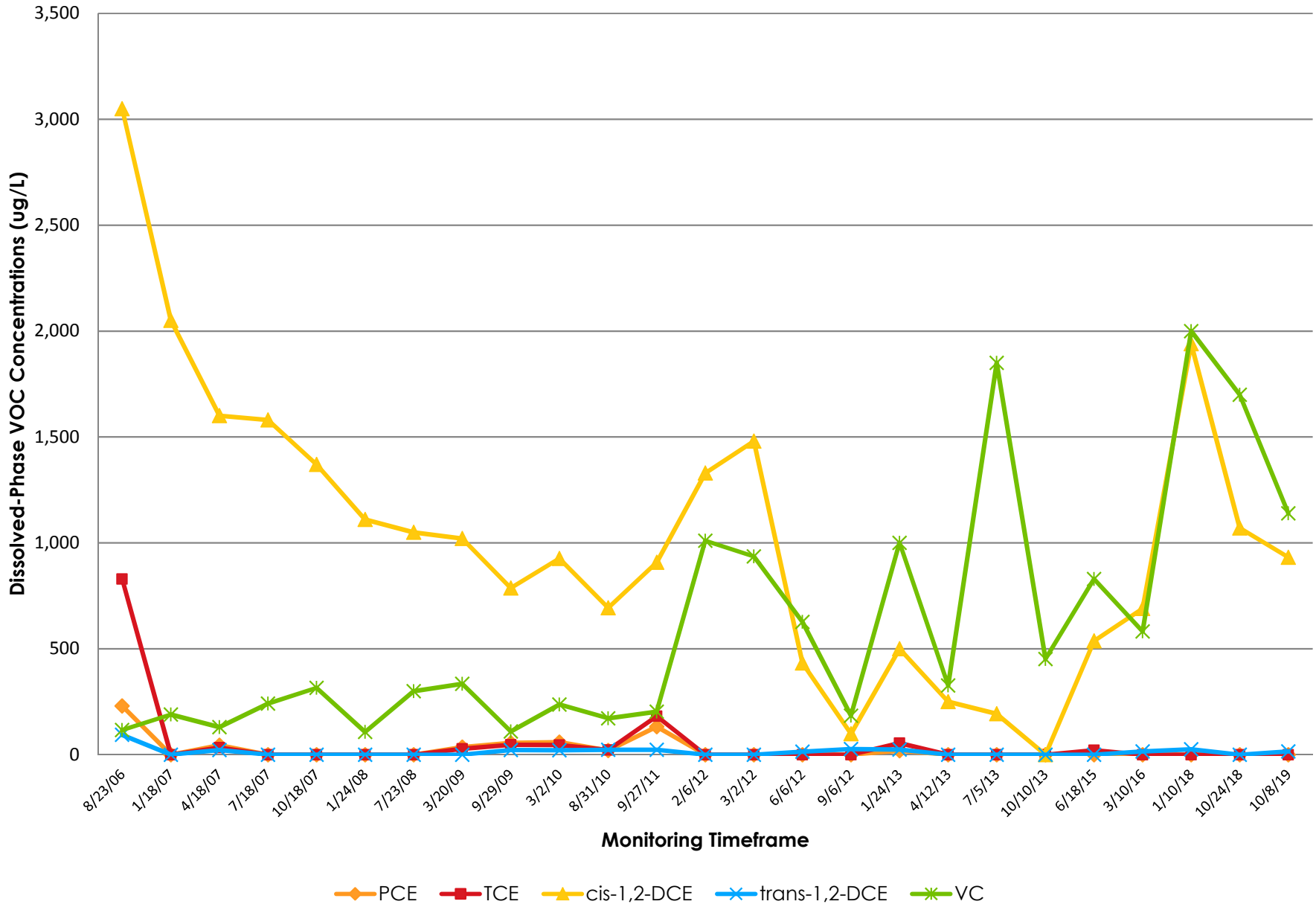
## FIGURE 3D: Dissolved-Phase VOC Concentrations versus Time - MW-23R



## FIGURE 3E: Dissolved-Phase VOC Concentrations versus Time - MW-105



## FIGURE 3F: Dissolved-Phase VOC Concentrations versus Time - MW-207R



# APPENDIX A

# IC/EC Certification Forms

Enclosure 2

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**Site Management Periodic Review Report Notice**
**Institutional and Engineering Controls Certification Form**

**Site Details** **Box 1**

**Site No.** **C828117**

**Site Name Ward Street Site**

Site Address: Corner of Ward St. & St. Paul St. Zip Code: ~~14603~~ 14605
City/Town: Rochester
County: Monroe
Site Acreage: 1.859

Reporting Period: November 15, 2018 to November 15, 2019

| | YES | NO |
|---|---|---|
| 1. Is the information above correct? | ☐ | X |
| If NO, include handwritten above or on a separate sheet. See Address Correction Above | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | ☐ | X |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | ☐ | X |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | ☐ | X |
| **If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.** | | |
| 5. Is the site currently undergoing development? | ☐ | X |

**Box 2**

| | YES | NO |
|---|---|---|
| 6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial | X | ☐ |
| 7. Are all ICs/ECs in place and functioning as designed? | X | ☐ |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative _____ Date _____

| | Box 2A | |
|---|---|---|
| | YES | NO |
| 8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid? | ☐ | X |
| **If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.** | | |
| 9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years) | X | ☐ |
| **If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.** | | |

| **SITE NO. C828117** | **Box 3** |
|---|---|
| **Description of Institutional Controls** | |

| Parcel | Owner | Institutional Control |
|---|---|---|
| **106.62-01-028** | Germanow-Simon Corporation | Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br><br>Site Management Plan<br>Monitoring Plan |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

| | | |
|---|---|---|
| **106.62-01-029** | Germanow-Simon Corporation | Monitoring Plan<br>Site Management Plan<br>Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

| | | |
|---|---|---|
| **106.62-01-030** | Germanow-Simon Corporation | Site Management Plan<br>Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br><br>Monitoring Plan |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

| | | |
|---|---|---|
| **106.62-01-031** | Germanow-Simon Corporation | Site Management Plan<br>Monitoring Plan<br>Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

| | | |
|---|---|---|
| **106.62-01-032** | Germanow-Simon Corporation | Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br><br>Site Management Plan<br>Monitoring Plan |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

| | | |
|---|---|---|
| **106.62-01-057** | Germanow-Simon Corporation | Soil Management Plan<br>Site Management Plan<br>Ground Water Use Restriction<br>Landuse Restriction<br>Monitoring Plan |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

| | | |
|---|---|---|
| **106.62-01-21** | Germanow-Simon Corporation | Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br><br>Monitoring Plan |

Restrict site usage to commercial or industrial. Restrict groundwater use. Any on-site soil excavation shall comply with the approved Soil Management Plan; and maintain Environmental Easement Agreement.

**Box 4**

**Description of Engineering Controls**

| Parcel | Engineering Control |
|---|---|
| **106.62-01-028** | Cover System |

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Maintain asphalt and concrete surfaces in the area of contamination.

**106.62-01-029**

Cover System

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Maintain asphalt and concrete surfaces in the area of contamination.

**106.62-01-030**

Cover System

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Maintain asphalt and concrete surfaces in the area of contamination.

**106.62-01-031**

Cover System

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Maintain asphalt and concrete surfaces in the area of contamination.

**106.62-01-032**

Cover System

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Operate a sub-slab depressurization system; Maintain asphalt and concrete surfaces in the area of contamination.

**106.62-01-057**

Cover System

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Maintain asphalt and concrete surfaces in the area of contamination.

**106.62-01-21**

Vapor Mitigation
Cover System

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications; Maintain asphalt and concrete surfaces in the area of contamination.

**Box 5**

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

| YES | NO |
|---|---|
| X | ☐ |

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

| YES | NO |
|---|---|
| X | ☐ |

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS**
**SITE NO. C828117**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Andrew Germanow (print name) at Germanow-Simon Corporation (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

11-21-19
Date

## IC/EC CERTIFICATIONS

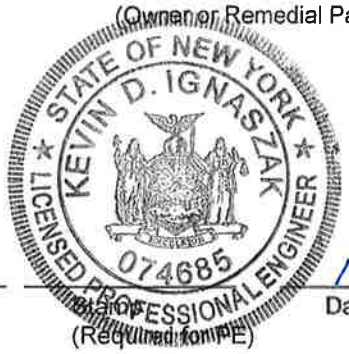
**Box 7**

**Professional Engineer Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I **Kevin Ignaszak** (print name) at **Stantec, 61 Commercial St, Suite 100, Rochester, NY 14614** (print business address)

am certifying as a Professional Engineer for the **Owner** (Owner or Remedial Party)




Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Date 12/12/19

(Required for PE)

Enclosure 2

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
**Site Management Periodic Review Report Notice**
**Institutional and Engineering Controls Certification Form**

**Site Details** **Box 1**

**Site No.** **C828136**

**Site Name 8-28 Ward Street**

Site Address: 8-28 Ward Street Zip Code: ~~14603-1061~~ 14605
City/Town: Rochester
County: Monroe
Site Acreage: 1.222

Reporting Period: November 15, 2018 to November 15, 2019

| | YES | NO |
|---|---|---|
| 1. Is the information above correct? | ☐ | ☒ |
| If NO, include handwritten above or on a separate sheet. See Address Correction Above | | |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period? | ☐ | ☒ |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))? | ☐ | ☒ |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period? | ☐ | ☒ |
| **If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.** | | |
| 5. Is the site currently undergoing development? | ☐ | ☒ |

**Box 2**

| | YES | NO |
|---|---|---|
| 6. Is the current site use consistent with the use(s) listed below? Commercial and Industrial | ☒ | ☐ |
| 7. Are all ICs/ECs in place and functioning as designed? | ☒ | ☐ |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative Date

**Box 2A**

| | YES | NO |
|---|---|---|
| 8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid? | ☐ | X |
| **If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.** | | |
| 9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years) | X | ☐ |
| **If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.** | | |

**SITE NO. C828136**

**Box 3**

**Description of Institutional Controls**

| Parcel | Owner | Institutional Control |
|---|---|---|
| **106.63-1-16** | Germanow-Simon Corporation | Ground Water Use Restriction<br>Soil Management Plan<br>Landuse Restriction<br><br>Site Management Plan<br>Monitoring Plan |

Groundwater use is prohibited;

A Site Management Plan (SMP) must be implemented;

Soils shall be managed in accordance with the SMP;

The potential for vapor intrusion for any new buildings must be evaluated and mitigated as necessary;

Periodic review is required to certifiy all controls are in place.

**Box 4**

**Description of Engineering Controls**

| Parcel | Engineering Control |
|---|---|
| **106.63-1-16** | Groundwater Treatment System<br>Cover System |

A multi-phase vacuum extraction system ("MPVE") was operated at the site until February 22, 2011. DEC has approved the shutdown and decommissioning of the system. An enhanced reductive dechlorination (ERD) program was implemented at the site in November 2011. Continued groundwater monitoring and periodic injections are required until cleanup goals are achieved or DEC approves program modifications;

Existing surface and near surface soils, asphalt-paved surfaces, concrete-paved surfaces, and any existing buildings act as a cover system and must be maintained;

**Box 5**

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

   a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

   b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and compete.

| YES | NO |
|---|---|
| X | ☐ |

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

   (a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

   (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

   (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

   (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

   (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

| YES | NO |
|---|---|
| X | ☐ |

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

Signature of Owner, Remedial Party or Designated Representative

Date

**IC CERTIFICATIONS**
**SITE NO. C828136**

**Box 6**

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1,2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Andrew Germanow (print name) at Germanow-Simon Corporation (print business address),

am certifying as Owner (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Signature of Owner, Remedial Party, or Designated Representative Rendering Certification

11-21-19
Date

## IC/EC CERTIFICATIONS

**Box 7**

**Professional Engineer Signature**

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I **Kevin Ignaszak** (print name) at **Stantec, 61 Commercial Street, Suite 100, Rochester, NY 14614** (print business address),

am certifying as a Professional Engineer for the **Owner** (Owner or Remedial Party)


Signature of Professional Engineer, for the Owner or Remedial Party, Rendering Certification

Stamp (Required for PE)

12/12/19
Date

# APPENDIX B

# NYSDEC Correspondence

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Remediation, Region 8
6274 East Avon-Lima Road, Avon, NY 14414-9516
P: (585) 226-5353 I F: (585) 226-8139
www.dec.ny.gov

March 4, 2019

Mr. Andrew Germanow
Germanow-Simon Corporation
408 St. Paul Street, P.O. Box 1091
Rochester, New York 14603-1091

**RE: Ward Street and 8-28 Ward Street Sites (C828117 and C828136)**
**Periodic Review and IC/EC Certification Report**
**Monroe(C), Rochester(C)**

Dear Mr. Germanow:

The Department has reviewed your Periodic Review Report (PRR) and IC/EC Certification for the November 15, 2017 through November 15, 2018 period.

The Department hereby accepts the PRR and associated Certification. The frequencies of Periodic Reviews for these sites are annually, and your next PRR is due on *December 15, 2019*. As a courtesy, you may receive a reminder letter and updated certification form 45-days prior to the due date. If you do not receive a letter, the PRR and certification must be submitted to this office by the due date.

If you have any questions, or need additional forms, please contact me at 226-5350. Thank you for your continued cooperation.

Sincerely,

**Todd M. Caffoe, P.E.**
Division of Environmental Remediation

**New York State Department of Environmental Conservation**
6274 East Avon-Lima Road, Avon, NY 14414
P: (585) 226-5350 |Todd.Caffoe@dec.ny.gov

www.dec.ny.gov | | 

ec: B. Schilling
M. Storonsky

## Mahoney, Robert

**From:** Mahoney, Robert
**Sent:** Monday, September 30, 2019 11:18 AM
**To:** Caffoe, Todd (DEC)
**Cc:** Storonsky, Mike; Best, Laura
**Subject:** Sites # 828117 & 828136 - Ward Street

Todd – FYI we are planning to do a groundwater sampling event at Ward Street next week, probably on Tuesday, 10/8, and possibly Wednesday also, if needed. This will be a standard event, sampling 6 wells using low-flow.

Thanks

Bob

**Bob Mahoney** P.G.
Senior Environmental Geologist

Direct: 585-413-5301
Mobile: 585-645-2567
bob.mahoney@stantec.com

Stantec

# APPENDIX C

# Laboratory Analytical Reports

PARADIGM

PARADIGM
ENVIRONMENTAL SERVICES, INC

*Analytical Report For*

**Stantec**

*For Lab Project ID*

**194958**

*Referencing*

Ward Street

*Prepared*

Tuesday, October 22, 2019

Any noncompliant QC parameters or other notes impacting data interpretation are flagged or documented on the final report or are noted below.

Certifies that this report has been approved by the Technical Director or Designee

179 Lake Avenue • Rochester, NY 14608 • (585) 647-2530 • Fax (585) 647-3311 • ELAP ID# 10958

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-105-GW | | |
| **Lab Sample ID:** | 194958-01 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,1,2,2-Tetrachloroethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,1,2-Trichloroethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,1-Dichloroethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,1-Dichloroethene | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,2,3-Trichlorobenzene | < 10.0 | ug/L | | 10/17/2019 19:44 |
| 1,2,4-Trichlorobenzene | < 10.0 | ug/L | | 10/17/2019 19:44 |
| 1,2-Dibromo-3-Chloropropane | < 20.0 | ug/L | | 10/17/2019 19:44 |
| 1,2-Dibromoethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,2-Dichlorobenzene | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,2-Dichloroethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,2-Dichloropropane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,3-Dichlorobenzene | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,4-Dichlorobenzene | < 4.00 | ug/L | | 10/17/2019 19:44 |
| 1,4-Dioxane | < 40.0 | ug/L | | 10/17/2019 19:44 |
| 2-Butanone | < 20.0 | ug/L | | 10/17/2019 19:44 |
| 2-Hexanone | < 10.0 | ug/L | | 10/17/2019 19:44 |
| 4-Methyl-2-pentanone | < 10.0 | ug/L | | 10/17/2019 19:44 |
| Acetone | < 20.0 | ug/L | | 10/17/2019 19:44 |
| Benzene | < 2.00 | ug/L | | 10/17/2019 19:44 |
| Bromochloromethane | < 10.0 | ug/L | | 10/17/2019 19:44 |
| Bromodichloromethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| Bromoform | < 10.0 | ug/L | | 10/17/2019 19:44 |
| Bromomethane | < 4.00 | ug/L | | 10/17/2019 19:44 |
| Carbon disulfide | < 4.00 | ug/L | | 10/17/2019 19:44 |
| Carbon Tetrachloride | < 4.00 | ug/L | | 10/17/2019 19:44 |
| Chlorobenzene | < 4.00 | ug/L | | 10/17/2019 19:44 |
| Chloroethane | < 4.00 | ug/L | | 10/17/2019 19:44 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-105-GW | | |
| **Lab Sample ID:** | 194958-01 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| | | | | | |
|---|---|---|---|---|---|
| Chloroform | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Chloromethane | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| cis-1,2-Dichloroethene | **212** | ug/L | | 10/17/2019 | 19:44 |
| cis-1,3-Dichloropropene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Cyclohexane | < 20.0 | ug/L | | 10/17/2019 | 19:44 |
| Dibromochloromethane | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Dichlorodifluoromethane | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Ethylbenzene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Freon 113 | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Isopropylbenzene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| m,p-Xylene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Methyl acetate | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Methyl tert-butyl Ether | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Methylcyclohexane | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Methylene chloride | < 10.0 | ug/L | | 10/17/2019 | 19:44 |
| o-Xylene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Styrene | < 10.0 | ug/L | | 10/17/2019 | 19:44 |
| Tetrachloroethene | **2.15** | ug/L | J | 10/17/2019 | 19:44 |
| Toluene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| trans-1,2-Dichloroethene | **111** | ug/L | | 10/17/2019 | 19:44 |
| trans-1,3-Dichloropropene | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Trichloroethene | **14.2** | ug/L | | 10/17/2019 | 19:44 |
| Trichlorofluoromethane | < 4.00 | ug/L | | 10/17/2019 | 19:44 |
| Vinyl chloride | **46.6** | ug/L | | 10/17/2019 | 19:44 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-105-GW | | |
| **Lab Sample ID:** | 194958-01 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **123** | 70.5 - 135 | | 10/17/2019 19:44 |
| 4-Bromofluorobenzene | **86.1** | 62 - 127 | | 10/17/2019 19:44 |
| Pentafluorobenzene | **95.1** | 87 - 113 | | 10/17/2019 19:44 |
| Toluene-D8 | **91.7** | 80.8 - 115 | | 10/17/2019 19:44 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65420.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-16-GW | | |
| **Lab Sample ID:** | 194958-02 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,1,2,2-Tetrachloroethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,1,2-Trichloroethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,1-Dichloroethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,1-Dichloroethene | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,2,3-Trichlorobenzene | < 12.5 | ug/L | | 10/17/2019 14:54 |
| 1,2,4-Trichlorobenzene | < 12.5 | ug/L | | 10/17/2019 14:54 |
| 1,2-Dibromo-3-Chloropropane | < 25.0 | ug/L | | 10/17/2019 14:54 |
| 1,2-Dibromoethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,2-Dichlorobenzene | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,2-Dichloroethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,2-Dichloropropane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,3-Dichlorobenzene | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,4-Dichlorobenzene | < 5.00 | ug/L | | 10/17/2019 14:54 |
| 1,4-Dioxane | < 50.0 | ug/L | | 10/17/2019 14:54 |
| 2-Butanone | < 25.0 | ug/L | | 10/17/2019 14:54 |
| 2-Hexanone | < 12.5 | ug/L | | 10/17/2019 14:54 |
| 4-Methyl-2-pentanone | < 12.5 | ug/L | | 10/17/2019 14:54 |
| Acetone | < 25.0 | ug/L | | 10/17/2019 14:54 |
| Benzene | < 2.50 | ug/L | | 10/17/2019 14:54 |
| Bromochloromethane | < 12.5 | ug/L | | 10/17/2019 14:54 |
| Bromodichloromethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| Bromoform | < 12.5 | ug/L | | 10/17/2019 14:54 |
| Bromomethane | < 5.00 | ug/L | | 10/17/2019 14:54 |
| Carbon disulfide | < 5.00 | ug/L | | 10/17/2019 14:54 |
| Carbon Tetrachloride | < 5.00 | ug/L | | 10/17/2019 14:54 |
| Chlorobenzene | < 5.00 | ug/L | | 10/17/2019 14:54 |
| Chloroethane | < 5.00 | ug/L | | 10/17/2019 14:54 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-16-GW | | |
| **Lab Sample ID:** | 194958-02 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| | | | | | |
|---|---|---|---|---|---|
| Chloroform | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Chloromethane | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| cis-1,2-Dichloroethene | **295** | ug/L | | 10/17/2019 | 14:54 |
| cis-1,3-Dichloropropene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Cyclohexane | < 25.0 | ug/L | | 10/17/2019 | 14:54 |
| Dibromochloromethane | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Dichlorodifluoromethane | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Ethylbenzene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Freon 113 | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Isopropylbenzene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| m,p-Xylene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Methyl acetate | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Methyl tert-butyl Ether | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Methylcyclohexane | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Methylene chloride | < 12.5 | ug/L | | 10/17/2019 | 14:54 |
| o-Xylene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Styrene | < 12.5 | ug/L | | 10/17/2019 | 14:54 |
| Tetrachloroethene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Toluene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| trans-1,2-Dichloroethene | **3.69** | ug/L | J | 10/17/2019 | 14:54 |
| trans-1,3-Dichloropropene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Trichloroethene | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Trichlorofluoromethane | < 5.00 | ug/L | | 10/17/2019 | 14:54 |
| Vinyl chloride | **430** | ug/L | | 10/17/2019 | 14:54 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-16-GW | | |
| **Lab Sample ID:** | 194958-02 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **107** | 70.5 - 135 | | 10/17/2019 14:54 |
| 4-Bromofluorobenzene | **87.7** | 62 - 127 | | 10/17/2019 14:54 |
| Pentafluorobenzene | **98.5** | 87 - 113 | | 10/17/2019 14:54 |
| Toluene-D8 | **96.5** | 80.8 - 115 | | 10/17/2019 14:54 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65407.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-16R-GW | | |
| **Lab Sample ID:** | 194958-03 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,1,2,2-Tetrachloroethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,1,2-Trichloroethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,1-Dichloroethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,1-Dichloroethene | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,2,3-Trichlorobenzene | < 125 | ug/L | | 10/17/2019 15:16 |
| 1,2,4-Trichlorobenzene | < 125 | ug/L | | 10/17/2019 15:16 |
| 1,2-Dibromo-3-Chloropropane | < 250 | ug/L | | 10/17/2019 15:16 |
| 1,2-Dibromoethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,2-Dichlorobenzene | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,2-Dichloroethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,2-Dichloropropane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,3-Dichlorobenzene | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,4-Dichlorobenzene | < 50.0 | ug/L | | 10/17/2019 15:16 |
| 1,4-Dioxane | < 500 | ug/L | | 10/17/2019 15:16 |
| 2-Butanone | < 250 | ug/L | | 10/17/2019 15:16 |
| 2-Hexanone | < 125 | ug/L | | 10/17/2019 15:16 |
| 4-Methyl-2-pentanone | < 125 | ug/L | | 10/17/2019 15:16 |
| Acetone | < 250 | ug/L | | 10/17/2019 15:16 |
| Benzene | < 25.0 | ug/L | | 10/17/2019 15:16 |
| Bromochloromethane | < 125 | ug/L | | 10/17/2019 15:16 |
| Bromodichloromethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| Bromoform | < 125 | ug/L | | 10/17/2019 15:16 |
| Bromomethane | < 50.0 | ug/L | | 10/17/2019 15:16 |
| Carbon disulfide | < 50.0 | ug/L | | 10/17/2019 15:16 |
| Carbon Tetrachloride | < 50.0 | ug/L | | 10/17/2019 15:16 |
| Chlorobenzene | < 50.0 | ug/L | | 10/17/2019 15:16 |
| Chloroethane | < 50.0 | ug/L | | 10/17/2019 15:16 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-16R-GW | | |
| **Lab Sample ID:** | 194958-03 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| | | | | | |
|---|---|---|---|---|---|
| Chloroform | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Chloromethane | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| cis-1,2-Dichloroethene | **1420** | ug/L | | 10/17/2019 | 15:16 |
| cis-1,3-Dichloropropene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Cyclohexane | < 250 | ug/L | | 10/17/2019 | 15:16 |
| Dibromochloromethane | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Dichlorodifluoromethane | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Ethylbenzene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Freon 113 | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Isopropylbenzene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| m,p-Xylene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Methyl acetate | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Methyl tert-butyl Ether | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Methylcyclohexane | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Methylene chloride | < 125 | ug/L | | 10/17/2019 | 15:16 |
| o-Xylene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Styrene | < 125 | ug/L | | 10/17/2019 | 15:16 |
| Tetrachloroethene | **45.1** | ug/L | J | 10/17/2019 | 15:16 |
| Toluene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| trans-1,2-Dichloroethene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| trans-1,3-Dichloropropene | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Trichloroethene | **53.1** | ug/L | | 10/17/2019 | 15:16 |
| Trichlorofluoromethane | < 50.0 | ug/L | | 10/17/2019 | 15:16 |
| Vinyl chloride | **634** | ug/L | | 10/17/2019 | 15:16 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-16R-GW | | |
| **Lab Sample ID:** | 194958-03 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed | |
|---|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **108** | 70.5 - 135 | | 10/17/2019 | 15:16 |
| 4-Bromofluorobenzene | **83.0** | 62 - 127 | | 10/17/2019 | 15:16 |
| Pentafluorobenzene | **97.7** | 87 - 113 | | 10/17/2019 | 15:16 |
| Toluene-D8 | **92.6** | 80.8 - 115 | | 10/17/2019 | 15:16 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65408.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-207R-GW | | |
| **Lab Sample ID:** | 194958-04 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,1,2,2-Tetrachloroethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,1,2-Trichloroethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,1-Dichloroethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,1-Dichloroethene | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,2,3-Trichlorobenzene | < 50.0 | ug/L | | 10/17/2019 15:38 |
| 1,2,4-Trichlorobenzene | < 50.0 | ug/L | | 10/17/2019 15:38 |
| 1,2-Dibromo-3-Chloropropane | < 100 | ug/L | | 10/17/2019 15:38 |
| 1,2-Dibromoethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,2-Dichlorobenzene | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,2-Dichloroethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,2-Dichloropropane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,3-Dichlorobenzene | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,4-Dichlorobenzene | < 20.0 | ug/L | | 10/17/2019 15:38 |
| 1,4-Dioxane | < 200 | ug/L | | 10/17/2019 15:38 |
| 2-Butanone | < 100 | ug/L | | 10/17/2019 15:38 |
| 2-Hexanone | < 50.0 | ug/L | | 10/17/2019 15:38 |
| 4-Methyl-2-pentanone | < 50.0 | ug/L | | 10/17/2019 15:38 |
| Acetone | < 100 | ug/L | | 10/17/2019 15:38 |
| Benzene | < 10.0 | ug/L | | 10/17/2019 15:38 |
| Bromochloromethane | < 50.0 | ug/L | | 10/17/2019 15:38 |
| Bromodichloromethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| Bromoform | < 50.0 | ug/L | | 10/17/2019 15:38 |
| Bromomethane | < 20.0 | ug/L | | 10/17/2019 15:38 |
| Carbon disulfide | < 20.0 | ug/L | | 10/17/2019 15:38 |
| Carbon Tetrachloride | < 20.0 | ug/L | | 10/17/2019 15:38 |
| Chlorobenzene | < 20.0 | ug/L | | 10/17/2019 15:38 |
| Chloroethane | < 20.0 | ug/L | | 10/17/2019 15:38 |

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-207R-GW | | |
| **Lab Sample ID:** | 194958-04 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| | | | | | |
|---|---|---|---|---|---|
| Chloroform | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Chloromethane | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| cis-1,2-Dichloroethene | **932** | ug/L | | 10/17/2019 | 15:38 |
| cis-1,3-Dichloropropene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Cyclohexane | < 100 | ug/L | | 10/17/2019 | 15:38 |
| Dibromochloromethane | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Dichlorodifluoromethane | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Ethylbenzene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Freon 113 | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Isopropylbenzene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| m,p-Xylene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Methyl acetate | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Methyl tert-butyl Ether | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Methylcyclohexane | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Methylene chloride | < 50.0 | ug/L | | 10/17/2019 | 15:38 |
| o-Xylene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Styrene | < 50.0 | ug/L | | 10/17/2019 | 15:38 |
| Tetrachloroethene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Toluene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| trans-1,2-Dichloroethene | **15.5** | ug/L | J | 10/17/2019 | 15:38 |
| trans-1,3-Dichloropropene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Trichloroethene | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Trichlorofluoromethane | < 20.0 | ug/L | | 10/17/2019 | 15:38 |
| Vinyl chloride | **1140** | ug/L | | 10/17/2019 | 15:38 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | WSR-MW-207R-GW | | |
| **Lab Sample ID:** | 194958-04 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **110** | 70.5 - 135 | | 10/17/2019 15:38 |
| 4-Bromofluorobenzene | **78.5** | 62 - 127 | | 10/17/2019 15:38 |
| Pentafluorobenzene | **96.0** | 87 - 113 | | 10/17/2019 15:38 |
| Toluene-D8 | **93.1** | 80.8 - 115 | | 10/17/2019 15:38 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65409.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | 828-MW-23-GW | | |
| **Lab Sample ID:** | 194958-05 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,1,2,2-Tetrachloroethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,1,2-Trichloroethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,1-Dichloroethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,1-Dichloroethene | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,2,3-Trichlorobenzene | < 125 | ug/L | | 10/17/2019 16:01 |
| 1,2,4-Trichlorobenzene | < 125 | ug/L | | 10/17/2019 16:01 |
| 1,2-Dibromo-3-Chloropropane | < 250 | ug/L | | 10/17/2019 16:01 |
| 1,2-Dibromoethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,2-Dichlorobenzene | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,2-Dichloroethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,2-Dichloropropane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,3-Dichlorobenzene | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,4-Dichlorobenzene | < 50.0 | ug/L | | 10/17/2019 16:01 |
| 1,4-Dioxane | < 500 | ug/L | | 10/17/2019 16:01 |
| 2-Butanone | < 250 | ug/L | | 10/17/2019 16:01 |
| 2-Hexanone | < 125 | ug/L | | 10/17/2019 16:01 |
| 4-Methyl-2-pentanone | < 125 | ug/L | | 10/17/2019 16:01 |
| Acetone | < 250 | ug/L | | 10/17/2019 16:01 |
| Benzene | < 25.0 | ug/L | | 10/17/2019 16:01 |
| Bromochloromethane | < 125 | ug/L | | 10/17/2019 16:01 |
| Bromodichloromethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| Bromoform | < 125 | ug/L | | 10/17/2019 16:01 |
| Bromomethane | < 50.0 | ug/L | | 10/17/2019 16:01 |
| Carbon disulfide | < 50.0 | ug/L | | 10/17/2019 16:01 |
| Carbon Tetrachloride | < 50.0 | ug/L | | 10/17/2019 16:01 |
| Chlorobenzene | < 50.0 | ug/L | | 10/17/2019 16:01 |
| Chloroethane | < 50.0 | ug/L | | 10/17/2019 16:01 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | 828-MW-23-GW | | |
| **Lab Sample ID:** | 194958-05 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| | | | | | |
|---|---|---|---|---|---|
| Chloroform | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Chloromethane | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| cis-1,2-Dichloroethene | **1170** | ug/L | | 10/17/2019 | 16:01 |
| cis-1,3-Dichloropropene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Cyclohexane | < 250 | ug/L | | 10/17/2019 | 16:01 |
| Dibromochloromethane | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Dichlorodifluoromethane | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Ethylbenzene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Freon 113 | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Isopropylbenzene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| m,p-Xylene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Methyl acetate | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Methyl tert-butyl Ether | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Methylcyclohexane | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Methylene chloride | < 125 | ug/L | | 10/17/2019 | 16:01 |
| o-Xylene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Styrene | < 125 | ug/L | | 10/17/2019 | 16:01 |
| Tetrachloroethene | **83.3** | ug/L | | 10/17/2019 | 16:01 |
| Toluene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| trans-1,2-Dichloroethene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| trans-1,3-Dichloropropene | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Trichloroethene | **28.1** | ug/L | J | 10/17/2019 | 16:01 |
| Trichlorofluoromethane | < 50.0 | ug/L | | 10/17/2019 | 16:01 |
| Vinyl chloride | **97.5** | ug/L | | 10/17/2019 | 16:01 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | 828-MW-23-GW | | |
| **Lab Sample ID:** | 194958-05 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **109** | 70.5 - 135 | | 10/17/2019 16:01 |
| 4-Bromofluorobenzene | **83.1** | 62 - 127 | | 10/17/2019 16:01 |
| Pentafluorobenzene | **98.5** | 87 - 113 | | 10/17/2019 16:01 |
| Toluene-D8 | **90.8** | 80.8 - 115 | | 10/17/2019 16:01 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65410.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | 828-MW-23R-GW | | |
| **Lab Sample ID:** | 194958-06 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,1,2,2-Tetrachloroethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,1,2-Trichloroethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,1-Dichloroethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,1-Dichloroethene | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,2,3-Trichlorobenzene | < 5.00 | ug/L | | 10/17/2019 16:23 |
| 1,2,4-Trichlorobenzene | < 5.00 | ug/L | | 10/17/2019 16:23 |
| 1,2-Dibromo-3-Chloropropane | < 10.0 | ug/L | | 10/17/2019 16:23 |
| 1,2-Dibromoethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,2-Dichlorobenzene | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,2-Dichloroethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,2-Dichloropropane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,3-Dichlorobenzene | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,4-Dichlorobenzene | < 2.00 | ug/L | | 10/17/2019 16:23 |
| 1,4-Dioxane | < 20.0 | ug/L | | 10/17/2019 16:23 |
| 2-Butanone | < 10.0 | ug/L | | 10/17/2019 16:23 |
| 2-Hexanone | < 5.00 | ug/L | | 10/17/2019 16:23 |
| 4-Methyl-2-pentanone | < 5.00 | ug/L | | 10/17/2019 16:23 |
| Acetone | < 10.0 | ug/L | | 10/17/2019 16:23 |
| Benzene | < 1.00 | ug/L | | 10/17/2019 16:23 |
| Bromochloromethane | < 5.00 | ug/L | | 10/17/2019 16:23 |
| Bromodichloromethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| Bromoform | < 5.00 | ug/L | | 10/17/2019 16:23 |
| Bromomethane | < 2.00 | ug/L | | 10/17/2019 16:23 |
| Carbon disulfide | < 2.00 | ug/L | | 10/17/2019 16:23 |
| Carbon Tetrachloride | < 2.00 | ug/L | | 10/17/2019 16:23 |
| Chlorobenzene | < 2.00 | ug/L | | 10/17/2019 16:23 |
| Chloroethane | < 2.00 | ug/L | | 10/17/2019 16:23 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | 828-MW-23R-GW | | |
| **Lab Sample ID:** | 194958-06 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| | | | | | |
|---|---|---|---|---|---|
| Chloroform | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Chloromethane | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| cis-1,2-Dichloroethene | **1.11** | ug/L | J | 10/17/2019 | 16:23 |
| cis-1,3-Dichloropropene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Cyclohexane | < 10.0 | ug/L | | 10/17/2019 | 16:23 |
| Dibromochloromethane | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Dichlorodifluoromethane | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Ethylbenzene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Freon 113 | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Isopropylbenzene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| m,p-Xylene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Methyl acetate | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Methyl tert-butyl Ether | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Methylcyclohexane | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Methylene chloride | < 5.00 | ug/L | | 10/17/2019 | 16:23 |
| o-Xylene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Styrene | < 5.00 | ug/L | | 10/17/2019 | 16:23 |
| Tetrachloroethene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Toluene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| trans-1,2-Dichloroethene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| trans-1,3-Dichloropropene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Trichloroethene | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Trichlorofluoromethane | < 2.00 | ug/L | | 10/17/2019 | 16:23 |
| Vinyl chloride | < 2.00 | ug/L | | 10/17/2019 | 16:23 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | 828-MW-23R-GW | | |
| **Lab Sample ID:** | 194958-06 | **Date Sampled:** | 10/8/2019 |
| **Matrix:** | Groundwater | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **115** | 70.5 - 135 | | 10/17/2019 16:23 |
| 4-Bromofluorobenzene | **84.2** | 62 - 127 | | 10/17/2019 16:23 |
| Pentafluorobenzene | **93.0** | 87 - 113 | | 10/17/2019 16:23 |
| Toluene-D8 | **95.9** | 80.8 - 115 | | 10/17/2019 16:23 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65411.D

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | Trip Blank | | |
| **Lab Sample ID:** | 194958-07 | **Date Sampled:** | 10/3/2019 |
| **Matrix:** | Water | **Date Received:** | 10/9/2019 |

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| 1,1,1-Trichloroethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,1,2,2-Tetrachloroethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,1,2-Trichloroethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,1-Dichloroethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,1-Dichloroethene | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,2,3-Trichlorobenzene | < 5.00 | ug/L | | 10/17/2019 19:22 |
| 1,2,4-Trichlorobenzene | < 5.00 | ug/L | | 10/17/2019 19:22 |
| 1,2-Dibromo-3-Chloropropane | < 10.0 | ug/L | | 10/17/2019 19:22 |
| 1,2-Dibromoethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,2-Dichlorobenzene | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,2-Dichloroethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,2-Dichloropropane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,3-Dichlorobenzene | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,4-Dichlorobenzene | < 2.00 | ug/L | | 10/17/2019 19:22 |
| 1,4-Dioxane | < 20.0 | ug/L | | 10/17/2019 19:22 |
| 2-Butanone | < 10.0 | ug/L | | 10/17/2019 19:22 |
| 2-Hexanone | < 5.00 | ug/L | | 10/17/2019 19:22 |
| 4-Methyl-2-pentanone | < 5.00 | ug/L | | 10/17/2019 19:22 |
| Acetone | < 10.0 | ug/L | | 10/17/2019 19:22 |
| Benzene | < 1.00 | ug/L | | 10/17/2019 19:22 |
| Bromochloromethane | < 5.00 | ug/L | | 10/17/2019 19:22 |
| Bromodichloromethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| Bromoform | < 5.00 | ug/L | | 10/17/2019 19:22 |
| Bromomethane | < 2.00 | ug/L | | 10/17/2019 19:22 |
| Carbon disulfide | < 2.00 | ug/L | | 10/17/2019 19:22 |
| Carbon Tetrachloride | < 2.00 | ug/L | | 10/17/2019 19:22 |
| Chlorobenzene | < 2.00 | ug/L | | 10/17/2019 19:22 |
| Chloroethane | < 2.00 | ug/L | | 10/17/2019 19:22 |

PARADIGM ENVIRONMENTAL SERVICES, INC.

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | Trip Blank | | |
| **Lab Sample ID:** | 194958-07 | **Date Sampled:** | 10/3/2019 |
| **Matrix:** | Water | **Date Received:** | 10/9/2019 |

| | | | | |
|---|---|---|---|---|
| Chloroform | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Chloromethane | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| cis-1,2-Dichloroethene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| cis-1,3-Dichloropropene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Cyclohexane | < 10.0 | ug/L | 10/17/2019 | 19:22 |
| Dibromochloromethane | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Dichlorodifluoromethane | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Ethylbenzene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Freon 113 | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Isopropylbenzene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| m,p-Xylene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Methyl acetate | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Methyl tert-butyl Ether | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Methylcyclohexane | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Methylene chloride | < 5.00 | ug/L | 10/17/2019 | 19:22 |
| o-Xylene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Styrene | < 5.00 | ug/L | 10/17/2019 | 19:22 |
| Tetrachloroethene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Toluene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| trans-1,2-Dichloroethene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| trans-1,3-Dichloropropene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Trichloroethene | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Trichlorofluoromethane | < 2.00 | ug/L | 10/17/2019 | 19:22 |
| Vinyl chloride | < 2.00 | ug/L | 10/17/2019 | 19:22 |

**Lab Project ID:** 194958

**Client:** **Stantec**

**Project Reference:** Ward Street

| | | | |
|---|---|---|---|
| **Sample Identifier:** | Trip Blank | | |
| **Lab Sample ID:** | 194958-07 | **Date Sampled:** | 10/3/2019 |
| **Matrix:** | Water | **Date Received:** | 10/9/2019 |

| Surrogate | Percent Recovery | Limits | Outliers | Date Analyzed |
|---|---|---|---|---|
| 1,2-Dichloroethane-d4 | **122** | 70.5 - 135 | | 10/17/2019 19:22 |
| 4-Bromofluorobenzene | **81.4** | 62 - 127 | | 10/17/2019 19:22 |
| Pentafluorobenzene | **96.5** | 87 - 113 | | 10/17/2019 19:22 |
| Toluene-D8 | **93.1** | 80.8 - 115 | | 10/17/2019 19:22 |

**Method Reference(s):** EPA 8260C
EPA 5030C

**Data File:** x65419.D

PARADIGM
ENVIRONMENTAL SERVICES, INC.

## *Method Blank Report*

**Client:** **Stantec**
**Project Reference:** Ward Street
**Lab Project ID:** 194958
**SDG #:** 4958-01
**Matrix:** Groundwater

### *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed | |
|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,1,2,2-Tetrachloroethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,1,2-Trichloroethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,1-Dichloroethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,1-Dichloroethene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,2,3-Trichlorobenzene | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,2,4-Trichlorobenzene | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,2-Dibromo-3-Chloropropane | <10.0 | ug/L | | 10/17/2019 | 12:15 |
| 1,2-Dibromoethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,2-Dichlorobenzene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,2-Dichloroethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,2-Dichloropropane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,3-Dichlorobenzene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,4-Dichlorobenzene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| 1,4-Dioxane | <20.0 | ug/L | | 10/17/2019 | 12:15 |
| 2-Butanone | <10.0 | ug/L | | 10/17/2019 | 12:15 |
| 2-Hexanone | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| 4-Methyl-2-pentanone | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| Acetone | <10.0 | ug/L | | 10/17/2019 | 12:15 |
| Benzene | <1.00 | ug/L | | 10/17/2019 | 12:15 |
| Bromochloromethane | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| Bromodichloromethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Bromoform | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| Bromomethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Carbon disulfide | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Carbon Tetrachloride | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Chlorobenzene | <2.00 | ug/L | | 10/17/2019 | 12:15 |

This report is part of a multipage document and should only be evaluated in its entirety. The Chain of Custody provides additional sample information, including compliance with the sample condition requirements upon receipt.

*Report Prepared Friday, October 18, 2019*

PARADIGM
ENVIRONMENTAL SERVICES, INC.

## *Method Blank Report*

**Client:** **Stantec**
**Project Reference:** Ward Street
**Lab Project ID:** 194958
**SDG #:** 4958-01
**Matrix:** Groundwater

### *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed | |
|---|---|---|---|---|---|
| Chloroethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Chloroform | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Chloromethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| cis-1,2-Dichloroethene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| cis-1,3-Dichloropropene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Cyclohexane | <10.0 | ug/L | | 10/17/2019 | 12:15 |
| Dibromochloromethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Dichlorodifluoromethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Ethylbenzene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Freon 113 | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Isopropylbenzene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| m,p-Xylene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Methyl acetate | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Methyl tert-butyl Ether | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Methylcyclohexane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Methylene chloride | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| o-Xylene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Styrene | <5.00 | ug/L | | 10/17/2019 | 12:15 |
| Tetrachloroethene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Toluene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| trans-1,2-Dichloroethene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| trans-1,3-Dichloropropene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Trichloroethene | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Trichlorofluoromethane | <2.00 | ug/L | | 10/17/2019 | 12:15 |
| Vinyl chloride | <2.00 | ug/L | | 10/17/2019 | 12:15 |



*Report Prepared Friday, October 18, 2019*

PARADIGM
ENVIRONMENTAL SERVICES, INC.

# *Method Blank Report*

**Client:** **Stantec**
**Project Reference:** Ward Street
**Lab Project ID:** 194958
**SDG #:** 4958-01
**Matrix:** Groundwater

## *Volatile Organics*

| Analyte | Result | Units | Qualifier | Date Analyzed |
|---|---|---|---|---|
| **Surrogate** | **Percent Recovery** | **Limits** | **Outliers** | **Date Analyzed** |
| 1,2-Dichloroethane-d4 | **118** | 70.5 - 135 | | 10/17/2019 12:15 |
| 4-Bromofluorobenzene | **85.1** | 62 - 127 | | 10/17/2019 12:15 |
| Pentafluorobenzene | **98.8** | 87 - 113 | | 10/17/2019 12:15 |
| Toluene-D8 | **95.8** | 80.8 - 115 | | 10/17/2019 12:15 |

**Method Reference(s):** EPA 8260C
EPA 5030C
**Data File:** x65400.D
**QC Batch ID:** voaw191017
**QC Number:** 1

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*Report Prepared Friday, October 18, 2019*

PARADIGM ENVIRONMENTAL SERVICES, INC.

## *QC Report for Laboratory Control Sample*

**Client:** Stantec
**Project Reference:** Ward Street
**Lab Project ID:** 194958
**SDG #:** 4958-01
**Matrix:** Groundwater

### *Volatile Organics*

| Analyte | Spike Added | Spike Units | LCS Result | LCS % Recovery | % Rec Limits | LCS Outliers | Date Analyzed |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 20.0 | ug/L | 18.8 | 94.2 | 58.4 - 141 | | 10/17/2019 |
| 1,1,2,2-Tetrachloroethane | 20.0 | ug/L | 24.0 | 120 | 62.2 - 135 | | 10/17/2019 |
| 1,1,2-Trichloroethane | 20.0 | ug/L | 21.5 | 108 | 68.4 - 130 | | 10/17/2019 |
| 1,1-Dichloroethane | 20.0 | ug/L | 21.0 | 105 | 70.5 - 129 | | 10/17/2019 |
| 1,1-Dichloroethene | 20.0 | ug/L | 18.7 | 93.7 | 55.6 - 133 | | 10/17/2019 |
| 1,2-Dichlorobenzene | 20.0 | ug/L | 21.5 | 108 | 71.3 - 124 | | 10/17/2019 |
| 1,2-Dichloroethane | 20.0 | ug/L | 22.3 | 112 | 65.3 - 138 | | 10/17/2019 |
| 1,2-Dichloropropane | 20.0 | ug/L | 21.0 | 105 | 72.4 - 118 | | 10/17/2019 |
| 1,3-Dichlorobenzene | 20.0 | ug/L | 19.8 | 99.0 | 68.9 - 122 | | 10/17/2019 |
| 1,4-Dichlorobenzene | 20.0 | ug/L | 20.2 | 101 | 69.2 - 116 | | 10/17/2019 |
| Benzene | 20.0 | ug/L | 21.0 | 105 | 75.3 - 126 | | 10/17/2019 |
| Bromodichloromethane | 20.0 | ug/L | 21.3 | 107 | 67.8 - 126 | | 10/17/2019 |
| Bromoform | 20.0 | ug/L | 21.5 | 107 | 57.7 - 123 | | 10/17/2019 |
| Bromomethane | 20.0 | ug/L | 19.6 | 97.8 | 61.3 - 150 | | 10/17/2019 |
| Carbon Tetrachloride | 20.0 | ug/L | 19.3 | 96.4 | 55 - 145 | | 10/17/2019 |
| Chlorobenzene | 20.0 | ug/L | 20.9 | 105 | 73.5 - 122 | | 10/17/2019 |



*Report Prepared Friday, October 18, 2019*

PARADIGM ENVIRONMENTAL SERVICES, INC.

## *QC Report for Laboratory Control Sample*

**Client:** Stantec
**Project Reference:** Ward Street
**Lab Project ID:** 194958
**SDG #:** 4958-01
**Matrix:** Groundwater

### *Volatile Organics*

| Analyte | Spike Added | Spike Units | LCS Result | LCS % Recovery | % Rec Limits | LCS Outliers | Date Analyzed |
|---|---|---|---|---|---|---|---|
| Chloroethane | 20.0 | ug/L | 19.5 | 97.4 | 60.9 - 150 | | 10/17/2019 |
| Chloroform | 20.0 | ug/L | 21.2 | 106 | 72.1 - 132 | | 10/17/2019 |
| Chloromethane | 20.0 | ug/L | 17.9 | 89.3 | 43.2 - 171 | | 10/17/2019 |
| cis-1,3-Dichloropropene | 20.0 | ug/L | 18.5 | 92.6 | 59.1 - 122 | | 10/17/2019 |
| Dibromochloromethane | 20.0 | ug/L | 22.1 | 111 | 67 - 130 | | 10/17/2019 |
| Ethylbenzene | 20.0 | ug/L | 22.0 | 110 | 66.3 - 127 | | 10/17/2019 |
| Methylene chloride | 20.0 | ug/L | 21.3 | 106 | 65 - 144 | | 10/17/2019 |
| Tetrachloroethene | 20.0 | ug/L | 19.3 | 96.4 | 68.1 - 137 | | 10/17/2019 |
| Toluene | 20.0 | ug/L | 21.4 | 107 | 75.5 - 126 | | 10/17/2019 |
| trans-1,2-Dichloroethene | 20.0 | ug/L | 20.7 | 103 | 62.8 - 136 | | 10/17/2019 |
| trans-1,3-Dichloropropene | 20.0 | ug/L | 19.1 | 95.7 | 55.7 - 126 | | 10/17/2019 |
| Trichloroethene | 20.0 | ug/L | 19.6 | 98.1 | 70 - 127 | | 10/17/2019 |
| Trichlorofluoromethane | 20.0 | ug/L | 19.8 | 99.2 | 47.1 - 168 | | 10/17/2019 |
| Vinyl chloride | 20.0 | ug/L | 19.0 | 95.1 | 50.9 - 163 | | 10/17/2019 |



*Report Prepared Friday, October 18, 2019*

PARADIGM
ENVIRONMENTAL SERVICES, INC.

# *QC Report for Laboratory Control Sample*

**Client:** Stantec
**Project Reference:** Ward Street
**Lab Project ID:** 194958
**SDG #:** 4958-01
**Matrix:** Groundwater

## *Volatile Organics*

| Analyte | Spike Added | Spike Units | LCS Result | LCS % Recovery | % Rec Limits | LCS Outliers | Date Analyzed |
|---|---|---|---|---|---|---|---|

**Method Reference(s):** EPA 8260C
EPA 5030C
**Data File:** x65399.D
**QC Number:** 1
**QC Batch ID:** voaw191017

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*Report Prepared Friday, October 18, 2019*

# Analytical Report Appendix

The reported results relate only to the samples as they have been received by the laboratory.

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All soil/sludge samples have been reported on a dry weight basis, unless qualified "reported as received". Other solids are reported as received.

Low level Volatiles blank reports for soil/solid matrix are based on a nominal 5 gram weight. Sample results and reporting limits are based on actual weight, which may be more or less than 5 grams.

The Chain of Custody provides additional information, including compliance with sample condition requirements upon receipt. Sample condition requirements are defined under the 2003 NELAC Standard, sections 5.5.8.3.1 and 5.5.8.3.2.

NYSDOH ELAP does not certify for all parameters. Paradigm Environmental Services or the indicated subcontracted laboratory does hold certification for all analytes where certification is offered by ELAP unless otherwise specified. Aliquots separated for certain tests, such as TCLP, are indicated on the Chain of Custody and final reports with an "A" suffix.

Data qualifiers are used, when necessary, to provide additional information about the data. This information may be communicated as a flag or as text at the bottom of the report. Please refer to the following list of analyte-specific, frequently used data flags and their meaning:

*"<" = Analyzed for but not detected at or above the quantitation limit.*
*"E" = Result has been estimated, calibration limit exceeded.*
*"Z" = See case narrative.*
*"D" = Sample, Laboratory Control Sample, or Matrix Spike Duplicate results above Relative Percent Difference limit.*
*"M" = Matrix spike recoveries outside QC limits. Matrix bias indicated.*
*"B" = Method blank contained trace levels of analyte. Refer to included method blank report.*
*"J" = Result estimated between the quantitation limit and half the quantitation limit.*
*"L" = Laboratory Control Sample recovery outside accepted QC limits.*
*"P" = Concentration differs by more than 40% between the primary and secondary analytical columns.*
*"NC" = Not calculable. Applicable to RPD if sample or duplicate result is non-detect or estimated (see primary report for data flags). Applicable to MS if sample is greater or equal to ten times the spike added. Applicable to sample surrogates or MS if sample dilution is 10x or higher.*
*"*" = Indicates any recoveries outside associated acceptance windows. Surrogate outliers in samples are presumed matrix effects. LCS demonstrates method compliance unless otherwise noted.*
*"(1)" = Indicates data from primary column used for QC calculation.*
*"A" = denotes a parameter for which ELAP does not offer approval as part of their laboratory certification program.*
*"F" = denotes a parameter for which Paradigm does not carry certification, the results for which should therefore only be used where ELAP certification is not required, such as personal exposure assessment.*

# GENERAL TERMS AND CONDITIONS
# LABORATORY SERVICES

These Terms and Conditions embody the whole agreement of the parties in the absence of a signed and executed contract between the Laboratory (LAB) and Client. They shall supersede all previous communications, representations, or agreements, either verbal or written, between the parties. The LAB specifically rejects all additional, inconsistent, or conflicting terms, whether printed or otherwise set forth in any purchase order or other communication from the Client to the LAB. The invalidity or unenforceability in whole or in part of any provision, tern or condition hereof shall not affect in any way the validity or enforceability of the remainder of the Terms and Conditions. No waiver by LAB of any provision, term, or condition hereof or of any breach by or obligation of the Client hereunder shall constitute a waiver of such provision, term, or condition on any other occasion or a waiver of any other breach by or obligation of the Client. This agreement shall be administered and interpreted under the laws of the state which services are procured.

**Warranty.** Recognizing that the nature of many samples is unknown and that some may contain potentially hazardous components, LAB warrants only that it will perform testing services, obtain findings, and prepare reports in accordance with generally accepted analytical laboratory principles and practices at the time of performance of services. LAB makes no other warranty, express or implied.

**Scope and Compensation.** LAB agrees to perform the services described in the chain of custody to which these terms and conditions are attached. Unless the parties agree in writing to the contrary, the duties of LAB shall not be construed to exceed the services specifically described. LAB wi use LAB default method for all tests unless specified otherwise on the Work Order.
Payment terms are net 30 days from the date of invoice. All overdue payments are subject to an interest charge of one and one-half percent (1-1/2%) per month or a portion thereof. Client shall also be responsible for costs of collection, including payment of reasonable attorney fees if such expense is incurred. The prices, unless stated, do not include any sale, use or other taxes. Such taxes will be added to invoice prices when required.

**Prices.** Compensation for services performed will be based on the current Lab Analytical Fee Schedule or on quotations agreed to in writing by the parties. Turnaround time based charges are determined from the time of resolution of all work order questions. Testimony, court appearances or data compilation for legal action will be charged separately. Evaluation and reporting of initial screening runs may incur additional fees.

**Limitations of Liability.** In the event of any error, omission, or other professional negligence, the sole and exclusive responsibility of LAB shall be to re-perform the deficient work at its own expense and LAB shall have no other liability whatsoever. All claims shall be deemed waived unless made in writing and received by LAB within ninety (90) days following completion of services.
LAB shall have no liability, obligation, or responsibility of any kind for losses, costs, expenses, or other damages (including but not limited to any special, direct, incidental or consequential damages) with respect to LAB's services or results.
All results provided by LAB are strictly for the use of its clients and LAB is in no way responsible for the use of such results by clients or third parties. All reports should be considered in their entirety, and LAB is not responsible for the separation, detachment, or other use of any portion of these reports. Client may not assign the lab report without the written consent of the LAB.
Client covenants and agrees, at its/his/her sole expense, to indemnify, protect, defend, and save harmless the LAB from and against any and all damages, losses, liabilities, obligations, penalties, claims, litigation, demands, defenses, judgments, suits, actions, proceedings, costs, disbursements and/or expenses (including, without limitation attorneys' and experts' fees and disbursements) of any kind whatsoever which may at any time be imposed upon, incurred by or asserted or awarded against client relating to, resulting from or arising out of (a) the breach of this agreement by this client, (b) the negligence of the client in handling, delivering or disclosing any hazardous substance, (c) the violation of the Client of any applicable law, (d) non-compliance by the Client with any environmental permit or (e) a material misrepresentation in disclosing the materials to be tested.

**Hazard Disclosure.** Client represents and warrants that any sample delivered to LAB will be preceded or accompanied by complete written disclosure of the presence of any hazardous substances known or suspected by Client. Client further warrants that any sample containing any hazardous substance that is to be delivered to LAB will be packaged, labeled, transported, and delivered properly and in accordance with applicable laws.

**Sample Handling.** Prior to LAB's acceptance of any sample (or after any revocation of acceptance), the entire risk of loss or of damage to such sample remains with Client. Samples are accepted when receipt is acknowledged on chain of custody documentation. In no event will LAB have any responsibility for the action or inaction of any carrier shipping or delivering any sample to or from LAB premises.
Client authorizes LAB to proceed with the analysis of samples as received by the laboratory, recognizing that any samples not in compliance with all current DOH-ELAP-NELAP requirements for containers, preservation or holding time will be noted as such on th final report.
Disposal of hazardous waste samples is the responsibility of the Client. If the Client does not wish such samples returned, LAB may add storage and disposal fees to the final invoice. Maximum storage time for samples is 30 days after completion of analysis unless modified by applicable state or federal laws. Client will be required to give the LAB written instructions concerning disposal of these samples.
LAB reserves the absolute right, exercisable at any time, to refuse to receive delivery of, refuse to accept, or revoke acceptance of any sample, which, in the sole judgment of LAB (a) is of unsuitable volume, (b) may be or become unsuitable for or may pose a risk in handling, transport, or processing for any health, safety, environmental or other reason whether or not due to the presence in the sample of any hazardous substance, and whether or not such presence has been disclosed to LAB by Client or (c) if the condition or sample date make the sample unsuitable for analysis.

**Legal Responsibility.** LAB is solely responsible for performance of this contract, and no affiliated company, director, officer, employee, or agent shall have any legal responsibility hereunder, whether in contract or tort including negligence.

**Assignment.** LAB may assign its performance obligations under this contract to other parties, as it deems necessary. LAB shall disclose to Client any assignee (subcontractor) by ELAP ID # on the submitted final report.

**Force Majeure.** LAB shall have no responsibility or liability to the Client for any failure or delay in performance by LAB, which results in whole or in part from any cause or circumstance beyond the reasonable control of LAB. Such causes and circumstances shall include, but not limited to, acts of God, acts or orders of any government authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, difficulties or delays in transportation, mail or delivery services, inability to obtain sufficient services or supplies from LAB's usual suppliers, or any other cause beyond LAB's reasonable control.

**Law.** This contract shall be continued under the laws of the State of New York without regard to its conflicts of laws provision.

ANALYTICAL REPORT

| | |
|---|---|
| Lab Number: | L1947274 |
| Client: | Paradigm Environmental Services<br>179 Lake Avenue<br>Rochester, NY 14608 |
| ATTN: | Jane Daloia |
| Phone: | (585) 647-2530 |
| Project Name: | 194958 |
| Project Number: | 194958 |
| Report Date: | 10/15/19 |



Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19



| Alpha Sample ID | Client ID | Matrix | Sample Location | Collection Date/Time | Receive Date |
|---|---|---|---|---|---|
| L1947274-01 | WSR-MW-105-GW 194958-01 | WATER | Not Specified | 10/08/19 14:35 | 10/09/19 |
| L1947274-02 | WSR-MW-16-GW 194958-02 | WATER | Not Specified | 10/08/19 10:15 | 10/09/19 |
| L1947274-03 | WSR-MW-16R-GW 194958-03 | WATER | Not Specified | 10/08/19 11:15 | 10/09/19 |
| L1947274-04 | WSR-MW-207R-GW 194958-04 | WATER | Not Specified | 10/08/19 09:20 | 10/09/19 |
| L1947274-05 | 828-MW-23-GW 194958-05 | WATER | Not Specified | 10/08/19 13:40 | 10/09/19 |
| L1947274-06 | 828-MW-23R-GW 194958-06 | WATER | Not Specified | 10/08/19 12:35 | 10/09/19 |

| | | | |
|---|---|---|---|
| **Project Name:** | 194958 | **Lab Number:** | L1947274 |
| **Project Number:** | 194958 | **Report Date:** | 10/15/19 |

## Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

**Project Name:** 194958 **Lab Number:** L1947274
**Project Number:** 194958 **Report Date:** 10/15/19

**Case Narrative (continued)**

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 10/15/19

# INORGANICS
# &
# MISCELLANEOUS

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

## SAMPLE RESULTS

Lab ID: L1947274-01
Client ID: WSR-MW-105-GW 194958-01
Sample Location: Not Specified

Date Collected: 10/08/19 14:35
Date Received: 10/09/19
Field Prep: Not Specified

Sample Depth:
Matrix: Water

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Total Organic Carbon | 1.6 | | mg/l | 0.50 | 0.11 | 1 | - | 10/10/19 11:31 | 1,9060A | AG |

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

## SAMPLE RESULTS

Lab ID: L1947274-02
Client ID: WSR-MW-16-GW 194958-02
Sample Location: Not Specified

Sample Depth:
Matrix: Water

Date Collected: 10/08/19 10:15
Date Received: 10/09/19
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Total Organic Carbon | 5.5 | | mg/l | 2.5 | 0.57 | 5 | - | 10/10/19 11:31 | 1,9060A | AG |

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

## SAMPLE RESULTS

Lab ID: L1947274-03
Client ID: WSR-MW-16R-GW 194958-03
Sample Location: Not Specified

Sample Depth:
Matrix: Water

Date Collected: 10/08/19 11:15
Date Received: 10/09/19
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Total Organic Carbon | 1.0 | | mg/l | 0.50 | 0.11 | 1 | - | 10/10/19 11:31 | 1,9060A | AG |

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

## SAMPLE RESULTS

Lab ID: L1947274-04
Client ID: WSR-MW-207R-GW 194958-04
Sample Location: Not Specified

Sample Depth:
Matrix: Water

Date Collected: 10/08/19 09:20
Date Received: 10/09/19
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Total Organic Carbon | 2.1 | | mg/l | 1.0 | 0.23 | 2 | - | 10/10/19 11:31 | 1,9060A | AG |

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

## SAMPLE RESULTS

Lab ID: L1947274-05
Client ID: 828-MW-23-GW 194958-05
Sample Location: Not Specified

Sample Depth:
Matrix: Water

Date Collected: 10/08/19 13:40
Date Received: 10/09/19
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| **General Chemistry - Westborough Lab** | | | | | | | | | | |
| Total Organic Carbon | 3.6 | | mg/l | 1.0 | 0.23 | 2 | - | 10/10/19 11:31 | 1,9060A | AG |

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

## SAMPLE RESULTS

Lab ID: L1947274-06
Client ID: 828-MW-23R-GW 194958-06
Sample Location: Not Specified

Sample Depth:
Matrix: Water

Date Collected: 10/08/19 12:35
Date Received: 10/09/19
Field Prep: Not Specified

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab | | | | | | | | | | |
| Total Organic Carbon | 0.97 | | mg/l | 0.50 | 0.11 | 1 | - | 10/10/19 11:31 | 1,9060A | AG |

**Project Name:** 194958 **Lab Number:** L1947274

**Project Number:** 194958 **Report Date:** 10/15/19

# Method Blank Analysis
## Batch Quality Control

| Parameter | Result | Qualifier | Units | RL | MDL | Dilution Factor | Date Prepared | Date Analyzed | Analytical Method | Analyst |
|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab for sample(s): 01-06 Batch: WG1294577-1 | | | | | | | | | | |
| Total Organic Carbon | ND | | mg/l | 0.50 | 0.11 | 1 | - | 10/10/19 11:31 | 1,9060A | AG |

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** 194958

**Project Number:** 194958

**Lab Number:** L1947274

**Report Date:** 10/15/19



| Parameter | LCS %Recovery | Qual | LCSD %Recovery | Qual | %Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-06 Batch: WG1294577-2 | | | | | | | | |
| Total Organic Carbon | 98 | | - | | 90-110 | - | | |

# Matrix Spike Analysis
## Batch Quality Control

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19

| Parameter | Native Sample | MS Added | MS Found | MS %Recovery | Qual | MSD Found | MSD %Recovery | Qual | Recovery Limits | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1294577-4 QC Sample: L1947002-01 Client ID: MS Sample | | | | | | | | | | | | |
| Total Organic Carbon | 2300 | 6400 | 8500 | 97 | | - | - | | 80-120 | - | | 20 |

# Lab Duplicate Analysis

***Batch Quality Control***

**Project Name:** 194958

**Project Number:** 194958

***Lab Number:*** L1947274

***Report Date:*** 10/15/19

| Parameter | Native Sample | Duplicate Sample | Units | RPD | Qual | RPD Limits |
|---|---|---|---|---|---|---|
| General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG1294577-3 QC Sample: L1947002-01 Client ID: DUP Sample | | | | | | |
| Total Organic Carbon | 2300 | 2300 | mg/l | 0 | | 20 |

**Project Name:** 194958
**Project Number:** 194958

**Lab Number:** L1947274
**Report Date:** 10/15/19



## Sample Receipt and Container Information

Were project specific reporting limits specified? YES

### Cooler Information

| Cooler | Custody Seal |
|---|---|
| A | Absent |

### Container Information

| Container ID | Container Type | Cooler | Initial pH | Final pH | Temp deg C | Pres | Seal | Frozen Date/Time | Analysis(*) |
|---|---|---|---|---|---|---|---|---|---|
| L1947274-01A | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-01B | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-02A | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-02B | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-03A | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-03B | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-04A | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-04B | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-05A | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-05B | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-06A | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |
| L1947274-06B | Vial H2SO4 preserved | A | NA | | 5.7 | Y | Absent | | TOC-9060(28) |



*Values in parentheses indicate holding time in days

| | | | |
|---|---|---|---|
| **Project Name:** | 194958 | **Lab Number:** | L1947274 |
| **Project Number:** | 194958 | **Report Date:** | 10/15/19 |

## GLOSSARY

***Acronyms***

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

***Footnotes***

*Report Format: DU Report with 'J' Qualifiers*

| | | | |
|---|---|---|---|
| **Project Name:** | 194958 | **Lab Number:** | L1947274 |
| **Project Number:** | 194958 | **Report Date:** | 10/15/19 |

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

***Terms***

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

***Data Qualifiers***

**A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

**B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

**C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

**D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

**E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

**G** - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

**H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

**I** - The lower value for the two columns has been reported due to obvious interference.

**J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

**M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

**ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

**NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

**P** - The RPD between the results for the two columns exceeds the method-specified criteria.

**Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

**R** - Analytical results are from sample re-analysis.

**RE** - Analytical results are from sample re-extraction.

**S** - Analytical results are from modified screening analysis.

*Report Format: DU Report with 'J' Qualifiers*

**Project Name:** 194958 **Lab Number:** L1947274

**Project Number:** 194958 **Report Date:** 10/15/19

## REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.

# Certification Information

**The following analytes are not included in our Primary NELAP Scope of Accreditation:**

**Westborough Facility**
**EPA 624/624.1:** m/p-xylene, o-xylene
**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
**SM4500**: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

**Mansfield Facility**
**SM 2540D:** TSS
**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
**Biological Tissue Matrix:** EPA 3050B

**The following analytes are included in our Massachusetts DEP Scope of Accreditation**

**Westborough Facility:**

***Drinking Water***
**EPA 300.0**: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
**EPA 332**: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
**Microbiology**: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

***Non-Potable Water***
**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
**EPA 624.1**: Volatile Halocarbons & Aromatics,
**EPA 608.3**: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
**EPA 625.1**: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
**Microbiology**: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.**

**Mansfield Facility:**

***Drinking Water***
**EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
**EPA 522.**

***Non-Potable Water***
**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
**EPA 200.8:** Al, Sb**,** As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
**EPA 245.1** Hg.
**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

# CHAIN OF CUSTODY

1 of 1 L1947274 11148

| REPORT TO: | | INVOICE TO: | | | |
|---|---|---|---|---|---|
| COMPANY: | Paradigm Environmental | COMPANY: | Same | LAB PROJECT #: | CLIENT PROJECT #: |
| ADDRESS: | 179 Lake Avenue | ADDRESS: | | | |
| CITY: Rochester STATE: NY ZIP: 14608 | | CITY: STATE: ZIP: | | TURNAROUND TIME: (WORKING DAYS) | |
| PHONE: FAX: | | PHONE: FAX: | | STD / OTHER | |
| PROJECT NAME/SITE NAME: | | ATTN: Reporting | ATTN: Accounts Payable | ☐ 1 ☐ 2 ☐ 3 ☒ 5 | |
| | | COMMENTS: Please email results to reporting@paradigmenv.com | | Date Due: 10/17/19 | |

REQUESTED ANALYSIS

| | DATE | TIME | COMPOSITE | GRAB | SAMPLE LOCATION/FIELD ID | MATRIX | NUMBER OF CONTAINERS | TCL | Report J Flags ASP Ca+A. REMARKS | SDG closed: SW-846 HT's, PARADIGM LAB SAMPLE NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10/8/19 | 14:35 | | X | WSR-MW-105-GW | Ground Water | 2 | X | | 1949958-01 |
| 2 | | 10:15 | | | WSR-MW-16-GW | | | | | -02 |
| 3 | | 11:15 | | | WSR-MW-16R-GW | | | | | -03 |
| 4 | | 09:20 | | | WSR-MW-207R-GW | | | | | -04 |
| 5 | | 13:40 | | | 828-MW-23-GW | | | | | -05 |
| 6 | | 12:35 | | | 828-MW-23R-GW | | | | | -06 |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

**LAB USE ONLY BELOW THIS LINE**

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

| Receipt Parameter | NELAC Compliance | |
|---|---|---|
| Container Type: | Y ☐ | N ☐ |
| Comments: | | |
| Preservation: | Y ☐ | N ☐ |
| Comments: | | |
| Holding Time: | Y ☐ | N ☐ |
| Comments: | | |
| Temperature: | Y ☐ | N ☐ |
| Comments: | | |

Client

| | | Date/Time | |
|---|---|---|---|
| Sampled By | | 10/9/19 | 16:00 |
| Relinquished By | | 10/9/19 | 16:30 |
| Received By | | 10/9/19 | 16:30 |
| Received By | | 10/10/19 | 00:40 |
| Received @ Lab By | | Date/Time | |

Total Cost:

P.I.F.

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311



# CHAIN OF CUSTODY

PARADIGM ENVIRONMENTAL SERVICES, LLC

| REPORT TO: | | INVOICE TO: | | LAB PROJECT ID |
|---|---|---|---|---|
| CLIENT: | Stantec | CLIENT: | SAME | 194958 |
| ADDRESS: | 61 Commercial St., Suite 100 | ADDRESS: | | |
| CITY: | Rochester STATE: NY ZIP: 14614 | CITY: | STATE: ZIP: | Quotation #: |
| PHONE: | (585) 413-5266 | PHONE: | (585) 413-5327 | Email: mike.staransky@stantec.com laura.best@stantec.com |
| ATTN: | Mike Staransky | ATTN: | Laura Best | |

**PROJECT REFERENCE**

Ward Street

**Matrix Codes:**
AQ - Aqueous Liquid; NQ - Non-Aqueous Liquid; WA - Water; WG - Groundwater; DW - Drinking Water; WW - Wastewater; SO - Soil; SL - Sludge; SD - Solid; PT - Paint; WP - Wipe; CK - Caulk; OL - Oil; AR - Air

**REQUESTED ANALYSIS**

| DATE COLLECTED | TIME COLLECTED | COMPOSITE | GRAB | SAMPLE IDENTIFIER | MATRIX CODES | NUMBER OF CONTAINERS | TCL VOCs (8260) | TOC (5310) | REMARKS | PARADIGM LAB SAMPLE NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|
| 10/8/19 | 1435 | | X | WSR-MW-105-GW | WG | 4 | X | X | | 01 |
| | 10:15 | | X | WSR-MW-16-GW | WG | 4 | X | X | | 02 |
| | 11:15 | | X | WSR-MW-16R-GW | WG | 4 | X | X | | 03 |
| | 0920 | | X | WSR-MW-207R-GW | WG | 4 | X | X | | 04 |
| | 1340 | | X | 828-MW-23-GW | WG | 4 | X | X | | 05 |
| | 1235 | | X | 828-MW-23R-GW | WG | 4 | X | X | | 06 |
| 10/3/19 | ~~09:00~~ 1947 | | X | Trip Blank | WA | 1 | X | | | 07 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

per sample label GP 10/9/19

Laura Best

| Turnaround Time | | Report Supplements | | | |
|---|---|---|---|---|---|
| Availability contingent upon lab approval; additional fees may apply. | | | | | |
| Standard 5 day | X | None Required | | None Required | |
| 10 day | | Batch QC | | Basic EDD | |
| Rush 3 day | | Category A | X | NYSDEC EDD | |
| Rush 2 day | | Category B | | | |
| Rush 1 day | | | | | |
| Date Needed _____ please indicate date needed: | | Other please indicate package needed: | | Other EDD please indicate EDD needed: | X |
| | | | | Stantec | |

Laura Best Laura Best 10/8/19
Sampled By Date/Time

Laura Best 10/8/19 15:28
Relinquished By Date/Time

Jane J. Jacobs 10/8/19 1528
Received By Date/Time

10/9/19 09:55
Received @ Lab By Date/Time

Total Cost:

P.I.F.

8°C iced Started in field 10/8/19 15:41

By signing this form, client agrees to Paradigm Terms and Conditions (reverse).

Custody Seal N/A, samples delivered by client. GP 10/8/19

See additional page for sample conditions.

# Chain of Custody Supplement

**Client:** Stantec **Completed by:** Glenn Pezzulo

**Lab Project ID:** 194958 **Date:** 10/9/19

## Sample Condition Requirements

Per NELAC/ELAP 210/241/242/243/244

| Condition | NELAC compliance with the sample condition requirements upon receipt<br>Yes | No | N/A |
|---|---|---|---|
| **Container Type** | X | | |
| Comments | | | |
| *Transferred to method-compliant container* | | | X |
| **Headspace (<1 mL)** | X VoA | | X |
| Comments | | | |
| **Preservation** | X | | |
| Comments | | | |
| **Chlorine Absent (<0.10 ppm per test strip)** | | | X |
| Comments | | | |
| **Holding Time** | X | | |
| Comments | | | |
| **Temperature** | X | | |
| Comments | 8 °C iced started in field | | |
| **Compliant Sample Quantity/Type** | X | | |
| Comments | | | |

179 Lake Avenue, Rochester, NY 14608 Office (585) 647-2530 Fax (585) 647-3311

PARADIGM ENVIRONMENTAL SERVICES, LLC

# CHAIN OF CUSTODY

1 of 1 L1947274 11148

| REPORT TO: | | INVOICE TO: | | | |
|---|---|---|---|---|---|
| COMPANY: | Paradigm Environmental | COMPANY: | Same | LAB PROJECT #: | CLIENT PROJECT #: |
| ADDRESS: | 179 Lake Avenue | ADDRESS: | | | |
| CITY: | Rochester STATE: NY ZIP: 14608 | CITY: | STATE: ZIP: | TURNAROUND TIME: (WORKING DAYS) | |
| PHONE: | FAX: | PHONE: | FAX: | STD | OTHER |
| PROJECT NAME/SITE NAME: | | ATTN: | Reporting | ATTN: Accounts Payable | 1 2 3 X 5 |
| | | COMMENTS: | Please email results to reporting@paradigmenv.com | Date Due: 10/17/19 | |

REQUESTED ANALYSIS

| | DATE | TIME | COMPOSITE | GRAB | SAMPLE LOCATION/FIELD ID | MATRIX | NUMBER OF CONTAINERS | TOS | REMARKS | PARADIGM LAB SAMPLE NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 10/8/19 | 14:35 | | X | WSR-MW-105-GW | Ground Water | 2 | X | Report J Flags. ASP Cat A. | 194958-01 |
| 2 | | 10:15 | | | WSR-MW-16-GW | | | | | -02 |
| 3 | | 11:15 | | | WSR-MW-16R-GW | | | | | -03 |
| 4 | | 09:20 | | | WSR-MW-207R-GW | | | | | -04 |
| 5 | | 13:40 | | | 828-MW-23-GW | | | | | -05 |
| 6 | | 12:35 | | | 828-MW-23R-GW | | | | | -06 |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |

SDG closed. SW-846 HT's.

**LAB USE ONLY BELOW THIS LINE**

Sample Condition: Per NELAC/ELAP 210/241/242/243/244

| Receipt Parameter | NELAC Compliance | |
|---|---|---|
| Container Type: | Y ☐ | N ☐ |
| Comments: | | |
| Preservation: | Y ☐ | N ☐ |
| Comments: | | |
| Holding Time: | Y ☐ | N ☐ |
| Comments: | | |
| Temperature: | Y ☐ | N ☐ |
| Comments: Temp 5.7°C | | |

SRC 10/22/19

Client

| | | |
|---|---|---|
| Sampled By | Date/Time | 10/9/19 16:00 |
| Relinquished By | Date/Time | 10/9/19 16:30 |
| Received By | Date/Time | 10/9/19 16:30 |
| Received By | Date/Time | 10/10/19 00:40 |
| Received @ Lab By | Date/Time | |

Total Cost:

P.I.F.