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OPERATION, MAINTENANCE, AND MONITORING ANNUAL REPORT

JCI Jones Chemicals, Inc. Superfund Site

Prepared for

JCI Jones Chemicals, Inc.
100 Sunny Sol Boulevard
Caledonia, NY 14423

Prepared by

B & B Engineers and Geologists of New York., P.C.
Geosyntec Consultants
2039 Centre Pointe Blvd, Suite 103
Tallahassee, Florida 32308

Project Number: FR3533C

19 January 2021

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDIX

1. INTRODUCTION

B & B Engineers and Geologists of New York, , P.C., a Geosyntec Consultants, Inc. (Geosyntec) Company has prepared this operation, maintenance, and monitoring (OM&M) report for JCI Jones Chemicals, Inc. (JCI), Caledonia, New York Superfund Site ("Site"). The OM&M activities were conducted during the week of 19 October 2020; the previous annual monitoring event was conducted in September 2019 (Geosyntec 2019a). This OM&M report covers the period from 12 September 2019 to 20 October 2020.

Much of the background information in this report has been presented in previous OM&M reports; it is repeated here so that reviewers not familiar with the Site will have sufficient contextual information to assess the technical findings, conclusions, and recommendations presented in this report. Activities that occurred during this OM&M reporting period include:

- Process monitoring, sampling, and analysis of the groundwater-extraction system;
- Water-level measurements; and
- Groundwater and soil sampling and analysis.

The remedial design/remedial action at the Site was initiated by JCI as required by the Consent Decree under the Comprehensive Environmental Response, Compensation, and Liability Act established on July 11, 2001, with the U.S. Environmental Protection Agency (USEPA; New York State Department of Environmental Conservation [NYSDEC] Site Code 826003; USEPA Identification NY000813428). The remedial action includes treatment of affected soil by soil vapor extraction (SVE; Work Element I) and treatment of affected groundwater by source-area extraction and treatment, *in situ* chemical oxidation (ISCO) treatment, and monitored natural attenuation (MNA; Work Element II).

The Remedial Action Objectives (RAOs) for Work Element II include:

- Hydraulically contain and treat affected groundwater through a network of groundwater-extraction wells installed in the source area until the USEPA Maximum Contaminant Levels (MCLs) and New York State Groundwater Quality Standards 6, New York Environmental Conservation Rules and Regulations (NYCRR), Part 703.5 are achieved.
- Treat potential dense non-aqueous phase liquid (DNAPL) through chemical oxidation.
- Conduct MNA sampling of the affected groundwater downgradient from the source area to confirm that tetrachloroethene (PCE) and its degradation products are not migrating off site at concentrations exceeding USEPA MCLs and New York State Groundwater Quality Standards (6 NYCRR Part 703.5).

The groundwater-remediation goals are based on the New York State Groundwater Quality Standards 6 NYCRR Part 703.5 for Water Class GA, Type H (WS), for protection of a potential drinking water source (groundwater).

ISCO treatments using sodium permanganate ($NaMnO_4$) were conducted at the Site between July 2005 and November 2012.

The purpose of this OM&M report is to summarize the operational and monitoring parameters of the remedial system during the reporting period and discuss the annual monitoring event conducted in October 2020. The results for confirmatory VOC soil sampling and groundwater sampling for per and polyfluoroalkyl substances (PFAS) are also presented in this report.

2. BACKGROUND

The Site is located east of State Route 5 and on the northern side of Iroquois Road in Caledonia, northwestern Livingston County, New York (**Figure 1**); the address is 100 Sunny Sol Boulevard, Caledonia, New York. The Site is centered on latitude 42°58'40.9" North and longitude 77°50'49.1" West, and is situated in a relatively flat, sparsely populated, lightly industrialized suburban area of the Village of Caledonia. The Site is bordered by Iroquois Road to the south, farmlands to the north, and homes with acreage to the east and west. A construction company (formerly a lumberyard) and a printing company are located immediately northwest of the Site. A golf course, baseball field, and tennis court are present immediately south of Iroquois Road (**Figure 2**). Up until 31 May 2009, potable water to the Site and its vicinity had been supplied through Village of Caledonia production wells located to the south. As of 1 June 2009, potable water is supplied through the Village of Caledonia, which obtains its water from the Monroe County Water system.

There are nine buildings at the Site that are comprised of office space, drum-storage sheds, interconnected warehouse buildings, a sodium hypochlorite (bleach) manufacturing building, and a chlorine and sulfur-dioxide repackaging building. A map of the Site, including monitoring wells and extraction wells, is included as **Figure 3**. **Figure 4** illustrates the source-area wells and provides a Site layout. A railway line enters from the west, extends to within the eastern boundary, and runs to the north of the buildings. Much of the Site is flat, and areas around the buildings are paved with asphalt. A large area south of the buildings, facing Iroquois Road, is landscaped. An unlined pond is located to the north of the buildings.

The Site has been used for industrial purposes since August 1939. The future land use for the property is anticipated to be industrial. Groundwater from the Site is currently treated using an air-stripping unit and is used only as non-contact cooling water. As noted above, potable water is obtained from the Village of Caledonia.

2.1 Present and Past Operations

Commercial activities at the Site presently include:

- Manufacturing bleach through the reaction of chlorine and diluted sodium hydroxide;
- Manufacturing sodium bisulfite through the reaction of diluted sodium hydroxide and sulfur dioxide;
- Repackaging and distributing chlorine, sulfur dioxide, and sodium hydroxide from bulk to smaller containers; and
- Distributing various inorganic water-treatment chemicals, such as soda ash and lime.

At the present time, non-contact cooling water for the plant is supplied through the on-site supply/extraction wells—North Well, OEW-1, OEW-2, and BEW-1 (**Figure 3**). The extracted

water is initially treated using the air-stripping unit prior to use for non-contact cooling and is subsequently discharged to the on-site lagoon.

The operational history of the Site has been summarized from information presented in the Remedial Investigation Report (LFR 1999a). JCI purchased the Site in August 1939. Prior to the JCI purchase, the Site was utilized as an orchard, agricultural fields, and pasturelands. Reportedly, the property had been used as a food-packaging facility prior to purchase. Soon after the purchase of the property, JCI began production of bleach. In 1942, JCI purchased adjacent properties to the north and east, and JCI began repackaging chlorine from bulk sources to cylinders and 1-ton containers.

Between 1960 and approximately 1977, solvents and petroleum products—such as PCE, trichloroethene (TCE), toluene, 1,1,1-trichloroethane, methylene chloride, and Stoddard solvent—were repackaged from bulk to smaller containers for distribution.

2.2 Remedial Investigation and Goals

The remedial investigation (LFR 1999a) indicated PCE and its degradation products were the primary chemicals of concern in soil and groundwater at the Site; PCE concentrations ranged up to 330,000 micrograms per kilogram in soil and 67,000 micrograms per liter (µg/L) in groundwater. Soil sampling conducted in 2014 and 2015 detected much higher PCE concentrations in the former aboveground solvent storage tank (AST) area (also located near the former SVE treatment area). Based on sampling results, the former AST appears to be the primary source of chlorinated solvents detected at the Site.

The soil-remediation goals are the NYSDEC Technical and Administrative Guidance Memorandum HWR-94-4046: Soil Cleanup Objectives. The groundwater-remediation goals are based on the New York State Groundwater Quality Standards (6 NYCRR Part 703.5).

A summary of soil- and groundwater-remediation goals is presented in the table below:

Chemical of Concern	Soil (milligrams per kilogram)	Groundwater (micrograms per liter)
Tetrachloroethene	1.4	5
Trichloroethene	0.7	5
Cis-1,2-Dichloroethene	0.3	5
Trans-1,2-Dichloroethene	0.3	5
1,1-Dichloroethene	0.4	5
Vinyl Chloride	0.2	2

3. REMEDIATION SYSTEM OPERATION

The primary components of the remediation system include SVE-related wells and equipment, groundwater-extraction wells, a packed-tower air-stripping unit, and associated pumps and control units.

The groundwater source-area pump-and-treat system was started on 30 March 2004. The original SVE system was started on 20 April 2004, and shut down on 14 May 2008, as it was no longer effective (mass removal was at asymptotic levels). The SVE system was re-started in November 2018 using newly installed SVE wells and equipment. The air-stripping unit has been in continuous operation since November 1996, when it was installed as an interim remedial measure to treat affected groundwater recovered from the North Well for use in the daily plant operations. Source-area wells OEW-1, OEW-2, and BEW-1 were piped to the existing air-stripping unit in March 2004. Locations of groundwater supply/extraction wells are shown on **Figures 3** and **4**. **Table 1** is a remedial system summary; well construction data are presented in **Table 2**.

Several rounds of ISCO injections were conducted at the Site between July 2005 and November 2012. The ISCO treatments were successful in significantly reducing the contaminant mass in the injection area. Groundwater PCE concentrations have declined by over two to three orders of magnitude. Based on the current low groundwater concentrations, no additional ISCO treatments appear necessary at this time. However, should PCE concentrations rebound additional ISCO injections will be considered in consultation with the Agencies.

3.1 Operation, Maintenance, and Monitoring

This section describes the OM&M activities related to the groundwater-extraction-and-treatment system at the Site.

3.1.1 Groundwater Extraction-and-Treatment System

The time-averaged flow rate measured between 12 September 2019 and 20 October 2020 was approximately 275 gallons per minute (gpm). The instantaneous flow rates of extraction wells measured on 20 October 2020, are presented in **Table 3**. There are slight differences in total and individual flowmeter readings due to length of and size of pipes conveying the water to the air stripper.

The following information is collected for monitoring the performance of the groundwater-remediation system:

- Groundwater elevations at selected monitoring wells and all extraction wells;
- Instantaneous water-flow rate from each groundwater-extraction well to the air-stripping unit;
- Total volume of groundwater recovered (flow meter);
- Air-stripping unit pressure;

- Total hours of air-stripping unit operation and run-time hours of each extraction well;
- Volatile organic compound (VOC) analyses of influent and effluent air-stripping unit samples;
- VOC analyses of groundwater samples from each extraction well;
- VOC analyses of groundwater samples from selected monitoring wells;
- As requested by NYSDEC, two monitoring wells were sampled and analyzed for emerging contaminants: Per- and Polyfluoroalkyl Substances (PFAS); and
- Physical field parameter analysis.

3.1.2 Soil-Vapor Extraction System

Original SVE System

The original SVE system operated (24 hours per day) since startup in April 2004 until May 2006. In May 2006, SVE system operations were scaled back to 8 hours per day with USEPA approval in order to promote non-steady-state conditions that could possibly improve mass removal. The SVE system was shut down on 14 May 2008, as mass removal was at asymptotic levels and the system was no longer effective. Approximately 186 pounds of PCE equivalents were removed during original SVE system operation.

In May 2007 (LFR 2007), vadose-zone soil within the source area was sampled to verify the effectiveness of the SVE system and to evaluate whether continued SVE operation was necessary. Nine soil borings were advanced in the source area based on prior soil sampling results and recommendations from NYSDEC. With the exception of one isolated "hot spot" location, results indicated that PCE concentrations were below RAOs. A fourth SVE well (SVE-4) was installed and the SVE system was operated with this new SVE well for eight months between October 2007 and May 2008. On 7 May 2008, one vadose-zone soil sample, located adjacent to a previous sampling location, was collected to evaluate whether operation of the SVE system with the new SVE-4 well was successful in reducing the residual PCE concentration. Analytical results indicated that the SVE system with the new well was not effective in treating this apparent isolated "hot spot."

On 21 May 2013, a soil excavation was conducted to remove the "hot spot." However, organic vapor analyzer screening and side-wall soil sample analytical results were elevated, indicating that the isolated "hot spot" area was larger than anticipated. Between July 2014 and June 2015, JCI conducted additional detailed soil borings/sampling in this area to complete delineation of affected soil.

Current SVE System

Based on the results of the soil sampling (previous results present in **Appendix A** and summarized in **Figure A-1 in Appendix A**), JCI, in consultation with the Agencies, installed the current SVE

treatment in the source area on 31 October 2018. The SVE equipment being used for treatment was transferred from another CERCLA site in Vestal, NY with USEPA's approval.

The current system includes 12 new SVE extraction wells (well construction details are present in **Table A-1 in Appendix A**) and connected via flexible above-ground hoses to a vacuum manifold located outside of the SVE equipment shed. Airflow from the vacuum manifold enters the pump station through the port at the front of the pump station and upstream of the vacuum blower. During operation, airflow passes through the vacuum-blower silencer and exits the pump station for passage through a heat exchanger located outside the building. Finally, airflow passes through two (55-gallon) vapor-phase GAC canisters and is released to the atmosphere.

With the exception of shutdown for the winter during months of January – March 2019, the SVE system has been in continuous operation since startup in late October 2018. The results of periodic field monitoring and influent/effluent air samples collected are presented **Table A-2** and **Table A-3** in **Appendix A**, respectively. Based on samples collected, an additional 38 pounds of PCE equivalents were removed since the re-start of the current SVE system bring the total pounds of PCE equivalents removed by SVE treatment to 224 pounds.

3.1.3 Confirmatory Soil Sampling

In October 2020, to evaluate the performance of the current SVE system, soil confirmatory soil sampling was conducted at five locations in the SVE source treatment area. The soil borings were advanced adjacent to former soil boring locations (conducted in 2014 and 2015) that had elevated PCE concentrations. Specifically, five borings SB-44, SB-45, SB-46, SB-47 and SB-48 were advanced adjacent to the former soil boring locations SB-25D, SB-4, SB-10, SB-12 and SB-14, respectively, where elevated PCE levels were previously detected (**Figure A-1** in **Appendix A**). At SB-44 to SB-48, continuous soil cores were collected from land surface to 12 feet bls. The soil cores had very low sample recovery likely due to large-sized gravels. As such soil samples could not be collected from near those intervals, where elevated PCE levels were previously detected in the 2014 – 2015 samples.

The soil cores were screened with an Organic Vapor Analyzer equipped with photoionization detector (PID). Based on OVA screening, one soil sample per location was selected for laboratory analysis by USEPA method 8260 LL. The recent soil OVA screening and soil analytical results along with previous (2014 – 2015) results are present in the **Tables A-4** and **Table A-5** in **Appendix A**, respectively.

In the 2020 confirmatory soil borings SB-44 to SB48, PCE concentrations ranged from 0.039 to 97 milligrams per kilogram (mg/kg; **Table A-5** in **Appendix A**). In SB44, SB46 and SB47, at four (4) feet below land surface (bls), PCE was detected at 97 mg/kg, 40 mg/kg and 18 mg/kg, respectively, exceeding the soil cleanup criterion of 1.4 mg/kg. PCE concentrations were higher in the original soil borings mentioned above during the 2014 – 2015 sampling. The elevated OVA readings (**Table A-4** in **Appendix A**) observed in the current soil cores likely indicate high levels PCE that is adsorbed to the clayey soils. The SVE system does not appear to be having a

significant impact on the gravelly clays in extracting the adsorbed PCE. Additional remedies may be necessary to expeditiously remove the residual PCE adsorbed to the gravelly clays. With no supplemental remedial enhancements, the SVE may need to run for several years for the soils to achieve cleanup criteria.

3.2 Groundwater Elevations

Groundwater levels were recorded from on-site monitoring and extraction wells on 20 October 2020, and groundwater elevations were contoured to evaluate groundwater flow directions, hydraulic gradients, and extent of pumping influence. At the time of water level measurements, groundwater extraction wells were being pumped: North Well (200 gpm), OEW-1 (13.5 gpm), OEW-2 (54 gpm) and BEW-1 (9 gpm). The historical and recent groundwater elevations are presented in **Table 4**.

Off-site paired wells OP-9 and BP-7 could not be located and are presumed buried under a pile of soil that was present due to construction activities that were ongoing on that property. OP-10 and BP-6 wells concrete pads, located in the eastern parking lot (**Figure 3**), were badly deteriorated with caps missing causing stormwater to drain into the wells. The water levels from these wells were not included in contour maps as they appeared anomalous. The concrete pads at OP-10/BP-6 and other maintenance work for the monitoring wells were completed on 6 January 2021.

Groundwater elevations in the overburden monitoring wells ranged from approximately 615.94 (OEW-1) to 634.74 (OP-17) feet North American Vertical Datum of 1988 (NAVD 88). The groundwater elevations in the overburden zone were lower than the previous year (September 2019) measurements by approximately 1 to 1.5 feet.

Groundwater elevations in the bedrock monitoring wells ranged from approximately 619.34 (BEW-1) to 637.11 (BP-1) feet NAVD 88. The groundwater elevations in the bedrock zone were also lower by approximately 0.8 to 0.9 feet, compared to the previous measurements.

Groundwater elevation plots for the overburden and bedrock zones are shown on **Figures 5** and **6**, respectively. Regional groundwater flow in the overburden zone is towards the northeast. Groundwater flow in the vicinity of the source area is influenced by the extraction wells OEW-1, OEW-2, and North Well. The horizontal hydraulic gradient outside the area of pumping influence is relatively flat in the overburden zone.

Groundwater flow in the bedrock zone appears to be generally to the north and northeast. As shown on **Figure 6**, groundwater flow is influenced by BEW-1 pumping. Additionally, at BP-1, flow is radial due to groundwater "mounding" (637.11 feet NAVD 88). The regional horizontal hydraulic gradient is approximately 0.005 ft/ft in the bedrock zone. A large area of relatively flat hydraulic gradient—encompassed by monitoring wells BP-2, BP-3, BP-4, and L-2—is present in the vicinity of the bleach warehouse. The flat gradient is likely due to the pumping of extraction well BEW-1.

Comparison of overburden and bedrock zone groundwater elevations in selected paired wells—such as OP-17/BP-8 and OP-12/BP-9—indicate bedrock-zone groundwater elevations to be higher than the overburden zone wells. This, in turn, indicates an upward vertical hydraulic gradient and upward flow component. The vertically upward hydraulic gradient is likely due to the confining nature of the bedrock zone. This upward hydraulic gradient of the bedrock zone is significant, in that downward migration of the contaminants into the bedrock may be minimized.

3.3 Groundwater Analytical Results

During this annual sampling event, groundwater samples were collected from selected monitoring and extraction wells (OP-3, OP-6, OP-8, OP-11, OP-14, OP-16, BP-3, BP-4, BP-11, OEW-1, OEW-2, BEW-1 and North Well). The groundwater samples were analyzed by ALS Environmental (ALS.) using USEPA Method 8260C for VOCs. The monitoring wells samples for the routine VOC analysis are consistent with the Site Management Plan (ARCADIS 2015) with minor exceptions; BP-3 was sampled instead of BP-1, as PCE was never detected in BP-1; BP-7 was dropped as only low concentrations of cis-1,2-DCE were detected. Additional, OI-5 and OI-7 were also not sampled as these wells are used for ISCO injection and monitoring. Recent and historical VOC data and field parameters are presented in **Tables 5** and **6**, respectively. **Figures 7** and **8** present VOC data for selected wells. A brief discussion of the results is present below.

Groundwater concentrations in most of the wells continue to be low (**Table 5**). In particular, source area wells (discussed below) show a significant decrease in PCE concentrations when compared to the previous event. The time-series plots of selected wells presented in **Appendix B** indicate variable but a decreasing concentration trend in most wells. Multiple orders-of-magnitude reductions of PCE and degradation byproducts are noted in many wells.

In source-area monitoring well OP-16 (screened between 39 and 44 feet bls), PCE concentrations decreased from 21,000 µg/L (September 2017) to 2,000 µg/L (September 2019) and 260 µg/L in October 2020. PCE in OP-16 was as high as 62,000 µg/L prior to remedial startup in March 2004. In OP-11 (screened between 17 and 22 feet bls); located within the overburden portion of the source area), PCE concentrations decreased from 390 µg/L to 16 µg/L between July 2014 and August 2016 but increased to 60 µg/L in September 2017; during September 2019 and October 2020, PCE concentration was 24 µg/L and 5.9 µg/L, respectively. In BP-11 (open hole from 44.5 to 49.5 feet bls; located within the bedrock portion of the source area), PCE concentrations show a slight rebound. In September 2018 and 2019, PCE concentrations were below criterion but increased slightly to 21 µg/L in October 2020. Although there have been variations, PCE in this well was either low or below remedial goals. Concentration variations and rebound are common at DNAPL-PCE sites treated by ISCO; as the residual chemical oxidant is depleted in the subsurface, continued dissolution of DNAPL results in elevated dissolved groundwater concentrations. However, significant overall reductions in concentrations have been observed in the monitoring wells compared with previous groundwater-monitoring results (**Table 5**; **Figure 8**).

In monitoring wells outside of the source area, the October 2020 concentrations remain consistent with previous results (**Table 5**). The PCE concentration in OP-8 (screened between 17 and 22 feet

bls; located east of the source area) continued to be below the remediation goal of 5 µg/L for several successive sampling events (since May 2010). In the adjacent bedrock-zone well BP-4 (open bore hole from 50 and 55 feet bls, PCE, TCE and cis-1,2-dichloroethene (cis-1,2-DCE) in October 2020 were detected at low concentrations of 7.1 µg/L, 17 µg/L, 23 µg/L, and <1 µg/L, respectively. In BP-3 (open bore hole from 55 to 60 feet bls; located in central portion of the site near OP-7), cis-1,2-DCE and vinyl chloride were historically detected at low levels; in 2019 the concentrations were 10 µg/L and 5.3 µg/L, respectively. Both cis-1,2-DCE and vinyl chloride were below detection limits in October 2020. In the hydraulically downgradient well OP-14 (screened between 21 and 26 feet bls), concentrations of chlorinated solvents continue to be below criteria (since 2007).

3.3.1 PFAS Sampling

During the October 2020 monitoring event, additional PFAS groundwater sampling was conducted in wells OP-2 and OP-3 (**Figure 3; Table 7**). Previous sampling was conducted for emergent contaminants in September 2019 (Geosyntec 2019b) and included four wells OP-8, OP-12, OP-14 and BP-4. Low levels of perfluoroctane sulfonic acid (PFOS) ranging from 27 to 30 nanograms per Liter (ng/L) or parts per trillion were detected in two (OP-8 and OP-12) of the four wells sampled. As the PFOS levels slightly exceeded the initial screening criteria of 10 ng/L (NYSDEC October 2020), Agencies requested additional PFAS sampling be conducted in October 2020 in OP-2 and OP-3 to evaluate the extent.

The analytical results for the recent PFAS sampling are summarized in **Table 7** along with the 2019 emergent sampling data. All sampling and analysis were conducted in accordance with NYSDEC (October 2020) and USEPA (February 2020) guidance documents. PFOS in OP-2 and OP-3 were detected at 1.2 and 5.7 ng/L, respectively. These concentrations are very low and well below the NYSDEC criteria of 10 ng/L. As such, PFAS contaminants do not appear to be a concern at the JCI Site. An updated Data Usability Summary report (DUSR; Geosyntec 2019B) and the detailed Category B or Tier IV Analytical Data Package will be submitted separately to the Agencies.

3.4 Groundwater-Extraction-and-Treatment System Performance

The groundwater-extraction-and-treatment system performance data are summarized in **Table 3**. The time-averaged groundwater flow rate between 12 September 2019 and 20 October 2020, was approximately 275 gpm; the system is designed to treat up to 500 gpm. During the winter months, groundwater was extracted at a lower rate ranging between 225 and 250 gpm. The total volume of groundwater recovered and treated from March 2004 to October 2020 is approximately 2.132 billion gallons. Approximately 121.8 million gallons of groundwater was extracted and treated during this reporting period. To monitor the performance of the groundwater-treatment system, samples were collected from the influent water of each operating extraction well (OEW-1, OEW-2, BEW-1, and North Well); the combined influent into the air-stripping unit; and the effluent water from the air-stripping unit. The groundwater-extraction-and-treatment system samples were analyzed by ALS using USEPA Method 8260C for VOCs, and the analytical results are

summarized in **Table 3**. PCE concentrations in OEW-1 and BEW-1were 140 and 170 µg/L, respectively; in the air-stripper influent groundwater sample, the PCE was detected at 19 µg/L.

Since startup in 2004, approximately 1,467 pounds of PCE equivalents (PCE and PCE-degradation products, such as TCE, cis-1,2-DCE, trans-1,2-Dichloroethene, 1,1-Dichloroethene, and vinyl chloride) have been removed from the groundwater by the air-stripping unit (between March 2004 and October 2020). Approximately 20 pounds were removed during this reporting period (between September 2019 and October 2020), assuming that the average PCE-equivalent concentrations were constant, and the source wells were operational and contributing higher concentrations over the entire monitoring period.

3.5 Source-Area Treatment Through In Situ Chemical Oxidation

Numerous rounds of ISCO treatments were conducted at the Site between July 2005 and November 2012. The ISCO treatments were successful in significantly reducing the contaminant mass in the area injection area. As discussed above, groundwater PCE concentrations **(Tables 4 and 5)** have declined by over two to three orders of magnitude. Based on the current low groundwater concentrations, no additional ISCO treatments are planned at this time. However, should PCE concentrations rebound additional ISCO injections will be considered in consultation with the Agencies.

4. SUMMARY AND RECOMMENDATONS

Below are the summary and recommendations for the annual monitoring event conducted in October 2020.

4.1 Summary

This annual report presents the results of annual monitoring of the groundwater and SVE remediation systems at the JCI Site for the period 12 September 2019 to 20 October 2020. The results of confirmatory soil sampling for VOCs and groundwater sampling for PFAS are also presented in this report.

Groundwater monitoring well results indicate that PCE concentrations in a majority of the source area monitoring wells have decreased significantly when compared to the previous sampling events. Time-series concentrations plots of selected wells presented in Appendix B clearly show the declining trend. For example, PCE concentrations in source well OP-16 decreased significantly from pre-startup levels of 62,000 µg/L in August 1998 to 240 µg/L in October 2020.

The ongoing treatment strategy continues to reduce the chlorinated-solvent mass at the Site. Chlorinated solvent mass removed and treated by the combined effects of SVE (222 pounds) and groundwater extraction and treatment (1,467 pounds) since startup is estimated to be approximately 1,689 pounds.

OVA screening and soil analyses of confirmatory soil samples in the source area indicate that residual PCE remains adsorbed to the clayey soils. The SVE system appears to be having a small effect in extracting the adsorbed PCE from the gravelly clays. To expedite source treatment, additional remedies may need to be evaluated that could help expedite and extract the PCE adsorbed to clays. With no additional remedial enhancements, the SVE may need to be in operation for a long period of time before soil criteria are met.

Additional groundwater PFAS sampling that was conducted at the request of the Agencies to further evaluate the extent detected PFOS well below the screening criteria of 10 ng/L. The recent and previous (Geosyntec 2019b) sampling results do not indicate PFAS to be a concern at the Site.

4.2 Recommendations

The following are recommendations for continuing remediation-system operations at the Site:

- Continue operation of the groundwater extraction and treatment system to treat and contain affected groundwater. Conduct routine maintenance and monitoring at the Site on an annual basis.
- Upon completion of the offsite construction work, attempt to locate the offsite wells OP-9/BP-7. The wells were presumed buried under a pile of soil that was present due to construction activities that were ongoing on that property.
- Continue operation and monitoring of the SVE treatment system in the source area. Periodic field and system air samples should be collected, analyzed and evaluated to determine the effectiveness of the SVE and whether or not to continue and/or expand by installing/connecting additional SVE wells to treat the residual VOCs remaining in the source area.
- To promote non-steady-state conditions and prevent asymptotic recovery, the SVE system operations should include rotation of the extraction wells and placing the system in a "pulsed" mode. Rotating the operating wells will minimize and/or identify stagnant areas. Operating the SVE system in a "pulsed" mode by running the system intermittently on and off for about 8 – 12 hours per day may improve mass removal.
- Discuss with the Agencies conducting remedial enhancements to the current SVE system technology, such as using a newer engineered phytoremediation technology, specifically the *TreeWell*® system. Additional remedial enhancements such as the *TreeWell* system can potentially extract PCE that is adsorbed to the clays and help expedite cleanup time.
- Discuss with Agencies updating the annual monitoring well sampling list. Currently 16 groundwater samples including the air-stripper influent and effluent samples are analyzed for VOCs during each monitoring event. Contaminant concentrations in a number of these wells including OP-3, OP-8 and OP-14 have declined and been below criteria since at least 2013 (**Table 5; Appendix B**) and therefore, should be dropped from future sampling list.

Further recommendations will be presented in future OM&M status reports based on data from groundwater-sampling events.

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TABLES

Table 1. Remedial System Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Startup Date: 30 March 2004

Groundwater Recovery		
Recovery Well ID#	OEW-1, OEW-2, BEW-1, and North Well	
Screen Interval	OEW-1: 15 - 40 feet; OEW-2: 20 - 40; BEW-1: 43 - 58 feet (Open Hole); North Well: 24 feet	
Drawdown	Less than 10 feet in source area	
Design Flow Rate (GPM)	Maximum flow rate is 500 gallons per minute (gpm).	
Design Influent Concentration	400 micrograms per liter (µg/l)	
Effluent Polishing Type	Air Stripper	
Gallery Design Size		
Other (e.g., FP Recovery, Pretreat)		
Permits		
(e.g., NPDES, consumptive use)	SPDES	
Soil Treatment		
SVE Well ID#	SVE-5 - SVE-15	
Screen Interval	1 - 11 Feet bgs	
Flow Rate	Average 500 standard cubic feet per minute (scfm) at 32 inches of water column	
Off Gas Treatment	Two 55-Gallon Carbitrol GAC Drums	
Other		
Equipment & Specifications		**Availability**
(i.e., tower, blower, flowmeter, pumps) Specify usage, type, mfg, and design specifications.	Air stripper: Delta Cooling Towers - Vanguard S6 - 200FR)	Operational
	Air stripper blower: Twin City Fans (2 HP, 230-volt, 3 phase)	Operational
	4 flow meters: OEW-1, OEW-2, BEW-1 and North Well; effluent to on-site lagoon	Operational
	transfer pump: 30 HP, 230-volt, 3-phase	Operational
	SVE Roots Universal 68 RAI™ blower: 40 HP, 230-VAC, 3-phase	Operational
Control Panel		
(Brand & List components)	Allen Bradley SLC 5/02	Operational
Surge Protection (Mfg & Type)	power surge protectors	Operational
Other		
Telemetry (Mfg)	None	

SYSTEM REPAIR HISTORY	
Date	**Part Replaced or Modification**
7/1/04	Replaced air-stripper effluent tank sump pump
9/4/04	Replaced air-stripper tower packing material
2/5/05	Replaced SVE blower/motor unit
6/8/05	Repaired/replaced pump motor of the North Well pump
9/29/05	Set flow meters for OEW-1, OEW-2, and BEW-1 to read the value multiplied by 100
3/7/06	Replaced motor on the air-stripper effluent tank sump pump
5/2/07	Cleaned out SVE knock-out tank; repaired sight-gauge leak; replaced sight tube
5/2/07	Repaired flow meter for OEW-1 and BEW-1; reconfigured/checked calibration for flow meters
10/29/07	Installed new SVE well, SVE-4 (4-inch diameter, screened 1 to 8 feet below ground surface [bgs])
11/1/07	Recalibrated level sensor LT-1; corrected conditon causing alarm fault and shut-down in OEW-2
6/6/08	SVE system shut down; spent carbon issue; small PCE 'hot spot' remaining at 3 feet bgs
11/6/08	Flow meters malfunctioned between 10/21/08 and 10/28/08; replaced batteries and cleaned
10/27/09	Total system flow meter malfunctioned; replaced padde-wheel and cleaned; individual flow meter readings were used to estimate total volume treated for the monitoring period
4/8/11	Replaced OEW-1 groundwater pump
6/1/11	BEW-1 flow meter malfunction; flow rate estimated at 10-12 gpm
7/11/11	VFD alarm sump pump cleaned by JCI; improved flow; alarm condition not resolved
7/12/11	Troubleshoot VFD alarm; order replacement cooling fan; clean cooling fans
7/16/11	Replaced VFD cooling fan; system running OK
8/5/11	BEW-1 flow meter installed; observed BEW-1 pump malfunction
11/7/11	Replaced pressure gauges; troubleshoot OEW-1 shutoff and dry run; adjusted settings; will need to monitor operation
5/22/12	Troubleshoot OEW-2 (not running); needs new pressure gauge
5/29/12	Routine O&M; replaced OEW-2 pressure gauge; OEW-2 not working
6/1/12	Disassembled and inspected relay contacts; only one set OK one set slightly burned and one set burned
11/2/12	Routine OM&M
11/8/12	Chemical injection
12/3/12	OEW-2 pump startup testing
5/20/13	Routine OM&M
5/23/13	Groundwater sampling; North well flow meter troubleshooting
10/21/13	SYSTEM OFF; problem with level sensor and sump pump operation
10/23/13	Level sensor re-calibrated by JCI
11/2/13	SYSTEM OFF; one day troubleshooting sump pump and controls
11/18/13	Pump replaced; system back ON; O&M
11/19/13	O&M; groundwater sampling
11/20/13	Groundwater sampling
11/21/13	Groundwater sampling
7/28/14	Groundwater sampling
7/31/14	Groundwater sampling
8/1/14	O&M; groundwater sampling
5/25/15	OEW-1 pump malfunction
6/15/15	Soil sampling
6/16/15	Soil and groundwater sampling
6/17/15	Groundwater sampling
6/18/15	Groundwater sampling
7/13/15	OEW-1 pump repaired
7/17/15	O&M; on-site activities
8/20/15	Change air stripper belts
11/30/15	Clean and change batteries for OEW-1 and BEW-1 flow meters
1/28/16	Change air stripper belts
3/7/16	Weekend power failure; system restarted okay
3/17/16	Overnight power failure, restart system OK; BEW-1 flow meter not working
4/18/16	System shut-down for weekend to allow discharge pond level to stabilize
5/16/16	BEW-1 flow meter replaced
8/15/16	Monitor Flowrate
8/22/16	Ground water sampling activities
8/25/16	O&M activities, observed erratic flow for OEW-1, lower total flow readings, make adjustments and recommendations for corrective action
9/26/16	Pressure gauges replaced, attempt to adjust BEW-1 lower, flow meter not reading low flow
10/17/16	BEW-1 flow meter replaced, total flow meter cleaned
10/20/16	Flows adjusted, stilling well installed in OEW-1 for better water level monitoring
9/18/17	OMM and Annual Groundwater Monitoring conducted during the week
6/15/18	Transferred SVE Equipment from Vestal NY Site
9/12/18	OMM and Annual Groundwater Monitoring conducted during the week
9/9/18	Installed SVE wells 5 - 15
10/31/18	Started SVE treatment connecting SVE wells 1 - 15 via above ground flexible hose
9/9/2019	OMM and Annual Groundwater Monitoring conducted during the week
2/11/20	SVE Monitoring
8/13/20	SVE Monitoring
8/13/20	Annual OMM, Soil Confirmatory Sampling and PFAS sampling

Table 2. Monitoring Well Construction Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Northing*	Easting*	TOC Elevation	Well Depth (feet bgs)	Monitoring Zone	Screen Interval (feet bgs)	Well Diameter (inches)	Installation Date	Installed By
OP-1	1085234.52	1345596.1	648.34	30	Overburden	25 - 30	4	30854	CRA
OP-2	1085231.93	1346109.16	650.37	25.3	Overburden	20.3 - 25.3	4	30853	CRA
OP-3	1085516.3	1346091.93	649.62	31	Overburden	26 - 31	4	NA	CRA
OP-5	1085414.95	1345563.73	650.49	22	Overburden	17 - 22	2	35179	LFR
OP-6	1085841.14	1345917.29	651.28	21	Overburden	16 - 21	2	34569	LFR
OP-7	1085698.08	1345549.04	648.66	23	Overburden	18 - 23	2	35178	LFR
OP-8	1085681.22	1345360.28	651.77	22	Overburden	17 - 22	2	35178	LFR
OP-9	1085921.28	1345290.15	645.32	22	Overburden	17 - 22	2	35181	LFR
OP-10	1086016.49	1346547.21	653.63	22	Overburden	17 - 22	2	35180	LFR
OP-11	1085696.52	1345231.65	653.39	22	Overburden	17 - 22	2	35180	LFR
OP-12	1085618.74	1345027.56	653.11	22	Overburden	17 - 22	2	35184	LFR
OP-13	1085690.4	1346888.12	660.05	31	Overburden	26 - 31	2	35752	LFR
OP-14	1086208.85	1346916.14	652.88	26	Overburden	21 - 26	2	35753	LFR
OP-15	1085583.01	1345228.5	652.54	24	Overburden	19 - 24	2	35753	LFR
OP-16	1085691.1	1345225.74	653.13	44	Overburden	39 - 44	2	36026	LFR
OP-17	1085800.48	1344990.07	645.53 **	22	Overburden	17 - 22	2	40738	ARCADIS
BP-1	1085534.57	1346092.96	650.64	113.5	Bedrock	Open Hole (15 ft.)	6	30859	CRA
BP-2	1085415.78	1345552.64	651.97	75	Bedrock	Open Hole (15 ft.)	4	30851	CRA
BP-3	1085700.99	1345548.19	648.54	60	Bedrock	Open Hole (5 ft.)	2	31814	CRA
BP-4	1085676.64	1345361.87	652.31	55	Bedrock	Open Hole (5 ft.)	2	31819	CRA
BP-5	1085835.62	1345920.49	651.87	90	Bedrock	Open Hole (15 ft.)	2	35187	LFR
BP-6	1086017.39	1346555.71	653.63	101	Bedrock	Open Hole (15 ft.)	4	35187	LFR
BP-7	1085923.18	1345294.02	645.32	60	Bedrock	50 - 60	2	40737	ARCADIS
BP-8	1085799.36	1344984.78	645.45 **	48	Bedrock	38 - 48	2	40738	ARCADIS
BP-9	1085623.28	1345026.05	653.04	65	Bedrock	55 - 65	2	40740	ARCADIS
BP-10	1085585.05	1345231.96	652.42	51	Bedrock	41 - 51	2	40742	ARCADIS
BP-11	1085692.26	1345229.48	653.61	49.5	Bedrock	Open Hole (5 ft.)	3	40739	ARCADIS
L-1	1085878.2	1345518.48	650.28	21	Overburden	16 - 21	4	30859	CRA
L-2	1086070.21	1345484.72	651.08	67.5	Bedrock	Open Hole (15 ft.)	4	30832	CRA
L-3	1086167.69	1345432.72	649.65	20	Overburden	15 - 20	4	30826	CRA
North Well	1085867.04	1345511.47	650.3	24	Overburden	NA	48	03/85	NA
PZ-1	1085868.53	1345537.95	649.58	22	Overburden	12 - 22	2	34667	LFR
PZ-2	1085883.18	1345578.66	649.39	23	Overburden	13 - 23	2	34667	LFR
OEW-1	1085697.35	1345243.03	650.28	40	Overburden	15 - 40	10	37867	LFR
OEW-2	1085949.49	1345425.37	649.42	40	Overburden	20 - 40	10	37867	LFR
BEW-1	1085690.51	1345243.42	650.39	58	Bedrock	Open Hole (15 ft.)	10	37867	LFR
OI-1	1085703.86	1345225.38	651.02	40	Overburden	15 - 40	2	37867	LFR
OI-2	1085699.51	1345224.23	651	40	Overburden	15 - 40	2	37867	LFR
OI-3	1085695.79	1345225.61	651.15	40	Overburden	15 - 40	2	37867	LFR
OI-4	1085704.48	1345231.33	650.84	40	Overburden	15 - 40	2	37867	LFR
OI-5	1085698.94	1345232.5	651.14	40	Overburden	15 - 40	2	37867	LFR
OI-6	1085678.18	1345218.21	650.6	45	Overburden	15 - 45	2	39576	LFR
OI-7	1085680.63	1345228.97	650.5	45	Overburden	15 - 45	2	39576	LFR
OI-8	1085681.65	1345239.74	650.36	45	Overburden	15 - 45	2	39576	LFR
BI-1	1085700.33	1345227.38	653.17	58	Bedrock	43 - 58	2	37867	LFR

Notes:

1. [1] Resurveyed April 30, 2007.
2. bgs = below ground surface.
3. CRA = Conestoga-Rovers & Associates.
4. ft. = feet.
5. LFR = LFR Inc.
6. NA = not available.
7. NAVD 88 = North American Vertical Datum of 1988.
8. TOC = top of casing.
9. * Horizontal coordinates referenced to North American Datum of 1983.
10. ** TOC elevation was re-surveyed on October 25, 2017 as the well was raised during pavement improvements.

Table 3. Groundwater Treatment System Performance Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Extraction Well ID	Total Depth	Screened Interval (feet bgs)	Date	Run Time (hours)	Meter Reading Flow Rate (gpm)	Meter Reading (gallons*)	Pressure (psi)	Total System Flowmeter (100 x gallons)	AirStripper Pressure (inches of water)	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride	PCE Equivalents
			NY State Groundwater Quality Standards (µg/L)							5	5	5	5	5	2	
North Well	24	NM	4/30/96	NM	NM	NM	NM	NA	NA	**570**	**45**	**210**	<1	<1	<1	995
			11/18/97	NM	NM	NM	NM	NA	NA	**61**	4	**6**	<2	<2	<2	77
			8/21/98	NM	NM	NM	NM	NA	NA	**140**	**16**	**9**	<0.5	<0.5	<0.5	176
			1/10/02	NM	NM	NM	NM	NA	NA	**35.6**	2.5	3.1	<1	<1	<1	44
			3/31/04	NM	NM	1,257,753,300	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/1/04	NM	285	1,257,799,300	36	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/12/04	NM	290	1,261,377,500	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			5/13/04	NM	130	1,510,900	30	NA	NA	NM	NM	NM	NM	NM	NM	NM
			7/1/04	NM	237	10,238,200	47	NA	NA	**190**	**9**	21	<2	<2	<2	238
			10/5/04	NM	285	34,555,300	44	NA	NA	**110**	4.1	**7.6**	<1	<1	<1	129
			2/8/05	NM	128.5	70,688	Broken	NA	NA	**110**	3.2	**10**	<1	<1	<1	132
			6/13/05	NM	193.3	82,512	NM	NA	NA	**110**	3.9	**11**	<1	<1	<1	134
			9/27/05	NM	250	NM	NM	NA	NA	**44**	1.9	1.8	<1	<1	<1	50
			5/2/06	NM	249	177,302,000	20	NA	NA	**86**	4.3	4.2	<1	<1	<1	99
			11/16/06	NM	274	247,875	17	NA	NA	**44**	3.0	4.9	<1	<1	<1	56
			5/1/07	NM	238	295,980	NM	NA	NA	**53**	4	**7.4**	<1	<1	<1	71
			10/29/07	NM	172.1	339,719	NM	NA	NA	**22**	1.1	<1	<1	<1	<2	23
			5/6/08	NM	214	397,515	NM	NA	NA	**68**	**5.0**	4.2	<1	<1	<2	82
			11/3/08	NM	208	438,631	NM	NA	NA	**21**	1.1	1.4	<1	<1	<2	25
			5/11/09	NM	210	495,688	20	NA	NA	**42**	3.3	4.6	<1	<1	<1	54
			10/27/09	NM	206	544,864	NM	NA	NA	**37**	2.4	3.8	<1	<1	<1	47
			5/25/10	NM	255	616,301	NM	NA	NA	**33**	3.0	4.6	<1	<1	<1	45
			11/3/10	NM	215	659,284	30	NA	NA	**22**	1.5	2.6	<1	<1	<1	28
			7/15/11	NM	220	729,500	NM	NA	NA	**42**	2.3	3.7	<1	<1	<1	51
			11/7/11	NM	232	765,296	NM	NA	NA	**18**	<1	1.9	<1	<1	<1	21
			5/22/12*	NM	240	830,514	20	NA	NA	**16**	1.1	2.5	<1	<1	<1	22
			11/7/12	NM	237	882,933	55	NA	NA	**12**	<1	1.9	<1	<1	<1	15
			5/24/13	NM	NM	not working	18	NA	NA	**16**	1.1	3.6	<1	<1	<1	24
			11/21/13	NM	236	not working	NM	NA	NA	**30**	2.7	**7.4**	<1	<1	<1	46
			8/1/14	NM	244	299,243	NM	NA	NA	**16**	1.2	1.8	<1	<1	<1	21
			6/18/15	NM	244	1,954,695	NM	NA	NA	**11**	1.1	1.8	<1	<1	<1	16
			8/24/16	NM	235	888,232	NM	NA	NA	**9.1**	<1	1.3	<1	<1	<1	11
			9/21/17	NM	257	120,697	NM	NA	NA	**14**	1	1.2	<1	<1	<1	16
			9/12/18	NM	252	6,421,562	5	NA	NA	**10**	<1	<1	<1	<1	<1	18
			9/9/19	NM	250	503,063	40	NA	NA	**8.8**	<1	<1	<1	<1	<1	15
			10/20/20	NM	200	1,067,718	Not Working	NA	NA	**8.6**	<1	<1	<1	<1	<1	15
OEW-1	40	15 - 40	11/12/03^	NM	NM	NM	NM	NA	NA	**12,000**	**670**	**560**	<250	<250	<250	13,832
			3/31/04	NM	NM	14,087	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/1/04	NM	27	18,334	16	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/12/04	NM	30	18,542	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			5/13/04	NM	0	52,477	18	NA	NA	NM	NM	NM	NM	NM	NM	NM
			7/1/04	1,010	14.3	470,078	17	NA	NA	**1,500**	**34**	**24**	<20	<20	<20	1,585
			10/5/04	2,510	40	153,578	25	NA	NA	**1,000**	**18**	**17**	<10	<10	<10	1,053
			2/8/05	5,460	42.9	76,905	25	NA	NA	**1,200**	**14**	**21**	<10	<10	<10	1,255
			6/13/05	NM	40.6	33,746	NM	NA	NA	**940**	**20**	<10	<10	<10	<10	965
			9/28/05	NM	0	220,186	NM	NA	NA	**73**	3.5	4.7	<1	<1	<1	77
			5/2/06	9,028	22	16,530	NM	NA	NA	**690**	**6.4**	**8.1**	<5	<5	<5	712
			11/16/06	9,058	0	16,568	10	NA	NA	**1,200**	**51**	**73**	<10	<10	<10	1,393
			5/1/07	9,468	27	NM	30	NA	NA	**280**	2.7	<2.5	<2.5	<2.5	<2.5	283
			10/29/07	14,832	28.1	72,183	12	NA	NA	**570**	**14**	**24**	<5	<5	<10	630
			5/6/08	NM	28	90,400	12	NA	NA	**470**	**18**	**18**	<5	<5	<10	524
			11/3/08	18,300	15	142,008	12	NA	NA	**380**	**12**	**21**	<5	<5	<10	432
			5/11/09	19,500	23	157,709	12	NA	NA	**270**	**12**	**10**	<2.5	<2.5	<2.5	303
			10/27/09	23,264	16	195,360	12	NA	NA	**250**	**8.5**	**20**	<2.5	<2.5	<2.5	296
			5/25/10	24,346	10	201,875	NM	NA	NA	**140**	**6.5**	**6.2**	<1	<1	<1	159
			11/3/10	27,236	NM	226,806	12	NA	NA	**220**	**8.2**	**20**	<1	<1	<1	265
			7/15/11	28,390	23	241,147	12	NA	NA	**180**	**24**	**17**	<2	<2	<2	240
			11/7/11	30,886	20	275,472	NM	NA	NA	**160**	4.9	**14**	<2	<2	<2	191
			5/22/12*	32,172	20	289,923	10	NA	NA	**120**	1.4	1.8	<1	<1	<1	125
			11/7/12	35,724	19.9	332,346	10	NA	NA	**150**	**6.2**	**28**	<2	<2	<2	207
			11/7/12**	--	--	--	--	--	--	**170**	**7.1**	**31**	<2	<2	<2	233
			5/24/13	36,862	21	238,197	10	NA	NA	**130**	<2	<2	<2	<2	<2	130
			11/21/13	40,050	20	280,183	9	NA	NA	**140**	3.3	**6.4**	<1	<1	<1	155
			8/1/14	45,560	17	158,101	12	NA	NA	**130**	4.1	**12**	<1	<1	<1	156
			6/17/15	52,064	19.6	270,950	NM	NA	NA	NS	NS	NS	NS	NS	NS	NS
			8/24/16	61,550	6 - 12	331,174	NM	NA	NA	**160**	1.7	3.3	<1	<1	<1	168
			9/21/17	70,338	11	384,423	NM	NA	NA	**150**	1.8	3.2	<1	<1	<1	158
			9/12/18	66,803	7.3	66,803	8	NA	NA	**160**	1.7	2.1	<1	<1	<1	166
			9/9/19	85,796	8	126,432	12	NA	NA	**150**	1.3	<1	<1	<1	<1	152
			10/20/20	94,862	13.5	200,206	NW	NA	NA	**140**	1.1	<1	<1	<1	<1	141
OEW-2	40	20 - 40	11/12/03^	NM	NM	NM	NM	NA	NA	**7**	<5	<5	<5	<5	<5	7
			3/31/04	NM	NM	8,543	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/1/04	NM	25	12,537	36	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/12/04	NM	30	12,538	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			5/13/04	NM	36.5	192,359	30	NA	NA	NM	NM	NM	NM	NM	NM	NM
			7/1/04	978	0	NM	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			10/5/04	1,968	37	672,627	36	NA	NA	**12**	1.7	<1	<1	<1	<1	14
			2/8/05	4,902	42.4	516,840	18	NA	NA	**35**	**6.7**	<1	<1	<1	<1	44
			6/13/05	NM	38.3	31,112	NM	NA	NA	**200**	**9.3**	<2	<2	<2	<2	212
			9/27/05	8,556	36.8	NM	17	NA	NA	3.3	<1	<1	<1	<1	<1	3
			5/2/06	12,120	40	81,695	16	NA	NA	**7.2**	<1	<1	<1	<1	<1	7
			11/16/06	NM	NM	NM	NM	NA	NA	2.5	<1	3.1	<1	<1	<1	3
			5/1/07	19,134	33	47,245	NM	NA	NA	**11**	2.3	<1	<1	<1	<1	14
			10/29/07	NM	34.5	119,012	NM	NA	NA	3.1	<1	<1	<1	<1	<2	3
			5/6/08	26,568	30	189,607	30	NA	NA	**11**	3.5	<1	<1	<1	<2	15
			11/3/08	29,838	40	251,852	16	NA	NA	1.3	<1	<1	<1	<1	<2	1.3
			5/11/09	33,904	34	335,624	20	NA	NA	**5.6**	1.7	<1	<1	<1	<1	7.8
			10/27/09	37,008	34	399,549	20	NA	NA	2.6	<1	<1	<1	<1	<1	2.6
			5/25/10	41,368	32	484,307	NM	NA	NA	1.8	<1	<1	<1	<1	<1	1.8
			11/3/10	44,298	34	543,742	10	NA	NA	1.2	<1	<1	<1	<1	<1	1.2
			7/15/11	49,968	38	647,820	20	NA	NA	**21**	4.2	<1	<1	<1	<1	26.3
			11/7/11	50,782	38	689,828	NM	NA	NA	1.1	<1	<1	<1	<1	<1	1.1
			5/22/12*	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS
			11/7/12	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS
			5/24/13	57,380	31	826,625	18	NA	NA	4.5	1.3	<1	<1	<1	<1	6.2
			11/21/13	60,584	35	892,735	18	NA	NA	**9.8**	3.1	<1	<1	<1	<1	13.7
			8/1/14	65,956	38	13,724	18	NA	NA	**7**	1.4	<1	<1	<1	<1	8.8
			6/18/15	73,354	53	443,912	NM	NA	NA	3.2	<1	<1	<1	<1	<1	3.2
			8/24/16	82,592	54	665,267	NM	NA	NA	1.3	<1	<1	<1	<1	<1	1.3
			9/21/17	NM	57	749,535	15	NA	NA	4	<1	<1	<1	<1	<1	4.0
			9/12/18	NM	53	201,721	28	NA	NA	1.8	<1	<1	<1	<1	<1	1.8
			9/9/19	105,800	53	540,892	15	NA	NA	1.2	<1	<1	<1	<1	<1	1.2
			10/20/20	114,606	54	889,500	NM	NA	NA	1.1	<1	<1	<1	<1	<1	1.1
BEW-1	58	43 - 58 (Open Hole)	11/12/03^	NM	NM	NM	NM	NA	NA	**380**	**8.4**	**14**	<5	<5	<5	415
			3/31/04	NM	NM	19,492	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/1/04	NM	59	28,566	18	NA	NA	NM	NM	NM	NM	NM	NM	NM
			4/12/04	NM	65	288,800	NM	NA	NA	NM	NM	NM	NM	NM	NM	NM
			5/13/04	NM	62.6	217,718	18	NA	NA	NM	NM	NM	NM	NM	NM	NM
			7/1/04	452	19.1	186,407	18	NA	NA	**740**	**12**	**21**	<10	<10	<10	792
			10/5/04	1,952	40	715,860	26	NA	NA	**590**	**7.6**	**17**	<5	<5	<5	629
			2/8/05	4,900	41.9	765,970	17	NA	NA	**490**	**7**	**13**	<5	<5	<5	522
			6/13/05	NM	37.3	14,841	NM	NA	NA	**460**	**9.4**	**19**	<5	<5	<5	505
			9/28/05	NM	0	NM	NM	NA	NA	**510**	**7.2**	**9.4**	<5	<5	<5	536
			5/2/06	8,472	40	31,796	NM	NA	NA	**290**	**9.8**	**16**	<2.5	<2.5	<2.5	330
			11/16/06	8,502	10	31,836	NM	NA	NA	**260**	**20**	**18**	<2.5	<2.5	<2.5	317
			5/1/07	8,910	63	195,260	32	NA	NA	**220**	**12**	**15**	<2.5	<2.5	<2.5	262
			10/29/07	NM	48.5	129,072	14	NA	NA	**270**	**10**	**17**	<2.5	<2.5	<5	312
			5/6/08	15,242	57.2	191,730	15	NA	NA	**210**	**12**	**18**	<1	<1	<4	257
			11/3/08	18,712	55	309,040	14	NA	NA	**200**	**9.4**	**16**	<2.5	<2.5	<5	240
			5/11/09	20,912	33	350,179	14	NA	NA	**220**	**11**	**14**	<2	<2	<2	258
			10/27/09	24,372	33	419,398	15	NA	NA	**200**	**9.6**	**15**	<2	<2.0	<2.0	238
			5/25/10	25,454	21	431,520	NM	NA	NA	**210**	**11**	**15**	<5	<5	<5	250
			11/3/10	44,298	28	474,575	14	NA	NA	**200**	**9.6**	**13**	<2.5	<2.5	<2.5	235
			7/15/11	29,520	15	NA	10	NA	NA	**200**	**15**	**16**	<2.5	<2.5	<2.5	247
			11/7/11	30,812	16	7,501.6	15	NA	NA	**180**	**10**	**14**	<2	<2	<2	217
			5/22/12*	32,110	15	18,166	10	NA	NA	**160**	**9.4**	**13**	<2	<2	<2	195
			11/7/12	35,676	14.15	48,647	12	NA	NA	**150**	**9.4**	**14**	<2	<2	<2	186
			11/7/12**	--	--	--	--	--	--	**150**	**9.7**	**15**	<2	<2	<2	189
			5/24/13	36,858	18	60,669	10	NA	NA	**170**	**10**	**12**	<2	<2	<2	204
			11/21/13	40,085	18	95,682	10	NA	NA	**150**	**10**	**15**	<1	<1	<1	189
			8/1/14	45,816	22	348,934	15	NA	NA	**180**	**9.6**	**12**	<2	<2	<2	213
			7/17/15	52,582	14.3	222,072	5	NA	NA	NS	NS	NS	NS	NS	NS	NS
			8/24/16	62,068	15	121,810	15	NA	NA	**220**	**14**	**15**	<1	<1	<1	264
			9/21/17	70,858	3	374,669	NM	NA	NA	**230**	**15**	**16**	<1	<1	<1	277
			9/12/18	NM	4.5	29,203	5	NA	NA	**180**	**11**	**14**	<2	<2	<2	218
			9/9/19	83,740	7	191,636	10	NA	NA	**170**	**13**	**13**	<2	<2	<2	209
			10/20/20	92,770	9	61,830	NM	NA	NA	**170**	**11**	**13**	<2	<2	<2	207

Table 3. Groundwater Treatment System Performance Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Extraction Well ID	Total Depth	Screened Interval (feet bgs)	Date	Run Time (hours)	Meter Reading Flow Rate (gpm)	Meter Reading (gallons*)	Pressure (psi)	Total System Flowmeter (100 x gallons)	AirStripper Pressure (inches of water)	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride	PCE Equivalents
			NY State Groundwater Quality Standards (µg/L)							5	5	5	5	5	2	
Influent	NM	NM	3/30/04	NM	NM	NA	NA	NM	NM	**1,300**	**31**	**100**	<5	<5	<10	1,514
			3/31/04	NM	NM	NA	NA	12,577,954	NM	**520**	**16**	**33**	<5	<5	<10	598
			4/1/04	NM	NM	NA	NA	12,578,587	NM	**640**	**16**	**26**	<5	<5	<10	706
			5/13/04	NM	291	NA	NA	12,670,122	NM	**360**	**10**	**19**	<5	<5	<10	406
			5/20/04	NM	NM	NA	NA	NM	NM	**2,000**	<20	<20	<20	<20	<40	2,000
			5/28/04	NM	NM	NA	NA	NM	NM	**1,600**	<40	<20	<20	<20	<40	1,600
			7/1/04	NM	270	NA	NA	12,833,081	NM	**240**	**14**	**35**	<2.5	<2.5	<2.5	319
			10/5/04	NM	402	NA	NA	13,205,963	NM	**210**	**6.9**	**13**	<1	<1	<1	242
			2/8/05	NM	256	NA	NA	13,879,421	1.8	**290**	**6.1**	**10**	<2.5	<2.5	<2.5	315
			6/13/05	NM	365.6	NA	NA	14,145,707	2	**240**	**7.5**	**9.3**	<2	<2	<2	266
			9/27/05*	NM	287	NA	NA	14,658,192	1.8	**34**	2.3	1.8	<1	<1	<1	40
			5/2/06	NM	305	NA	NA	15,348,569	1.6	**110**	4.4	5.4	<1	<1	<1	125
			11/16/06	NM	288	NA	NA	16,221,414	1.6	**140**	**8.5**	**12**	<1	<1	<1	172
			5/1/07	NM	NM	NA	NA	16,772,397	NM	**90**	**5.7**	**9.3**	<1	<1	<1	114
			10/29/07	NM	290	NA	NA	17,583,710	2.6	**120**	4.2	**6.3**	<1	<1	<2	136
			5/6/08	NM	329.2	NA	NA	18,293,339	2.5	**88**	**5.7**	**6.6**	<1	<1	<2	107
			11/3/08	NM	324	NA	NA	18,951,821	2	**59**	2.9	4.7	<1	<1	<2	71
			5/11/09	NM	300	NA	NA	19,633,309	2.8	**74**	4.2	**5.0**	<1	<1	<1	88
			10/27/09	NM	296	NA	NA	19,986,790	2.9	**46**	2.7	**5.2**	<1	<1	<1	59
			5/25/10	NM	318	NA	NA	20,782,134	2.6	**43**	3.3	4.6	<1	<1	<1	55
			11/3/10	NM	300	NA	NA	21,303,012	2.3	**50**	2.3	4.6	<1	<1	<1	61
			7/15/11	NM	280	NA	NA	22,105,250	2.5	**43**	2.8	3.8	<1	<1	<1	53
			11/7/11	NM	310	NA	NA	22,537,892	3.1	**35**	1.7	3.4	<1	<1	<1	43
			5/22/12*	NM	280	NA	NA	23,283,429	2.9	**35**	1.9	4.0	<1	<1	<1	44
			11/7/12	NM	275	NA	NA	23,898,952	2.7	**38**	2.2	**5.2**	<1	<1	<1	50
			5/24/13	NM	314	NA	NA	24,644,901	NM	**35**	2.0	4.6	<1	<1	<1	46
			11/21/13	NM	297	NA	NA	25,243,416	3.5	**47**	3.4	**7.0**	<1	<1	<1	64
			8/1/14	NM	290	NA	NA	26,279,650	NM	**39**	2.3	3.5	<1	<1	<1	48
			6/18/15	NM	294	NA	NA	27,526,457	2.8	**7.9**	<1	1.5	<1	<1	<1	11
			8/24/16	NM	240	NA	NA	28,907,889	3.4	**26**	1.5	2.1	<1	<1	<1	32
			9/21/17	NM	266	NA	NA	30,316,441	5.2	**27**	1.5	1.8	<1	<1	<1	32
			9/12/18	NM	Malfunction	NA	NA	31,469,399	4.1	**22**	1.2	1.3	<1	<1	<1	26
			9/9/19	NM	320	NA	NA	32,681,892	7.8	**19**	1.3	<1	<1	<1	<1	21
			10/20/20	NM	275	NA	NA	33,899,962	NM	**19**	<1	<1	<1	<1	<1	19
Effluent	NM	NM	3/30/04	NM	NM	NA	NA	NM	NM	3	<1	<1	<1	<1	<2	3
			3/31/04	NM	NM	NA	NA	12,577,954	NM	4	<1	<1	<1	<1	<2	4
			4/1/04	NM	NM	NA	NA	12,578,587	NM	3	<1	<1	<1	<1	<2	3
			5/13/04	NM	291	NA	NA	12,670,122	1.5	<1	<1	<1	<1	<1	<2	<1
			5/20/04	NM	NM	NA	NA	NM	NM	60	<1	<1	<1	<1	<2	60
			5/28/04	NM	NM	NA	NA	NM	NM	41	<1	<1	<1	<1	<2	41
			7/1/04	NM	270	NA	NA	12,833,081	1.7	1.8	<1	<1	<1	<1	<1	2
			10/5/04	NM	402	NA	NA	13,205,963	2	1	<1	<1	<1	<1	<1	1
			2/8/05	NM	256	NA	NA	13,879,421	1.8	1.8	<1	<1	<1	<1	<1	2
			6/13/05	NM	365.6	NA	NA	14,145,707	2.1	1.5	<1	<1	<1	<1	<1	2
			9/27/05	NM	287	NA	NA	14,658,192	1.8	<1	<1	<1	<1	<1	<1	<1
			5/2/06	NM	305	NA	NA	15,348,569	1.6	<1	<1	<1	<1	<1	<1	<1
			11/16/06	NM	288	NA	NA	16,221,414	1.6	1.8	<1	<1	<1	<1	<1	2
			5/1/07	NM	NM	NA	NA	16,772,397	NM	<1	<1	<1	<1	<1	<1	<1
			10/30/07	NM	NM	NA	NA	17,583,710	NM	<1	<1	<1	<1	<1	<2	<1
			5/6/08	NM	329	NA	NA	18,293,339	2.5	1.3	<1	<1	<1	<1	<2	1
			11/3/08	NM	324	NA	NA	18,951,821	2	<1	<1	<1	<1	<1	<2	<1
			5/11/09	NM	300	NA	NA	19,633,309	2.8	<1	<1	<1	<1	<1	<1	<1
			10/27/09	NM	296	NA	NA	19,986,790	2.9	<1	<1	<1	<1	<1	<1	<1
			5/25/10	NM	318	NA	NA	20,782,134	2.6	<1	<1	<1	<1	<1	<1	<1
			11/3/10	NM	300	NA	NA	21,303,012	2.6	<1	<1	<1	<1	<1	<1	<1
			7/15/11	NM	280	NA	NA	22,105,250	2.5	<1	<1	<1	<1	<1	<1	<1
			11/7/11	NM	310	NA	NA	22,537,892	3.1	<1	<1	<1	<1	<1	<1	<1
			5/22/12*	NM	280	NA	NA	23,283,429	2.9	<1	<1	<1	<1	<1	<1	<1
			11/7/12	NM	275	NA	NA	23,898,952	2.7	<1	<1	<1	<1	<1	<1	<1
			5/24/13	NM	314	NA	NA	24,644,901	NM	<1	<1	<1	<1	<1	<1	<1
			11/21/13	NM	297	NA	NA	25,243,416	3.5	<1	<1	<1	<1	<1	<1	<1
			8/1/14	NM	290	NA	NA	26,279,650	NM	<1	<1	<1	<1	<1	<1	<1
			6/18/15	NM	294	NA	NA	27,526,457	2.8	<1	<1	<1	<1	<1	<1	<1
			8/24/16	NM	235	NA	NA	28,907,889	3.4	<1	<1	<1	<1	<1	<1	<1
			9/21/17	NM	266	NA	NA	30,316,441	5.2	<1	<1	<1	<1	<1	<1	<1
			9/12/18	NM	NA	NA	NA	31,469,399	4.1	<1	<1	<1	<1	<1	<1	<1
			9/9/19	NM	250	NA	NA	32,681,892	7.8	<1	<1	<1	<1	<1	<1	<1
			10/20/20	NM	275	NA	NA	33,899,962	NM	<1	<1	<1	<1	<1	<1	<1

Notes:

1. Analytical results presented in micrograms per liter.
2. gallons* = Starting with August 2014 data, North Well, OEW-1, BEW-1, and OEW-2 readings should be multiplied by a factor of 100; previous readings for the North Well should be multiplied by a factor of 1,000.
3. * Groundwater samples collected directly from extraction wells using low-flow sampling techniques.
4. ** sample preserved with ascorbic acid.
5. bgs = below ground surface.
6. DCE = dichloroethene.
7. gpm = gallons per minute.
8. NM = not measured.
9. NA = not applicable.
10. PCE = tetrachloroethene.
11. psi = pounds per square inch.
12. TCE = trichloroethene.
13. NS = not sampled.

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
OP-1	Overburden	5/2/06	648.34	11.23	637.11
		11/16/06		12.27	636.07
		4/30/07		8.52	639.82
		5/3/07		8.70	639.64
		5/22/07		9.73	638.61
		10/29/07		15.20	633.14
		5/5/08		9.17	639.17
		11/3/08		14.63	633.71
		5/11/09		10.59	637.75
		10/27/09		13.41	634.93
		5/25/10		11.69	636.65
		11/1/10		13.70	634.64
		7/21/11		11.19	637.15
		11/7/11		13.16	635.18
		5/22/12		11.38	636.96
		11/5/12		13.17	635.17
		5/20/13		10.70	637.64
		11/21/13		12.85	635.49
		8/1/14		8.99	639.35
		7/17/15		10.25	638.09
		8/22/16		14.55	633.79
		9/19/17		10.70	637.64
		9/10/18		13.10	635.24
		9/9/19		12.81	635.53
		10/20/20		13.94	634.40
OP-2	Overburden	5/2/06	650.37	14.30	636.07
		11/16/06		15.37	635.00
		4/30/07		11.53	638.84
		5/3/07		11.65	638.72
		5/22/07		12.68	637.69
		10/29/07		18.02	632.35
		5/5/08		12.21	638.16
		11/3/08		17.51	632.86
		5/11/09		13.69	636.68
		10/27/09		16.43	633.94
		5/25/10		14.79	635.58
		11/1/10		16.63	633.74
		7/21/11		14.24	636.13
		11/7/11		16.14	634.23
		5/22/12		14.44	635.93
		11/5/12		16.67	633.70
		5/20/13		13.80	636.57
		11/21/13		15.86	634.51
		8/1/14		11.91	638.46
		7/17/15		13.34	637.03
		8/22/16		17.48	632.89
		9/19/17		13.80	636.57
		9/10/18		16.10	634.27
		9/9/19		15.89	634.48
		10/20/20		16.96	633.41
OP-3	Overburden	5/2/06	649.62	13.79	635.83
		11/16/06		14.88	634.74
		4/30/07		11.06	638.56
		5/3/07		11.17	638.45
		5/22/07		12.16	637.46
		10/29/07		17.51	632.11
		5/5/08		11.71	637.91
		11/3/08		16.96	632.66
		5/11/09		13.19	636.43
		10/27/09		15.90	633.72
		5/25/10		14.29	635.33
		11/1/10		16.09	633.53
		7/21/11		13.73	635.89
		11/7/11		15.63	633.99
		5/22/12		13.94	635.68
		11/5/12		16.10	633.52
		5/20/13		13.31	636.31
		11/21/13		15.34	634.28
		8/1/14		11.39	638.23
		7/17/15		12.84	636.78
		8/22/16		17.02	632.60
		9/19/17		14.38	635.24
		9/10/18		15.58	634.04
		9/9/19		15.33	634.29
		10/20/20		16.37	633.25
OP-5	Overburden	5/2/06	650.49	13.44	637.05
		11/16/06		14.48	636.01
		4/30/07		10.76	639.73
		5/3/07		10.92	639.57
		5/22/07		11.96	638.53
		10/29/07		17.38	633.11
		5/5/08		11.40	639.09
		11/3/08		16.79	633.70
		5/11/09		12.81	637.68
		10/27/09		15.61	634.88
		5/25/10		13.89	636.60
		11/1/10		15.86	634.63
		7/21/11		13.41	637.08
		11/7/11		15.35	635.14
		5/22/12		13.60	636.89
		11/5/12		15.91	634.58
		5/20/13		12.93	637.56
		11/21/13		15.04	635.45
		8/1/14		11.20	639.29
		7/17/15		12.49	638.00
		8/22/16		16.66	633.83
		9/19/17		12.95	637.54
		9/10/18		15.29	635.20
		9/9/19		15.02	635.47
		10/20/20		16.08	634.41

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
OP-6	Overburden	5/2/06	651.28	15.60	635.68
		11/16/06		16.66	634.62
		4/30/07		13.00	638.28
		5/3/07		13.06	638.22
		5/22/07		14.02	637.26
		10/29/07		19.19	632.09
		5/5/08		13.63	637.65
		11/3/08		18.66	632.62
		5/11/09		15.02	636.26
		10/27/09		17.65	633.63
		5/25/10		16.06	635.22
		11/1/10		17.83	633.45
		7/21/11		15.57	635.71
		11/7/11		17.36	633.92
		5/22/12		15.76	635.52
		11/5/12		17.79	633.49
		5/20/13		15.15	636.13
		11/21/13		17.13	634.15
		8/1/14		13.24	638.04
		7/17/15		14.71	636.57
		8/22/16		18.69	632.59
		9/19/17		15.27	636.01
		9/10/18		17.35	633.93
		9/9/19		17.14	634.14
		10/20/20		18.19	633.09
OP-7	Overburden	5/2/06	648.66	12.69	635.97
		11/16/06		13.73	634.93
		4/30/07		10.07	638.59
		5/3/07		10.17	638.49
		5/22/07		11.14	637.52
		10/29/07		16.31	632.35
		5/8/08		10.68	637.98
		11/3/08		15.73	632.93
		5/11/09		12.09	636.57
		10/27/09		14.72	633.94
		5/25/10		13.15	635.51
		11/1/10		14.90	633.76
		7/21/11		12.68	635.98
		11/7/11		14.44	634.22
		5/22/12		12.83	635.83
		11/5/12		14.90	633.76
		5/20/13		12.21	636.45
		11/21/13		14.18	634.48
		8/1/14		10.33	638.33
		7/17/15		11.80	636.86
		8/22/16		15.77	632.89
		9/19/17		12.24	636.42
		9/10/18		14.39	634.27
		9/9/19		11.70	636.96
		10/20/20		14.19	634.47
OP-8	Overburden	5/2/06	651.77	14.93	636.84
		11/16/06		15.94	635.83
		4/30/07		12.35	639.42
		5/3/07		12.51	639.26
		5/22/07		13.49	638.28
		10/29/07		18.75	633.02
		5/5/08		12.97	638.80
		11/3/08		18.15	633.62
		5/11/09		14.33	637.44
		10/27/09		17.05	634.72
		5/25/10		15.37	636.40
		11/1/10		17.31	634.46
		7/21/11		14.94	636.83
		11/7/11		16.79	634.98
		5/22/12		15.07	636.70
		11/5/12		17.22	634.55
		5/20/13		14.45	637.32
		11/21/13		16.49	635.28
		8/1/14		12.73	639.04
		7/17/15		14.04	637.73
		8/22/16		18.05	633.72
		9/19/17		14.75	637.02
		9/10/18		16.72	635.05
		9/9/19		16.49	635.28
		10/20/20		17.51	634.26
OP-9	Overburden	5/2/06	645.32	9.34	635.98
		11/16/06		10.32	635.00
		4/30/07		6.82	638.50
		5/3/07		6.87	638.45
		5/22/07		7.83	637.49
		10/29/07		12.70	632.62
		5/5/08		7.40	637.92
		11/3/08		12.17	633.15
		5/11/09		8.76	636.56
		10/27/09		11.26	634.06
		5/25/10		9.76	635.56
		11/1/10		11.45	633.87
		7/21/11		9.30	636.02
		11/7/11		10.96	634.36
		5/22/12		9.44	635.88
		11/5/12		11.33	633.99
		5/20/13		8.86	636.46
		11/21/13		10.77	634.55
		8/1/14		6.96	638.36
		7/17/15		8.49	636.83
		8/22/16		12.18	633.14
		9/19/17		8.94	636.38
		9/10/18		11.01	634.31
		9/9/19		10.80	634.52
		10/20/20		NA	

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
OP-10	Overburden	5/2/06	653.63	18.83	634.80
		11/16/06		19.77	633.86
		4/30/07		16.29	637.34
		5/3/07		16.38	637.25
		5/22/07		17.29	636.34
		10/29/07		Dry	NA
		5/5/08		16.89	636.74
		11/3/08		21.11	632.52
		5/11/09		18.25	635.38
		10/27/09		20.77	632.86
		5/25/10		19.29	634.34
		11/1/10		20.90	632.73
		7/21/11		18.74	634.89
		11/7/11		20.44	633.19
		5/22/12		18.95	634.68
		11/5/12		20.85	632.78
		5/20/13		18.39	635.24
		11/21/13		20.23	633.40
		8/1/14		16.41	637.22
		7/17/15		17.91	635.72
		8/22/16		Dry	
		9/19/17		18.25	635.38
		9/10/18		16.43	637.20
		9/9/19		19.73	633.90
		10/20/20		17.71	
OP-11	Overburden	5/2/06	653.39	16.46	636.93
		11/16/06		17.45	635.94
		4/30/07		13.78	639.61
		5/3/07		14.01	639.38
		5/22/07		15.05	638.34
		10/29/07		20.39	633.00
		5/5/08		14.51	638.88
		11/3/08		19.79	633.60
		5/11/09		15.88	637.51
		10/27/09		18.65	634.74
		5/25/10		16.72	636.67
		11/1/10		18.92	634.47
		7/21/11		16.51	636.88
		11/7/11		18.30	635.09
		5/22/12		16.62	636.77
		11/5/12		18.85	634.54
		5/20/13		15.99	637.40
		11/21/13		18.09	635.30
		8/1/14		14.23	639.16
		7/17/15		15.57	637.82
		8/22/16		19.69	633.70
		9/19/17		16.00	637.39
		9/10/18		18.29	635.10
		9/9/19		18.02	635.37
		10/20/20		19.09	634.30
OP-12	Overburden	5/2/06	653.11	16.09	637.02
		11/16/06		17.12	635.99
		4/30/07		13.43	639.68
		5/3/07		13.60	639.51
		5/22/07		14.63	638.48
		10/29/07		19.97	633.14
		5/5/08		14.10	639.01
		11/3/08		19.39	633.72
		5/11/09		15.49	637.62
		10/27/09		18.26	634.85
		5/25/10		16.54	636.57
		11/1/10		18.47	634.64
		7/21/11		16.09	637.02
		11/7/11		17.96	635.15
		5/22/12		16.22	636.89
		11/5/12		18.45	634.66
		5/20/13		15.59	637.52
		11/21/13		17.69	635.42
		8/1/14		13.83	639.28
		7/17/15		15.17	637.94
		8/22/16		19.32	633.79
		9/19/17		14.81	638.30
		9/10/18		17.91	635.20
		9/9/19		17.68	635.43
		10/20/20		18.70	634.41
OP-13	Overburden	5/2/06	660.05	25.33	634.72
		11/16/06		26.24	633.81
		4/30/07		22.80	637.25
		5/3/07		22.91	637.14
		5/22/07		23.80	636.25
		10/29/07		28.76	631.29
		5/5/08		23.41	636.64
		11/3/08		28.23	631.82
		5/11/09		24.75	635.30
		10/27/09		27.27	632.78
		5/25/10		25.77	634.28
		11/1/10		27.35	632.70
		7/21/11		25.24	634.81
		11/7/11		26.90	633.15
		5/22/12		25.39	634.66
		11/5/12		27.30	632.75
		5/20/13		24.86	635.19
		11/21/13		26.71	633.34
		8/1/14		22.89	637.16
		7/17/15		24.42	635.63
		8/22/16		28.31	631.74
		9/19/17		24.82	635.23
		9/10/18		27.04	633.01
		9/9/19		26.76	633.29
		10/20/20		27.78	632.27

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
OP-14	Overburden	5/2/06	652.88	18.58	634.30
		11/16/06		19.43	633.45
		4/30/07		16.20	636.68
		5/3/07		16.30	636.58
		5/22/07		17.14	635.74
		10/29/07		21.83	631.05
		5/5/08		16.78	636.10
		11/3/08		21.32	631.56
		5/11/09		18.04	634.84
		10/27/09		20.42	632.46
		5/25/10		19.01	633.87
		11/1/10		20.51	632.37
		7/21/11		18.50	634.38
		11/7/11		20.08	632.80
		5/22/12		18.67	634.21
		11/5/12		20.45	632.43
		5/20/13		18.16	634.72
		11/21/13		19.89	632.99
		8/1/14		16.28	636.60
		7/17/15		17.75	635.13
		8/22/16		21.42	631.46
		9/19/17		18.11	634.77
		9/10/18		20.26	632.62
		9/9/19		19.95	632.93
		10/20/20		20.94	631.94
OP-15	Overburden	5/2/06	652.54	15.51	637.03
		11/16/06		16.53	636.01
		4/30/07		12.85	639.69
		5/3/07		13.02	639.52
		5/22/07		14.05	638.49
		10/29/07		19.41	633.13
		5/5/08		13.51	639.03
		11/3/08		18.03	634.51
		5/11/09		14.91	637.63
		10/27/09		17.69	634.85
		11/1/10		17.92	634.62
		7/21/11		15.51	637.03
		11/7/11		17.40	635.14
		5/22/12		15.65	636.89
		11/5/12		17.89	634.65
		5/20/13		15.02	637.52
		11/21/13		17.11	635.43
		8/1/14		13.28	639.26
		7/17/15		14.59	637.95
		8/22/16		18.74	633.80
		9/19/17		15.05	637.49
		9/10/18		17.36	635.18
		9/9/19		17.11	635.43
		10/20/20		18.17	634.37
OP-16	Overburden	5/2/06	653.13	16.78	636.35
		11/16/06		16.23	636.90
		4/30/07		13.14	639.99
		5/3/07		14.79	638.34
		5/22/07		15.50	637.63
		10/29/07		20.89	632.24
		5/5/08		15.79	637.34
		11/3/08		20.31	632.82
		5/11/09		16.43	636.70
		10/27/09		18.86	634.27
		5/25/10		16.93	636.20
		11/1/10		18.71	634.42
		7/21/11		15.96	637.17
		11/7/11		17.93	635.20
		5/22/12		16.05	637.08
		11/5/12		17.96	635.17*
		5/20/13		15.89	637.24
		11/21/13		17.71	635.42
		8/1/14		14.26	638.87
		7/17/15		15.88	637.25
		8/22/16		19.71	633.42
		9/19/17		16.19	636.94
		9/10/18		18.32	634.81
		9/9/19		18.09	635.04
		10/20/20		18.83	634.30
OP-17	Overburden	7/21/11	644.15	7.28	636.87
		11/7/11		9.08	635.07
		5/22/12		7.37	636.78
		11/5/12		9.55	634.60
		5/20/13		6.73	637.42
		11/21/13		8.81	635.34
		8/1/14		3.64	640.51
		7/17/15		6.42	637.73
		8/22/16		10.37	633.78
		9/19/17	645.53	7.71	637.82
		9/10/18		9.92	635.61
		9/9/19		9.73	635.80
		10/20/20		10.79	634.74

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
BP-1	Bedrock	5/2/06	650.64	11.18	639.46
		11/16/06		11.20	639.44
		4/30/07		8.64	642.00
		5/3/07		8.98	641.66
		5/22/07		10.17	640.47
		10/29/07		14.78	635.86
		5/5/08		9.85	640.79
		11/3/08		13.68	636.96
		5/11/09		10.91	639.73
		10/27/09		13.16	637.48
		5/25/10		11.52	639.12
		11/1/10		12.88	637.76
		7/21/11		11.36	639.28
		11/7/11		12.38	638.26
		5/22/12		11.25	639.39
		11/5/12		12.41	638.23
		5/20/13		10.81	639.83
		11/21/13		12.04	638.60
		8/1/14		8.25	642.39
		7/17/15		10.38	640.26
		8/22/16		14.23	636.41
		9/19/17		10.99	639.65
		9/10/18		12.44	638.20
		9/9/19		12.49	638.15
		10/20/20		13.53	637.11
BP-2	Bedrock	5/2/06	651.97	14.88	637.09
		11/16/06		15.08	636.89
		4/30/07		11.98	639.99
		5/3/07		12.75	639.22
		5/22/07		13.68	638.29
		10/29/07		18.51	633.46
		5/5/08		13.31	638.66
		11/3/08		17.82	634.15
		5/11/09		14.38	637.59
		10/27/09		16.83	635.14
		5/25/10		15.17	636.80
		11/1/10		16.73	635.24
		7/21/11		14.71	637.26
		11/7/11		16.27	635.70
		5/22/12		14.55	637.42
		11/5/12		16.35	635.62
		5/20/13		14.22	637.75
		11/21/13		15.96	636.01
		8/1/14		12.23	639.74
		7/17/15		13.91	638.06
		8/22/16		17.66	634.31
		9/19/17		14.19	637.78
		9/10/18		16.36	635.61
		9/9/19		16.19	635.78
		10/20/20		17.11	634.86
BP-3	Bedrock	5/2/06	648.54	11.42	637.12
		11/16/06		11.62	636.92
		4/30/07		8.51	640.03
		5/3/07		9.31	639.23
		5/22/07		10.26	638.28
		10/29/07		15.09	633.45
		5/5/08		9.87	638.67
		11/3/08		14.39	634.15
		5/11/09		10.92	637.62
		10/27/09		13.40	635.14
		5/25/10		11.69	636.85
		11/1/10		13.33	635.21
		7/21/11		11.29	637.25
		11/7/11		12.87	635.67
		5/22/12		11.07	637.47
		11/5/12		12.84	635.70
		5/20/13		10.81	637.73
		11/21/13		12.58	635.96
		8/1/14		8.79	639.75
		7/17/15		10.53	638.01
		8/22/16		14.26	634.28
		9/19/17		10.94	637.60
		9/10/18		12.90	635.64
		9/9/19		12.75	635.79
		10/20/20		13.59	634.95
BP-4	Bedrock	5/2/06	652.31	15.29	637.02
		11/16/06		15.41	636.90
		4/30/07		12.34	639.97
		5/3/07		13.18	639.13
		5/22/07		13.51	638.80
		10/29/07		18.97	633.34
		5/5/08		13.80	638.51
		11/3/08		18.29	634.02
		5/11/09		14.81	637.50
		10/27/09		17.26	635.05
		5/25/10		15.55	636.76
		11/1/10		16.62	635.69
		7/21/11		15.09	637.22
		11/7/11		16.08	636.23
		5/22/12		14.30	638.01
		11/5/12		16.04	636.27
		5/20/13		14.64	637.67
		11/21/13		15.78	636.53
		8/1/14		11.99	640.32
		7/17/15		13.73	638.58
		8/22/16		17.46	634.85
		9/19/17		14.44	637.87
		9/10/18		16.75	635.56
		9/9/19		15.99	636.32
		10/20/20		16.95	635.36

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
BP-5	Bedrock	5/2/06	651.87	14.89	636.98
		11/16/06		15.75	636.12
		4/30/07		12.60	639.27
		5/3/07		12.67	639.20
		5/22/07		13.39	638.48
		10/29/07		17.20	634.67
		5/5/08		13.21	638.66
		11/3/08		16.99	634.88
		5/11/09		14.25	637.62
		10/27/09		16.61	635.26
		5/25/10		15.23	636.64
		11/1/10		16.99	634.88
		7/21/11		14.39	637.48
		11/7/11		16.57	635.30
		5/22/12		14.75	637.12
		11/5/12		16.50	635.37
		5/20/13		14.30	637.57
		11/21/13		16.06	635.81
		8/1/14		14.03	637.84
		7/17/15		14.20	637.67
		8/22/16		17.58	634.29
		9/19/17		15.20	636.67
		9/10/18		16.45	635.42
		9/9/19		16.01	635.86
		10/20/20		16.24	635.63
BP-6	Bedrock	5/2/06	653.63	18.31	635.32
		11/16/06		18.99	634.64
		4/30/07		15.84	637.79
		5/3/07		16.06	637.57
		5/22/07		16.99	636.64
		10/29/07		21.26	632.37
		5/5/08		16.67	636.96
		11/3/08		21.26	632.37
		5/11/09		17.91	635.72
		10/27/09		20.22	633.41
		5/25/10		18.77	634.86
		11/1/10		20.21	633.42
		7/21/11		18.40	635.23
		11/7/11		19.79	633.84
		5/22/12		18.35	635.28
		11/5/12		20.07	633.56
		5/20/13		17.89	635.74
		11/21/13		19.60	634.03
		8/1/14		15.87	637.76
		7/17/15		17.53	636.10
		8/22/16		21.21	632.42
		9/19/17		18.00	635.63
		9/10/18		20.05	633.58
		9/9/19		18.40	635.23
		10/20/20		20.24	633.39
BP-7	Bedrock	7/21/11	645.32	7.79	637.53
		11/7/11		9.62	635.70
		5/22/12		7.83	637.49
		11/5/12		9.45	635.87
		5/20/13		7.48	637.84
		11/21/13		9.19	636.13
		8/1/14		5.48	639.84
		7/17/15		7.23	638.09
		8/22/16		10.87	634.45
		9/19/17		7.63	637.69
		9/10/18		9.59	635.73
		9/9/19		9.42	635.90
		10/20/20		NA	
BP-8	Bedrock	7/21/11	644.25	5.98	638.27
		11/7/11		7.35	636.90
		5/22/12		6.83	637.42
		11/5/12		7.76	636.49
		5/20/13		5.87	638.38
		11/21/13		7.46	636.79
		8/1/14		4.14	640.11
		7/17/15		6.17	638.08
		8/22/16		9.02	635.23
		9/19/17	645.45	6.72	638.73
		9/10/18		8.54	636.91
		9/9/19		8.43	637.02
		10/20/20		9.33	
BP-9	Bedrock	7/21/11	653.04	13.48	639.56
		11/7/11		14.70	638.34
		5/22/12		14.49	638.55
		11/5/12		15.62	637.42
		5/20/13		13.74	639.30
		11/21/13		15.32	637.72
		8/1/14		11.51	641.53
		7/17/15		13.31	639.73
		8/22/16		17.01	636.03
		9/19/17		13.75	639.29
		9/10/18		15.61	637.43
		9/9/19		15.49	637.55
		10/20/20		16.36	636.68

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
BP-10	Bedrock	7/21/11	652.42	15.18	637.24
		11/7/11		16.90	635.52
		5/22/12		15.09	637.33
		11/5/12		16.87	635.55
		5/20/13		14.84	637.58
		11/21/13		16.59	635.83
		8/1/14		12.90	639.52
		7/17/15		14.59	637.83
		8/22/16		18.35	634.07
		9/19/17		15.01	637.41
		9/10/18		17.10	635.32
		9/9/19		16.85	635.57
		10/20/20		17.78	634.64
BP-11	Bedrock	7/21/11	653.61	16.46	637.15
		11/7/11		18.43	635.18
		5/22/12		16.56	637.05
		11/5/12		18.47	635.14
		5/20/13		16.38	637.23
		11/21/13		18.21	635.40
		8/1/14		14.79	638.82
		7/17/15		16.39	637.22
		8/22/16		20.22	633.39
		9/19/17		16.95	636.66
		9/10/18		18.84	634.77
		9/9/19		18.59	635.02
		10/20/20		19.29	634.32
L-1	Overburden	5/2/06	650.28	14.69	635.59
		11/16/06		15.79	634.49
		4/30/07		12.14	638.14
		5/3/07		12.09	638.19
		5/22/07		13.11	637.17
		10/29/07		18.13	632.15
		5/5/08		12.68	637.60
		11/3/08		17.58	632.70
		5/11/09		14.07	636.21
		10/27/09		16.62	633.66
		5/25/10		15.17	635.11
		11/1/10		16.82	633.46
		7/21/11		14.63	635.65
		11/7/11		16.39	633.89
		5/22/12		14.80	635.48
		11/5/12		16.90	633.38
		5/20/13		14.21	636.07
		11/21/13		16.14	634.14
		8/1/14		12.28	638.00
		7/17/15		13.76	636.52
		8/22/14		16.95	633.33
		9/19/17		14.26	636.02
		9/10/18		16.37	633.91
		9/9/19		16.14	634.14
		10/20/20		17.04	633.24
L-2	Bedrock	5/2/06	651.08	13.99	637.09
		11/16/06		9.44	641.64
		4/30/07		11.42	639.66
		5/3/07		11.84	639.24
		5/22/07		12.77	638.31
		10/29/07		17.32	633.76
		5/5/08		11.44	639.64
		11/3/08		16.67	634.41
		5/11/09		13.54	637.54
		10/27/09		15.84	635.24
		5/25/10		14.30	636.78
		11/1/10		15.79	635.29
		7/21/11		13.96	637.12
		11/7/11		15.39	635.69
		5/22/12		13.82	637.26
		11/5/12		15.38	635.70
		5/20/13		13.41	637.67
		11/21/13		15.05	636.03
		8/1/14		11.32	639.76
		7/17/15		13.09	637.99
		8/22/16		16.66	634.42
		9/19/17		13.58	637.50
		9/10/18		15.43	635.65
		9/9/19		15.25	635.83
		10/20/20		16.18	634.90
L-3	Overburden	5/2/06	649.65	14.72	634.93
		11/16/06		14.69	634.96
		4/30/07		11.22	638.43
		5/3/07		11.28	638.37
		5/22/07		12.23	637.42
		10/29/07		Dry	NA
		5/5/08		11.82	637.83
		11/3/08		16.53	633.12
		5/11/09		13.16	636.49
		10/27/09		15.65	634.00
		5/25/10		14.15	635.50
		11/1/10		15.75	633.90
		7/21/11		13.72	635.93
		11/7/11		15.39	634.26
		5/22/12		13.80	635.85
		11/5/12		15.70	633.95
		5/20/13		13.26	636.39
		11/21/13		15.14	634.51
		8/1/14		11.35	638.30
		7/17/15		12.87	636.78
		8/22/16		16.61	633.04
		9/19/17		13.35	636.30
		9/10/18		15.42	634.23
		9/9/19		15.11	634.54
		10/20/20		16.11	633.54

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
PZ-1	Overburden	5/2/06	649.58	13.86	635.72
		11/16/06		14.94	634.64
		4/30/07		11.26	638.32
		5/3/07		11.33	638.25
		5/22/07		12.27	637.31
		10/29/07		17.35	632.23
		5/5/08		11.85	637.73
		11/3/08		16.80	632.78
		5/11/09		13.23	636.35
		10/27/09		15.84	633.74
		5/25/10		14.32	635.26
		11/1/10		15.99	633.59
		7/21/11		13.80	635.78
		11/7/11		15.58	634.00
		5/22/12		13.97	635.61
		11/5/12		16.00	633.58
		5/20/13		13.36	636.22
		11/21/13		15.32	634.26
		8/1/14		11.42	638.16
		7/17/15		12.93	636.65
		8/22/16		17.63	631.95
		9/19/17		13.44	636.14
		9/10/18		15.55	634.03
		9/9/19		15.25	634.33
		10/20/20		16.34	633.24
PZ-2	Overburden	5/2/06	649.39	13.59	635.80
		11/16/06		14.63	634.76
		4/30/07		11.02	638.37
		5/3/07		11.08	638.31
		5/22/07		12.03	637.36
		10/29/07		17.02	632.37
		5/5/08		11.61	637.78
		11/3/08		16.47	632.92
		5/11/09		12.99	636.40
		10/27/09		15.50	633.89
		5/25/10		14.05	635.34
		11/1/10		15.70	633.69
		7/21/11		13.55	635.84
		11/7/11		15.28	634.11
		5/22/12		13.73	635.66
		11/5/12		15.71	633.68
		5/20/13		13.12	636.27
		11/21/13		15.14	634.25
		8/1/14		11.21	638.18
		7/17/15		12.71	636.68
		8/22/16		16.57	632.82
		9/19/17		13.21	636.18
		9/10/18		15.31	634.08
		9/9/19		15.10	634.29
		10/20/20		16.06	633.33
OEW-1	Overburden	5/2/06	650.28	25.69	624.59
		11/16/06		14.32	635.96
		4/30/07		10.67	639.61
		5/3/07		20.32	629.96
		5/22/07		14.53	635.75
		10/29/07		22.96	627.32
		5/5/08		18.14	632.14
		11/3/08		31.68	618.60
		5/11/09		26.95	623.33
		10/27/09		25.60	624.68
		5/25/10		16.69	633.59
		11/1/10		25.21	625.07
		7/21/11		20.62	629.66
		11/7/11		24.80	625.48
		5/22/12		21.81	628.47
		11/5/12		25.20	625.08
		5/20/13		21.28	629.00
		11/21/13		NM	NM
		8/1/14		NM	NM
		7/17/15		NM	NM
		8/22/16		28.33	621.95
		9/19/17		33.77	616.51
		9/10/18		35.45	614.83
		9/9/19		34.74	615.54
		10/20/20		34.34	615.94
OEW-2	Overburden	5/2/06	649.42	15.35	634.07
		11/16/06		16.13	633.29
		4/30/07		12.11	637.31
		5/3/07		11.01	638.41
		5/22/07		13.27	636.15
		10/29/07		16.64	632.78
		5/5/08		12.67	636.75
		11/3/08		17.42	632.00
		5/11/09		14.23	635.19
		10/27/09		16.66	632.76
		5/25/10		15.22	634.20
		11/1/10		16.93	632.49
		7/21/11		14.99	634.43
		11/7/11		16.68	632.74
		5/22/12		13.59	635.83
		11/5/12		15.52	633.90
		5/20/13		14.24	635.18
		11/21/13		16.41	633.01
		8/1/14		15.72	633.70
		7/17/15		14.27	635.15
		8/22/16		18.26	631.16
		9/19/17		15.22	634.20
		9/10/18		17.78	631.64
		9/9/19		17.44	631.98
		10/20/20		19.05	630.37

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
BEW-1	Bedrock	5/2/06	650.39	17.14	633.25
		11/16/06		13.49	636.90
		4/30/07		10.43	639.96
		5/3/07		16.46	633.93
		5/22/07		15.69	634.70
		10/29/07		23.46	626.93
		5/5/08		18.58	631.81
		11/3/08		24.39	626.00
		5/11/09		17.71	632.68
		10/27/09		20.10	630.29
		5/25/10		15.51	634.88
		11/1/10		19.07	631.32
		7/21/11		13.41	636.98
		11/7/11		17.22	633.17
		5/22/12		14.89	635.50
		11/5/12		17.55	632.84
		5/20/13		15.01	635.38
		11/21/13		21.02	629.37
		8/1/14		15.25	635.14
		7/17/15		17.03	633.36
		8/22/16		23.68	626.71
		9/19/17		21.29	629.10
		9/10/18		25.87	624.52
		9/9/19		26.80	623.59
		10/20/20		31.05	619.34
North Well	Overburden	5/2/06	650.30	15.79	634.51
		11/16/06		17.29	633.01
		4/30/07		13.39	636.91
		5/3/07		13.34	636.96
		5/22/07		14.17	636.13
		10/29/07		19.30	631.00
		5/5/08		13.73	636.57
		11/3/08		18.65	631.65
		5/11/09		15.14	635.16
		10/27/09		17.67	632.63
		5/25/10		16.59	633.71
		11/1/10		17.43	632.87
		7/21/11		15.70	634.60
		11/7/11		17.67	632.63
		5/22/12		16.05	634.25
		11/5/12		18.13	632.17
		5/20/13		15.52	634.78
		11/21/13		17.23	633.07
		8/1/14		13.56	636.74
		7/17/15		14.80	635.50
		8/22/16		18.60	631.70
		9/19/17		15.30	635.00
		9/10/18		17.34	632.96
		9/9/19		27.15	623.15
		10/20/20		17.94	632.36
BI-1	Bedrock	5/2/06	653.17	NM	NA
		4/30/07		13.17	640.00
		5/3/07		14.77	638.40
		5/22/07		15.48	637.69
		10/29/07		20.87	632.30
		5/5/08		15.78	637.39
		11/3/08		19.8	633.37
		5/11/09		16.43	636.74
		10/27/09		18.88	634.29
		5/25/10		16.74	636.43
		11/1/10		18.72	634.45
		7/21/11		15.99	637.18
		11/7/11		17.93	635.24
		5/22/12		16.07	637.10
		11/5/12		17.96	635.21
		5/20/13		15.86	637.31
		11/21/13		17.72	635.45
		8/1/14		14.24	638.93
		7/17/15		15.88	637.29
		8/22/16		19.71	633.46
		9/19/17		16.24	636.93
		9/10/18		NM	NM
		9/9/19		18.08	635.09
		10/20/20		18.79	634.38
OI-5	Overburden	7/21/11	651.14	14.34	636.80
		11/7/11		16.10	635.04
		5/22/12		14.38	636.76
		11/5/12		16.59	634.55
		5/20/13		13.74	637.40
		11/21/13		15.82	635.32
		8/1/14		11.96	639.18
		7/17/15		13.32	637.82
		8/22/16		17.42	633.72
		9/19/17		13.72	637.42
		9/10/18		15.99	635.15
		9/9/19		15.76	635.38
		10/20/20		16.83	634.31

Table 4. Groundwater Elevation Data
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Monitoring Zone	Date	TOC Elevation (feet NAVD 88)	Groundwater (feet BTOC)	Groundwater Elevation (feet)
OI-7	Overburden	11/3/08	650.50	16.92	633.58
		5/11/09		13.01	637.49
		10/27/09		NM	NA
		5/25/10		14.06	636.44
		11/1/10		16.02	634.48
		7/21/11		13.66	636.84
		11/7/11		15.49	635.01
		5/22/12		13.75	636.75
		11/5/12		15.97	634.53
		5/20/13		13.13	637.37
		11/21/13		15.23	635.27
		8/1/14		11.38	639.12
		7/17/15		12.70	637.80
		8/22/16		16.82	633.68
		9/19/17		13.14	637.36
		9/10/18		15.42	635.08
		9/9/19		15.19	635.31
		10/20/20		16.22	634.28

Notes:

1. BI-1 = Bedrock Injection Well.
2. BTOC = below top of casing.
3. Dry = well was dry.
4. NA = not applicable.
5. NAVD 88 = North American Vertical Datum of 1988.
6. NM = not measured.
7. OI-1 = Overburden Injection Well.
8. TOC = top of casing.
9. * not used for contouring; suspected error during water level measurement.

Table 5. Groundwater Analytical Results Summary
Chlorinated Volatile Organic Compounds
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Date Sampled	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
NY State Groundwater Quality Standards		**5**	**5**	**5**	**5**	**5**	**2**
OP-1	4/30/96	<1	<1	<1	<1	<1	<1
	11/21/97	<1	<1	<1	<1	<1	<1
	8/21/98	<0.5	<0.5	<0.5	<0.5		<0.5
	1/8/02	<1	0.54 J	<1	<1	<1	<1
OP-2	4/30/96	<1	<1	3	<1	<1	<1
	11/21/97	<1	<1	**11**	<1	<1	<1
	8/20/98	<0.5	0.6	3	<0.5	<0.5	<0.5
	1/8/02	<1	0.64 J	**8.4**	<1	<1	<1
	10/21/20	<1	<1	2.9	<1	<1	<1
OP-3	5/1/96	**10**	**13**	<1	<1	<1	<1
	11/21/97	**9**	**14**	<1	<1	<1	<1
	8/20/98	**14**	**18**	0.7	<0.5	<0.5	<0.5
	1/8/02	**6.6**	**9**	<1	<1	<1	<1
	10/5/04	4.8	**6.2**	<1	<1	<1	<1
	5/23/05	**8.2**	**12**	<1	<1	<1	<1
	9/27/05	**8.2**	**12**	<1	<1	<1	<1
	5/3/06	**7.2**	**10**	<1	<1	<1	<1
	11/14/06	**8**	**11**	<1	<1	<1	<1
	5/1/07	**6.2**	**9.2**	<1	<1	<1	<1
	10/30/07	1.7	1.5	<1	<1	<1	<2
	5/5/08	2.3	2.7	<1	<1	<1	<2
	11/5/08	4.6	**6.3**	<1	<1	<1	<2
	5/12/09	2.2	2.6	<1	<1	<1	<1
	10/28/09	**5.6**	**7.2**	<1	<1	<1	<1
	5/27/10	4.7	**5.9**	<1	<1	<1	<1
	11/4/10	3.9	**5.3**	<1	<1	<1	<1
	7/12/11	1.5	1.6	<1	<1	<1	<1
	11/15/11	2.4	3.4	<1	<1	<1	<1
	5/31/12	1.2	1.3	<1	<1	<1	<1
	11/8/12	3.7	4.5	<1	<1	<1	<1
	5/22/13	4.3	**5.9**	<1	<1	<1	<1
	11/18/13	2.4	2.5	<1	<1	<1	<1
	7/28/14	3.4	4.6	<1	<1	<1	<1
	6/17/15	2.5	3.8	<1	<1	<1	<1
	8/23/16	<1	<1	<1	<1	<1	<1
	9/19/17	1.4	1.5	<1	<1	<1	<1
	9/11/18	<1	<1	<1	<1	<1	<1
	9/10/19	3.7	4.8	<1	<1	<1	<1
DUP	9/10/19	3.6	4.9	<1	<1	<1	<1
	10/21/20	2.3	2.9	<2	<1	<1	<1
OP-5	4/29/96	<1	<1	<1	<1	<1	<1
	11/21/97	<1	<1	<1	<1	<1	<1
	8/20/98	<0.5	0.8	<0.5	<0.5	<0.5	<0.5
	1/10/02	<1	0.62 J	<1	<1	<1	<1
OP-6	4/30/96	**29**	**9**	<1	<1	<1	<1
	11/20/97	**48**	**8**	**4**	<1	<1	<1
	8/21/98	**22**	**9**	<0.5	<0.5	<0.5	<0.5
	1/9/02	**359**	**21.4**	**17.2**	<1	<1	<1
	4/5/02	**67.6**	3	**1.3**	<1	<1	<1
	10/6/04	**7**	2.6	<1	<1	<1	<1
	5/24/05	4.7	2.7	<1	<1	<1	<1
	9/27/05	**14**	3.4	<1	<1	<1	<1
	5/4/06	**11**	4.2	<1	<1	<1	<1
	11/14/06	**24**	2.6	<1	<1	<1	<1
	5/1/07	4.5	1.3	<1	<1	<1	<1
	10/30/07	5	1.2	<1	<1	<1	<2
	5/6/08	**12**	2.8	<1	<1	<1	<2
	11/5/08	**25**	2.5	<1	<1	<1	<2
	5/12/09	**6.7**	1.2	<1	<1	<1	<1
	10/28/09	**11**	2.1	<1	<1	<1	<1
	5/27/10	**10**	4.9	<1	<1	<1	<1
	11/4/10	**16**	2.5	1.5	<1	<1	<1
	7/12/11	**5.4**	1.5	<1	<1	<1	<1
	11/15/11	**8.9**	1.5	<1	<1	<1	<1
	5/31/12	4.3	1.7	<1	<1	<1	<1
	11/9/12	**12**	2.8	<1	<1	<1	<1
	5/22/13	**8.8**	2.6	<1	<1	<1	<1
	11/19/13	**6.6**	1.3	<1	<1	<1	<1
	7/28/14	3.5	1.6	<1	<1	<1	<1
	6/17/15	3.9	2.3	<1	<1	<1	<1
	8/23/16	**5.6**	1.1	<1	<1	<1	<1
	9/20/17	4.7	1.3	<1	<1	<1	<1
	9/11/18	**5.4**	1.3	<1	<1	<1	<1
	9/10/19	**6.8**	1.4	<1	<1	<1	<1
	10/21/20	**5.6**	1.1	<1	<1	<1	<1
OP-7	4/29/96	<1	1	<1	<1	<1	<1
	11/21/97	<1	2	<1	<1	<1	<1
	8/21/98	0.8	1	<0.5	<0.5	<0.5	<0.5
	1/9/02	4.2	2.2	0.58 J	<1	<1	<1
	10/6/04	<1	<1	<1	<1	<1	<1
	5/23/05	<1	<1	<1	<1	<1	<1
	9/27/05	<1	1.1	<1	<1	<1	<1
	5/4/06	<1	<1	<1	<1	<1	<1
	11/14/06	1.3	1.6	<1	<1	<1	<1
	5/2/07	<1	<1	<1	<1	<1	<1
	10/30/07	1.9	<1	<1	<1	<1	<2
	5/6/08	<1	1.3	<1	<1	<1	<2
	11/5/08	<1	1.4	<1	<1	<1	<2
	5/12/09	<1	<1	<1	<1	<1	<1
	10/29/09	<1	1.0	<1	<1	<1	<1
	7/12/11	<1	<1	<1	<1	<1	<1
	11/16/11	<1	<1	<1	<1	<1	<1

Table 5. Groundwater Analytical Results Summary
Chlorinated Volatile Organic Compounds
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Date Sampled	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
NY State Groundwater Quality Standards		**5**	**5**	**5**	**5**	**5**	**2**
OP-8	4/29/96	**300**	**26**	**72**	<1	<1	<1
	11/21/97	**40**	**20**	<2	<2	<2	<2
	1/11/02	**79**	3	3	<0.5	<0.5	<0.5
	1/11/02	**13.7**	0.68 J	1.2	<1	<1	<1
	10/6/04	**52**	1.3	<1	<1	<1	<1
	5/24/05	**30**	<1	<1	<1	<1	<1
	9/27/05	**22**	1.4	<1	<1	<1	<1
	5/3/06	**16**	<1	<1	<1	<1	<1
	11/15/06	**16**	1.8	<1	<1	<1	<1
	5/2/07	**9.2**	<1	<1	<1	<1	<1
	10/31/07	5	<1	<1	<1	<1	<2
	5/7/08	**9.2**	<1	<1	<1	<1	<2
	11/6/08	4.8	<1	<1	<1	<1	<2
	5/13/09	**7.1**	<1	<1	<1	<1	<1
	10/28/09	4.2	<1	<1	<1	<1	<1
	5/27/10	**5.7**	<1	<1	<1	<1	<1
	11/2/10	4.1	<1	<1	<1	<1	<1
	7/13/11	5.0	<1	<1	<1	<1	<1
	11/16/11	3.9	<1	<1	<1	<1	<1
	5/31/12	2.6	<1	<1	<1	<1	<1
	11/6/12	3.0	<1	<1	<1	<1	<1
	5/23/13	4.7	<1	<1	<1	<1	<1
	11/19/13	3.3	<1	<1	<1	<1	<1
	7/31/14	2.6	<1	<1	<1	<1	<1
	6/17/15	3.8	<1	<1	<1	<1	<1
	8/24/16	2.4	<1	<1	<1	<1	<1
	9/20/17	3.7	<1	<1	<1	<1	<1
	9/12/18	2.0	<1	<1	<1	<1	<1
	9/11/19	1.2	<1	<1	<1	<1	<1
	10/22/20	1.4	<1	<1	<1	<1	<1
OP-9	5/1/96	**120**	**110**	2	<1	<1	<1
	11/20/97	**64**	**17**	**31**	<2	<2	<2
	8/22/98	**120**	**86**	1	<0.5	<0.5	<0.5
	1/11/02	**74**	**38.8**	2.3	<1	<1	<1
	10/6/04	**130**	**46**	<1	<1	<1	<1
	5/25/05	**91**	**26**	<1	<1	<1	<1
	9/27/05	**94**	**24**	<1	<1	<1	<1
	5/4/06	**76**	**24**	<1	<1	<1	<1
	11/15/06	**78**	**26**	<1	<1	<1	<1
	5/2/07	**64**	**25**	<1	<1	<1	<1
	10/31/07	**52**	**14**	<1	<1	<1	<2
	5/6/08	**82**	**26**	<1	<1	<1	<2
	11/4/08	**26**	**6**	<1	<1	<1	<2
	5/12/09	**35**	**7.6**	<1	<1	<1	<1
	10/29/09	**46**	**11**	<1	<1	<1	<1
	5/26/10	**32**	**7.2**	<1	<1	<1	<1
	11/2/10	**33**	**6.4**	<1	<1	<1	<1
	7/14/11	**47**	**8.6**	<1	<1	<1	<1
	11/14/11	**44**	**8.9**	<1	<1	<1	<1
	5/29/12	**24**	**5.0**	<1	<1	<1	<1
	11/5/12	**36**	**6.8**	<1	<1	<1	<1
	5/22/13	**31**	**5.7**	<1	<1	<1	<1
	11/18/13	**26**	**5.6**	<1	<1	<1	<1
	7/31/14	**24**	3.6	<1	<1	<1	<1
	6/15/15	**15**	3.1	<1	<1	<1	<1
	8/23/16	**33**	4.4	<1	<1	<1	<1
	9/20/17	**30**	4.6	<1	<1	<1	<1
	9/12/18	**29**	4.9	<1	<1	<1	<1
	9/10/19	**26**	4.3	<1	<1	<1	<1
OP-10	5/2/96	**25**	1	<1	<1	<1	<1
	11/21/97	**24**	2	<1	<1	<1	<1
	8/21/98	**8**	2	<0.5	<0.5	<0.5	<0.5
	1/7/02	Dry	Dry	Dry	Dry	Dry	Dry
	10/5/04	**8.8**	1.4	<1	<1	<1	<1
	5/23/05	2.8	<1	<1	<1	<1	<1
	5/3/06	4.5	<1	<1	<1	<1	<1
	11/14/06	**14**	1.6	<1	<1	<1	<1
	5/1/07	3	<1	<1	<1	<1	<1
	5/5/08	4.2	<1	<1	<1	<1	<2

Table 5. Groundwater Analytical Results Summary
Chlorinated Volatile Organic Compounds
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Date Sampled	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
NY State Groundwater Quality Standards		**5**	**5**	**5**	**5**	**5**	**2**
OP-11	5/2/96	**3,100**	**70**	**9**	<1	<1	<1
	11/21/97	**1,300**	**24**	<20	<20	<20	<20
	8/22/98	**5,400**	**62**	**9**	<0.5	<0.5	<0.5
	1/12/02	**298**	**43.6**	**26.6**	<1	<1	<1
	10/7/04	**250**	4.9	<2	<2	<2	<2
	5/24/05	**130**	**12**	2.8	<1	<1	<1
	9/28/05	**32**	2.1	2	<1	<1	<1
	5/2/06	**39**	2	<1	<1	<1	<1
	11/13/06	**50**	**5.3**	1.2	<1	<1	<1
	4/30/07	**50**	3.3	<1	<1	<1	<1
	10/29/07	**10**	<1	<1	<1	<1	<2
	5/7/08	**30**	<1	<1	<1	<1	<2
	11/4/08	**37**	<1	<1	<1	<1	<2
	5/13/09	**65**	1.9	<1	<1	<1	<1
	10/29/09	**26**	1.2	<1	<1	<1	<1
	5/27/10	**80**	2.0	<1	<1	<1	<1
	11/2/10	**17**	<1	<1	<1	<1	<1
	7/13/11	**120**	2.0	1.7	<1	<1	<1
	11/16/11	**40**	1.2	<1	<1	<1	<1
	5/31/12	**84**	1.7	<1	<1	<1	<1
	11/6/12	**52**	1.5	<1	<1	<1	<1
	11/6/12**	**47**	1.4	<1	<1	<1	<1
	5/23/13	**300**	2.8	<2.5	<2.5	<2.5	<2.5
	11/20/13	**240**	3.2	<2	<2	<2	<2
	7/31/14	**390**	4.1	<2	<2	<2	<2
	6/18/15	**35**	<1	<1	<1	<1	<1
	8/24/16	**15**	1.0	<1	<1	<1	<1
DUP	8/24/16	**16**	<1	<1	<1	<1	<1
	9/21/17	**58**	1.1	1.2	<1	<1	<1
DUP	9/21/17	**60**	1.1	1.2	<1	<1	<1
	9/11/18	**29**	1.1	1.4	<1	<1	<1
	9/11/19	**24**	10.0	<1	<1	<1	<1
	10/22/20	**5.9**	<1	<1	<1	<1	<1
DUP	10/22/20	4.2	<1	<1	<1	<1	<1
OP-12	5/2/96	**21**	<1	<1	<1	<1	<1
	11/20/97	5	3	2	<1	<1	<1
	8/22/98	3	1	<0.5	<0.5	<0.5	<0.5
	1/10/02	1.6	0.71 J	**9.8**	<1	<1	<1
	10/7/04	1	<1	<1	<1	<1	<1
	5/24/05	<1	<1	<1	<1	<1	<1
	5/1/07	<1	<1	<1	<1	<1	<1
	9/10/19	<1	<1	<1	<1	<1	<1
OP-13	11/20/97	<1	<1	<1	<1	<1	<1
	8/20/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	1/10/02	<1	<1	<1	<1	<1	<1
	5/22/13	<1	<1	<1	<1	<1	<1
OP-14	11/20/97	5	1	<1	<1	<1	<1
	8/20/98	**6**	1	<0.5	<0.5	<0.5	<0.5
	1/10/02	3.4	1.3	<1	<1	<1	<1
	10/4/04	2.6	<1	<1	<1	<1	<1
	5/23/05	1.6	<1	<1	<1	<1	<1
	9/27/05	2.8	<1	<1	<1	<1	<1
	5/3/06	1.5	<1	<1	<1	<1	<1
	11/14/06	1.7	<1	<1	<1	<1	<1
	5/1/07	<1	<1	<1	<1	<1	<1
	10/30/07	**5.1**	<1	<1	<1	<1	<2
	5/6/08	5	<1	<1	<1	<1	<2
	11/5/08	4.3	<1	<1	<1	<1	<2
	5/12/09	2.9	<1	<1	<1	<1	<1
	10/28/09	2.5	<1	<1	<1	<1	<1
	5/26/10	1.2	<1	<1	<1	<1	<1
	11/3/10	1.3	<1	<1	<1	<1	<1
	7/12/11	2.1	<1	<1	<1	<1	<1
	11/14/11	1.2	<1	<1	<1	<1	<1
	5/29/12	<1	<1	<1	<1	<1	<1
	11/8/12	2	<1	<1	<1	<1	<1
	5/22/13	<1	<1	<1	<1	<1	<1
	11/18/13	3.7	<1	<1	<1	<1	<1
	7/28/14	2.4	<1	<1	<1	<1	<1
	6/15/15	<1	<1	<1	<1	<1	<1
	8/23/16	2.3	<1	<1	<1	<1	<1
	9/19/17	4	<1	<1	<1	<1	<1
	9/11/18	2.6	<1	<1	<1	<1	<1
	9/10/19	1.8	<1	<1	<1	<1	<1
	10/20/20	2	<1	<1	<1	<1	<1
OP-15	11/20/97	<1	1	<1	<1	<1	<1
	8/20/98	<0.5	0.8	<0.5	<0.5	<0.5	<0.5
	1/10/02	<1	<1	<1	<1	<1	<1
	5/1/07	<1	<1	<1	<1	<1	<1

Table 5. Groundwater Analytical Results Summary
Chlorinated Volatile Organic Compounds
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Date Sampled	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
NY State Groundwater Quality Standards		**5**	**5**	**5**	**5**	**5**	**2**
OP-16	8/20/98	**62,000**	**100**	2	<0.5	2	<0.5
	1/12/02	**2,080**	**46.1**	2.3	<1	<1	<1
	10/7/04	**950**	**39**	<10	<10	<10	<10
	5/24/05	**1,700**	**74**	<20	<20	<20	<20
	9/28/05	**890**	**40**	<10	<10	<10	<10
	5/2/06	**1,800**	**81**	<20	<20	<20	<20
	11/13/06	**380**	**24**	7.1	<5	<5	<5
	4/30/07	**150**	**11**	6.7	<2	<2	<2
	10/29/07	**4,700**	**130**	<50	<50	<50	<100
	5/7/08	**4,600**	**200**	<50	<50	<50	<100
	11/4/08	**14,000**	**280**	<100	<100	<100	<200
	5/13/09	**3,700**	**110**	<50	<50	<50	<50
	10/29/09	**3,600**	**60**	<25	<25	<25	<25
	5/27/10	**700**	**23**	<10	<10	<10	<10
	11/2/10	**1,400**	**38**	<10	<10	<10	<10
	7/13/11	**70**	**5.9**	**12**	<1	<1	<1
	11/16/11	**65**	4.4	**10**	<1	<1	<1
	5/31/12	**45**	4.3	**11**	<1	<1	<1
	11/6/12	**38**	4.0	**13**	<1	<1	<1
	11/6/12**	**40**	4.4	**13**	<1	<1	<1
	5/23/13	**700**	**17**	**9.3**	<5	<5	<5
	11/20/13	**2,200**	**32**	<20	<20	<20	<20
	7/31/14	**12,000**	<100	<100	<100	<100	<100
	6/18/15	**2,500**	<20	<20	<20	<20	<20
	8/24/16	**8,700 D**	<50	<50	<50	<50	<50
	9/21/17	**21,000 D**	**77**	<50	<50	<50	<50
	9/11/18	**7,000**	<50	<50	<50	<50	<50
	9//11/19	**2,000**	<25	<25	<25	<25	<25
	10/22/20	**260**	<2.5	**9.5**	<2.5	<2.5	<2.5
OP-17	7/21/11	<1	<1	<1	<1	<1	<1
	11/14/11	<1	<1	<1	<1	<1	<1
PZ-1	4/30/96	**120**	**16**	**40**	<1	<1	<1
	11/21/97	2	<1	<1	<1	<1	<1
	8/22/98	**16**	2	<0.5	<0.5	<0.5	<0.5
	1//11/02	0.90 J	<1	<1	<1	<1	<1
	5/25/05	**18**	<1	<1	<1	<1	<1
	9/29/05	1.4	<1	<1	<1	<1	<1
	5/4/06	4.3	<1	<1	<1	<1	<1
	11/15/06	3.4	<1	<1	<1	<1	<1
	5/2/07	1	<1	<1	<1	<1	<1
	10/31/07	1	<1	<1	<1	<1	<2
	5/6/08	3.5	<1	<1	<1	<1	<2
	11/6/08	<1	<1	<1	<1	<1	<2
	5/12/09	2.1	<1	<1	<1	<1	<1
	10/28/09	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
BP-1	4/30/96	<1	<1	<1	<1	<1	<1
	11/19/97	<1	<1	2	<1	<1	<1
	8/20/98	<0.5	**8**	**13**	<0.5	<0.5	<0.5
	1/8/02	<1	3.3	**10**	<1	<1	<1
	5/23/05	<1	<1	5	<1	<1	<1
BP-2	4/29/96	<1	<1	<1	<1	<1	<1
	11/18/97	<1	<1	**7**	<1	<1	<1
	8/20/98	<0.5	<0.5	**16**	<0.5	<0.5	<0.5
	1/10/02	<1	<1	**22**	<1	<1	<1
BP-3	4/29/96	<1	2	**31**	<1	<1	<1
	11/21/97	<1	<1	<1	<1	<1	<1
	8/21/98	<0.5	<0.5	**11**	<0.5	<0.5	<0.5
	1/12/02	1.5	**7**	**22.1**	<1	<1	<1
	10/6/04	**33**	**9**	**24**	<1	<1	**3.2**
	5/23/05	**22**	**9.4**	**26**	<1	<1	**2.5**
	9/27/05	<1	<1	<1	<1	<1	<1
	5/3/06	**16**	2.8	**24**	<1	<1	**2.8**
	11/15/06	**12**	**13**	**27**	<1	<1	**3.7**
	5/2/07	<1	<1	<1	<1	<1	<1
	10/30/07	**20**	**5.9**	**24**	<1	<1	**6.1**
	5/6/08	**11**	3.5	**22**	<1	<1	**5.2**
	11/5/08	**13**	**5.6**	**23**	<1	<1	**3.6**
	5/12/09	3.4	2.1	**15**	<1	<1	**4.2**
	10/29/09	**6.0**	3.6	**17**	<1	<1	**2.8**
	5/27/10	**5.5**	4.9	**16**	<1	<1	**2.7**
	11/4/10	3.9	4.6	**15**	<1	<1	**3.9**
	7/12/11	3.8	**9.4**	**18**	<1	<1	**2.8**
	11/15/11	2.0	4.3	**12**	<1	<1	**9.3**
	5/31/12	2.0	**8.9**	**19**	<1	<1	**2.1**
	11/5/12	1.8	**7.0**	**16**	<1	<1	**4.9**
	5/23/13	<1	4.2	**12**	<1	<1	**8.9**
	11/19/13	<1	2.2	**13**	<1	<1	**11**
	7/31/14	<1	1.3	**7.2**	<1	<1	**12**
	6/17/15	<1	4.8	**17**	<1	<1	**5**
	8/23/16	<1	1.1	**6.9**	<1	<1	**9.2**
	9/21/17	<1	<1	**7.3**	<1	<1	**14**
	9/12/18	<1	4.5	**20**	<1	<1	**4.4**
	9/10/19	<1	1.8	**10**	<1	<1	**5.3**
	10/21/20	<1	<1	<1	<1	<1	<1

Table 5. Groundwater Analytical Results Summary
Chlorinated Volatile Organic Compounds
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Date Sampled	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
NY State Groundwater Quality Standards		**5**	**5**	**5**	**5**	**5**	**2**
BP-4	4/29/96	15	14	21	<1	<1	<1
	11/21/97	**11**	**10**	**29**	<1	<1	<1
	8/21/98	2	1	**21**	<0.5	<0.5	<0.5
	1/12/02	2.9	**5.4**	**21.4**	<1	<1	<1
	10/7/04	**8.1**	**17**	**44**	<1	<1	<1
	5/24/05	**6.5**	**16**	**48**	1.3	<1	<1
	9/27/05	<1	3.2	**66**	<1	<1	<1
	5/3/06	**6.3**	**20**	**46**	<1	<1	<1
	11/15/06	**7.6**	**15**	**49**	<1	<1	<1
	5/2/07	**6**	**18**	**43**	<1	<1	<1
	10/31/07	**19**	**8.7**	**40**	<1	<1	<2
	5/7/08	**10**	**21**	**37**	<1	<1	<2
	11/6/08	**8.4**	**20**	**34**	<1	<1	<2
	5/13/09	**8.2**	**21**	**33**	<1	<1	<1
	10/28/09	**8.4**	**20**	**29**	<1	<1	<1
	5/27/10	**8.7**	**24**	**38**	<1	<1	<1
	11/2/10	**7.6**	**21**	**30**	<1	<1	<1
	7/13/11	<1	**6.1**	**41**	<1	<1	**2.2**
	11/16/11	<1	**6.2**	**38**	<1	<1	1.4
	5/31/12	**5.7**	**20**	**31**	<1	<1	<1
	11/5/12	**8.1**	**20**	**31**	<1	<1	<1
	5/23/13	**7.2**	**22**	**30**	<1	<1	<1
	11/19/13	**6.0**	**19**	**32**	<1	<1	1.9
	7/31/14	**8.7**	**20**	**25**	<1	<1	<1
	6/17/15	<1	<1	**21**	<1	<1	**20**
DUP	6/17/15	<1	<1	**21**	<1	<1	**19**
	8/24/16	**8.8**	**22**	**23**	<1	1.1	1
	9/20/17	**1.4**	**1.3**	**21**	<1	<1	**7.9**
	9/11/18	**8.6**	**21**	**23**	<1	<1	<1
	9/11/19	**5.5**	**17**	**22**	<1	<1	1.9
	10/22/20	**7.1**	**17**	**23**	<1	<1	<1
BP-5	5/23/96	<5	<5	<5	<5	<5	<5
	11/21/97	<1	<1	**1**	<1	<1	<1
	8/20/98	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
	1/9/02	<1	<1	<1	<1	<1	<1
BP-6	5/23/96	<5	<5	<5	<5	<5	<5
	11/19/97	<1	<1	<1	<1	<1	<1
	8/21/98	<0.5	<0.5	2	<0.5	<0.5	<0.5
	1/9/02	<1	<1	3.2	<1	<1	<1
	10/5/04	<1	<1	<1	<1	<1	<1
	5/23/05	<1	<1	<1	<1	<1	<1
	9/27/05	<1	<1	<1	<1	<1	<1
BP-7	7/21/11	<1	<1	**12**	<1	<1	<1
	11/14/11	<1	1.1	**9.4**	<1	<1	<1
	6/17/15	<1	1.2	**11**	<1	<1	<1
BP-8	7/21/11	<1	1.3	**12**	<1	<1	<1
	11/14/11	<1	1.0	**11**	<1	<1	<1
BP-9	7/21/11	<1	<1	**12**	<1	<1	<1
	11/15/11	<1	<1	**8.9**	<1	<1	<1
BP-10	7/21/11	<1	<1	<1	<1	<1	<1
	11/15/11	<1	<1	<1	<1	<1	<1
BP-11	7/15/11	**59**	**3.9**	**9.8**	<1	<1	<1
	11/16/11	**34**	**1.5**	**9.3**	<1	<1	<1
	6/1/12	**54**	<1	<1	<1	<1	<1
	11/6/12	<1	<1	<1	<1	<1	<1
	11/6/12*	<1	<1	<1	<1	<1	<1
	5/24/13	**6.7**	<1	<1	<1	<1	<1
	11/19/13	1.7	<1	4.9	<1	<1	<1
	8/1/14	**48**	2.5	**10**	<1	<1	<1
	6/18/15	<1	<1	4.8	<1	<1	<1
	8/24/16	<1	<1	4.1	<1	<1	<1
	9/21/17	**17**	1.9	**11**	<1	<1	<1
	9/11/18	<1	<1	<1	<1	<1	<1
DUP	9/11/18	<1	<1	<1	<1	<1	<1
	9/10/19	<1	<1	2.2	<1	<1	<1
	10/23/20	**21**	1.7	**9.1**	<1	<1	<1
OI-1	5/25/05	**13,000**	**120**	<100	<100	<100	<100
OI-2	10/30/07	**460**	**70**	<5	<5	<5	<10
	5/7/08	**180**	3.7	<2.5	<2.5	<2.5	<5
	11/3/08	**210**	**43**	<2	<2	<2	<4
	5/13/09	**94**	1.7	<1	<1	<1	<1
	10/29/09	**190**	3.3	<1	<1	<1	<1

Table 5. Groundwater Analytical Results Summary
Chlorinated Volatile Organic Compounds
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Date Sampled	PCE	TCE	Cis-1,2-DCE	Trans-1,2-DCE	1,1-DCE	Vinyl Chloride
NY State Groundwater Quality Standards		**5**	**5**	**5**	**5**	**5**	**2**
OI-5	11/12/03*	**200,000**	<2,500	<2,500	<2,500	<2,500	<2,500
	9/28/05	3.3	<1	<1	<1	<1	<1
	5/2/06	**14,000**	<200	<200	<200	<200	<200
	11/14/06	**37,000**	<250	<250	<250	<250	<250
	4/30/07	**1,500**	<20	<20	<20	<20	<20
	10/30/07	**280**	<2.5	4.4	<2.5	<2.5	<5
	5/7/08	**46**	1.2	<1	<1	<1	<2
	11/3/08	**11,000**	<100	<100	<100	<100	<200
	5/13/09	**530**	<5	<5	<5	<5	<5
	10/29/09	**71**	1.7	1.0	<1	<1	<1
	5/27/10	**210**	1.8	<1	<1	<1	<1
	11/2/10	**100**	1.1	<1	<1	<1	<1
	7/14/11	**660**	1.3	2.0	<1	<1	<1
	11/16/11	**300**	<2.5	<2.5	<2.5	<2.5	<2.5
	6/1/12	**110**	1.1	<1	<1	<1	<1
	11/6/12	**100**	2.5	<1	<1	<1	<1
	11/6/12**	**97**	2.5	<1	<1	<1	<1
	5/24/13	**300**	2.8	<2.5	<2.5	<2.5	<2.5
	11/19/13	**200**	<2	<2	<2	<2	<2
	8/1/14	**420**	<5	<5	<5	<5	<5
	6/18/15	**710**	2.6	<2.5	<2.5	<2.5	<2.5
	8/24/16	**81**	1.2	1.2	<1	<1	<1
	9/21/17	**210 D**	1.2	2.2	<1	<1	<1
OI-7	5/7/08	**210**	2.2	<2	<2	<2	<4
	11/4/08	**10**	2.9	<1	<1	<1	<2
	5/13/09	4.1	<1	<1	<1	<1	<1
	10/29/09	4.0	1.7	1.1	<1	<1	<1
	5/27/10	**9.8**	<1	<1	<1	<1	<1
	11/2/10	2.0	<1	<1	<1	<1	<1
	7/13/11	**7.2**	<1	<1	<1	<1	<1
	11/16/11	1.9	<1	<1	<1	<1	<1
BI-1	11/12/03*	**3,800**	<130	<130	<130	<130	<130
	5/25/05	**680**	<10	**10**	<5	<5	<5
	5/2/06	2.5	<1	<1	<1	<1	<1
	11/14/06	**150**	3.6	**16**	<1	<1	<1
	4/30/07	**180**	<2	**11**	<2	<2	<2
	10/29/07	2.0	3.1	**18**	<1	<1	<2
	5/7/08	<2	2.8	**17**	<1	<1	<2
	11/4/08	<2	2.3	16	<1	<1	<2
	5/13/09	<1	2.4	**14**	<1	<1	<1
	10/29/09	<1.0	2.1	**12**	<1.0	<1.0	<1.0
	5/27/10	**34**	2.6	**14**	<1.0	<1.0	<1.0
	11/2/10	<1	1.8	**11**	<1	<1	<1
	7/14/11	**35**	2.1	**12**	<1	<1	<1
L-2	4/30/96	<1	<1	<1	<1	<1	<1
	11/21/97	<1	<1	<1	<1	<1	<1
	11/21/97	<1	<1	<1	<1	<1	<1
	8/22/98	<0.5	<0.5	**7**	<0.5	<0.5	<0.5
	1/11/02	<1	<1	**7.4**	<1	<1	<1
	5/25/05	<1	<1	4	<1	<1	<1
L-3	4/30/96	1	<1	1	<1	<1	<1
	11/21/97	1	<1	1	<1	<1	<1
	8/22/98	0.8	0.6	1	<0.5	<0.5	<0.5
	1/7/02	Dry	Dry	Dry	Dry	Dry	Dry

Notes:

1. Concentrations are presented in micrograms per liter.
2. NY State Groundwater Quality Standards from 6 NYCRR Part 703.5.
3. 11/12/03* in situ chemical-injection well; sample subsequent to installation in November 2003.
4. ** sample preserved with ascorbic acid.
5. Bold = positive detection.
6. DCE = dichloroethene.
7. J = concentration estimated; below detection limit.
8. PCE = tetrachloroethene.
9. TCE = trichloroethene.
10. D = sample dilution.

Table 6. Groundwater Sampling Physical Parameters
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Sampling Date	Time	Temperature (°C)	pH	Specific Conductance (micromhos/cm)	Dissolved Oxygen (mg/l)	ORP (mV)	Turbidity (NTUs)
OP-2	4/30/07	17:20	12.58	6.80	2,370	2.33	185.4	3
	10/21/20	17:55	13.17	5.76	2,106	1.14	-11	16
OP-3	5/1/96	08:52	NM	7.30	1,600	NM	NM	50
	11/19/97	14:10	10.3	7.50	1,146	NM	NM	16
	8/20/98	11:50	11	7.16	1,517	NM	NM	16
	1/8/02	15:45	11.9	7.27	1,041	2.81	NM	35
	10/5/04	13:52	14.1	7.67	1,156	0.16	-260	169
	5/23/05	15:45	11.8	7.19	1,146	2.24	-49	71
	9/27/05	14:12	13.7	7.20	700	3.10	-45	14
	5/3/06	11:19	10.9	7.14	1,392	3.73	NM	73
	11/14/06	15:29	11.4	7.38	1,417	2.50	-55	44
	5/1/07	17:50	11.44	7.16	1,499	7.80	3.7	33
	10/30/07	15:40	16.64	8.07	889	0.11	-345	3
	5/5/08	17:20	13.4	7.79	744	0.15	-308	50
	11/5/08	11:38	15.8	7.83	1,054	1.80	-291	5
	5/12/09	13:50	13.1	8.02	917	0.07	-294	24
	10/28/09	16:07	15.1	7.13	1,069	0.91	-72	51
	5/27/10	11:24	14	7.81	1,142	0.02	-316	58
	11/4/10	10:30	15.1	7.84	950	0.25	-253	2
	7/12/11	13:51	17.84	7.79	1,004	0.02	-217	27
	11/15/11	16:05	16.74	8.17	1,040	0.15	-220	5
	5/30/12	15:32	14.04	7.87	1,064	0.13	-213	8
	11/8/12	15:20	14.01	7.75	1,078	0.23	-201	10
	5/22/13	12:24	15.92	7.26	1,462	1.69	-30	--
	11/18/13	13:55	12.71	7.25	1,273	0.75	-121	7
	7/28/14	17:50	13.74	7.80	918	0.26	-196	30
	6/17/15	14:05	15.62	7.99	794	0.90	-199	60
	8/23/16	17:40	14.77	6.97	722	0.51	-168	40
	9/19/17	18:45	14.79	6.98	785	0.51	-178	34
	9/11/18	11:56	16.16	8.56	936	0.07	-251	14
	9/10/19	16:25	16.2	7.13	1,256	0.07	-1	10
	10/21/20	13:15	15.11	6.01	1,041	1.70	5	20
OP-6	4/30/96	10:05	NM	7.30	1,570	NM	NM	29
	11/20/97	10:06	13.3	7.13	1,118	NM	NM	57
	8/21/98	15:10	16.1	7.14	1,075	NM	NM	40
	1/9/02	14:20	15.8	7.18	947	5.00	104.1	241
	04/5/02*	09:26	7.7	6.97	550	4.57	123	NR
	10/6/04	14:30	15.9	7.20	1,302	4.53	14	9
	5/24/05	10:15	12.3	7.09	1,184	5.98	3	12
	9/27/05	14:59	16.8	7.16	750	5.40	75	1
	5/3/06	12:16	11.9	7.20	1,431	4.56	-36	8
	11/14/06	16:10	13.5	7.36	1,204	6.55	-5	5
	5/1/07	18:50	12.19	7.15	1,277	5.70	76.1	25
	10/30/07	17:35	DRY	DRY	DRY	DRY	DRY	DRY
	5/6/08	16:12	11.7	7.20	884	2.42	-59	35
	11/5/08	11:53	14.7	7.39	1,325	2.17	-57	75
	5/12/09	14:51	15.3	7.43	1,174	1.94	-24	27
	10/28/09	18:05	13.4	7.00	1,203	5.90	150	8
	5/27/10	12:00	17	6.79	802	3.67	84	9
	11/4/10	11:50	17.45	7.02	1,349	Malfunctioned	23	9
	7/12/11	15:07	17.27	7.31	1,287	4.88	20	17
	11/15/11	15:10	20.03	7.17	1,151	5.52	11	35**
	5/30/12	12:47	16.15	7.06	1,121	4.53	45	2
	11/9/12	9:10	13.82	6.99	1,129	4.28	57	2
	5/22/13	14:18	16.74	6.85	1,579	4.41	171	--
	11/19/13	11:35	16.28	7.06	1,193	4.25	51	4
	7/28/14	18:35	14.50	7.31	951	4.35	89	10
	6/17/15	15:30	18.21	7.61	1,151	4.01	29	26
	8/23/16	17:05	21.46	7.45	1,348	5.60	84	26
	9/20/17	13:55	18.50	7.39	1,020	5.46	-25	3
	9/11/18	13:48	18.07	7.37	1,184	6.57	120	6
	9/10/19	11:05	20.90	7.14	1,241	5.41	79	28
	10/21/20	14:00	18.12	7.09	1,351	3.95	79	19
OP-7	4/29/96	13:47	NM	7.30	1,660	NM	NM	28
	11/21/97	13:15	11.5	7.18	1,062	NM	NM	22
	8/21/98	14:05	13.2	7.31	1,163	NM	NM	46
	1/9/02	15:38	13.2	7.23	1,016	9.24	95.1	8
	10/6/04	9:53	14.7	6.98	1,477	5.90	28	21
	5/23/05	18:01	11.7	7.07	1,409	6.07	61	33
	9/27/05	16:20	14.7	7.78	847	4.60	122	1
	5/3/06	14:25	13.3	7.20	1,465	5.05	8	11
	11/14/06	17:00	12.2	7.28	1,292	4.10	107	5
	5/2/07	10:55	13.54	7.19	1,356	4.17	47	3
	10/30/07	16:58	16.34	7.14	1,255	5.29	16	5
	5/6/08	17:40	12.6	7.00	649	3.78	39	10
	11/5/08	15:04	16	7.12	1,390	4.63	-11	16
	5/12/09	18:00	16.2	7.36	1,404	4.63	96	20
	10/29/09	10:31	16.1	7.06	1,359	3.61	107	6
	7/12/11	19:05	17.0	7.11	1,608	4.27	-5	6
	11/15/11	17:20	15.48	7.21	1,155	5.27	-60	8

Table 6. Groundwater Sampling Physical Parameters
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Sampling Date	Time	Temperature (°C)	pH	Specific Conductance (micromhos/cm)	Dissolved Oxygen (mg/l)	ORP (mV)	Turbidity (NTUs)
OP-8	4/29/96	16:15	NM	7.30	1,470	NM	NM	12
	11/21/97	13:30	10.8	7.00	1,132	NM	NM	11
	8/21/98	16:15	12.7	7.35	1,179	NM	NM	10
	1/11/02	17:58	11.6	7.49	958	9.33	133	24
	10/6/04	15:35	15.7	7.16	1,325	4.21	22	40
	5/24/05	14:55	14.3	7.06	1,401	3.54	-27	17
	9/27/05	18:55	13.7	7.15	826	3.50	24	3
	5/3/06	16:18	12	7.17	1,359	5.04	13	2
	11/15/06	16:35	12.5	7.18	1,133	2.62	-44	17
	5/2/07	17:25	12.4	7.30	1,348	5.14	-7.3	6
	10/31/07	10:43	14.04	7.20	1,000	5.93	22	5
	5/7/08	10:03	12.6	6.97	949	4.91	49	12
	11/6/08	10:38	15.8	7.16	1,168	4.21	29	4
	5/13/09	10:11	12.3	7.33	1,151	5.57	34	8
	10/28/09	10:46	16.4	7.03	960	2.68	-36	10
	5/27/10	14:35	17.7	7.06	1,352	4.18	-25	10
	11/2/10	10:57	14.15	7.08	1,006	4.82	10	4
	7/13/11	13:00	16.92	7.17	1,384	5.81	8	4
	11/16/11	10:36	16.72	7.24	1,034	4.55	-66	5
	5/31/12	12:31	13.65	7.18	1,331	4.70	15	3
	11/6/12	12:19	14.97	7.23	1,069	3.98	69	2
	5/23/13	11:07	12.88	7.10	1,339	5.00	86	4
	11/19/13	13:40	12.86	7.10	1,292	4.92	75	2
	7/31/14	12:40	14.43	7.33	1,030	5.39	35	1
	6/17/15	17:20	13.12	7.24	1,162	4.32	93	4
	8/24/16	11:50	15.37	6.46	1,446	5.49	70	20
	9/20/17	17:05	16.9	7.7	1,175	4.89	26	8
	9/12/18	12:05	18.99	7.4	1,236	4.28	75	9
	9/11/19	15:55	16.3	7.2	1,378	5.31	105	8
	10/22/20	15:00	16.5	7.4	1,335	5.71	-28	2
OP-9	5/1/96	10:00	NM	7.30	1,250	NM	NM	2
	11/20/97	11:30	8.6	7.40	1,130	NM	NM	>200
	8/22/98	09:20	11.5	7.19	1,129	NM	NM	23
	1/11/02	11:22	11	7.35	955	2.74	1.1	37
	10/6/04	13:20	13.5	7.18	1,359	4.28	39	33
	5/25/05	14:50	10.4	7.92	1,516	5.54	30	7
	9/27/05	17:32	13	7.16	830	3.20	-24	4
	5/4/06	10:35	11.1	7.09	1,378	4.29	29	44
	11/15/06	14:00	12.2	7.09	1,510	3.25	13	5
	5/2/07	14:17	12.09	7.22	1,389	4.72	19.2	4
	10/31/07	12:12	13.75	7.17	1,164	3.35	-63	1
	5/6/08	12:50	13.4	7.00	867	4.89	17	6
	11/4/08	16:15	12.9	7.17	1,428	3.94	0	1
	5/12/09	16:55	11.4	7.35	1,129	6.10	41	2
	10/29/09	13:47	12.4	7.14	906	5.05	32	1
	5/26/10	18:30	16.1	NM	1,181	4.25	-4.9	2
	11/2/10	17:40	11.5	7.05	1,025	Malfunctioned	-1	1
	7/14/11	10:40	12.72	7.17	1,386	6.89	-24	1
	11/14/11	13:39	13.10	7.23	1,191	4.97	-36	6
	5/29/12	15:55	13.10	7.15	1,252	4.83	-20	4
	11/5/12	15:16	10.3	7.20	1,317	4.90	-18	2
	5/22/13	15:22	17.5	7.33	1,372	4.32	158	--
	11/18/13	17:01	9.57	NM	1,278	4.53	23	2
	7/31/14	15:25	14.78	7.27	1,142	5.00	-38	1
	6/15/15	17:22	14.59	7.22	1,327	4.25	-32	4
	8/23/16	9:30	12.40	7.23	1,317	4.17	-31	5
	9/20/17	11:30	13.20	7.25	1,311	4.29	-35	2
	9/12/18	10:55	15.76	7.25	1,311	4.90	4.9	4
	9/10/19	8:48	14.70	6.98	1,398	4.78	50	5
OP-10	5/2/96	09:15	NM	7.40	1,180	NM	NM	45
	11/21/97	09:15	NA	NA	NA	NM	NM	NA
	8/21/98	08:40	12.7	7.45	891	NM	NM	88
	1/7/02	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	10/5/04	10:56	14.5	7.04	912	5.92	91	1
	5/23/05	11:29	8	7.17	1,000	8.29	221	1
	9/27/05	11:52	DRY	DRY	DRY	DRY	DRY	DRY
	5//3/6	10:20	10.1	7.23	1,013	8.45	81	1
	11/14/06	13:25	13.1	7.23	1,092	7.03	189	6
	5/1/07	15:26	9.13	7.28	1,005	8.4	132	5
	10/29/07	11:02	DRY	DRY	DRY	DRY	DRY	DRY
	5/5/08	18:17	13.6	7.27	734	5.61	111	7
	11/5/08	DRY	DRY	DRY	DRY	DRY	DRY	DRY

Table 6. Groundwater Sampling Physical Parameters
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Sampling Date	Time	Temperature (°C)	pH	Specific Conductance (micromhos/cm)	Dissolved Oxygen (mg/l)	ORP (mV)	Turbidity (NTUs)
OP-11	5/2/96	09:55	NM	7.40	1,140	NM	NM	35
	11/21/97	14:15	11.5	7.01	1,157	NM	NM	68
	8/22/98	11:30	16.5	6.99	1,054	NM	NM	72
	1/12/02	8:52	13.9	7.09	909	1.60	83	21
	10/7/04	9:00	17.4	7.14	1,207	5.48	28	6
	5/24/05	16:35	11.9	7.15	1,299	4.91	-7	16
	9/28/05	10:24	13.4	7.17	832	2.70	62	1
	5/2/06	16:55	10.7	5.38	1,355	5.58	NM	3
	11/13/06	15:45	12.7	7.15	1,169	3.56	109	1
	4/30/07	16:33	10.89	7.17	1,339	5.43	39.6	1
	10/29/07	18:15	12.89	7.18	993	3.91	79.8	1
	5/7/08	15:25	10.8	7.19	867	7.63	69	3
	11/4/08	10:03	16.2	7.20	1,224	3.15	41	0
	5/13/09	11:06	13.4	7.36	1,081	7.06	109	1
	10/29/09	12:32	15.4	7.11	953	4.25	144	1
	5/27/10	18:44	14.5	7.16	988	5.60	177	0
	11/2/10	15:03	14.93	7.09	994	6.15	56	0
	7/13/11	17:20	15.45	7.16	1,395	6.08	58	1
	11/16/11	14:08	15.67	7.24	925	4.00	18	2
	5/31/12	14:35	15.91	7.01	1,011	4.02	16	1
	11/6/12	16:00	15.14	7.28	816	3.81	72	1
	5/23/13	15:50	13.73	7.18	1,058	3.91	52	4
	11/20/13	10:56	14.31	7.48	998	3.36	167	--
	7/31/14	17:25	15.71	7.25	1,005	6.35	46	Malfunctioned
	6/18/15	10:04	13.71	7.38	1,004	4.91	51	5
	8/24/16	10:45	14.48	6.54	1,129	4.98	93	2
	9/21/17	9:35	16.2	7.23	1,238	3.68	55	3
	9/11/18	17:40	16.37	7.39	1,193	3.78	90	5
	9/11/19	12:15	20.3	7.15	1,340	3.79	105	3
	10/22/20	10:30	15.3	7.19	1,111	3.95	-59	3
OP-12	5/2/96	10:15	NM	7.40	1,180	NM	NM	23
	11/20/97	14:30	10.6	7.43	901	NM	NM	>200
	8/22/98	10:00	13.4	7.27	881	NM	NM	>200
	1/10/02	15:26	11.7	7.55	936	0.94	72.8	335
	10/5/04	15:33	12.3	7.18	1,024	5.37	-32	4
	5/24/05	11:55	10.2	7.06	1,122	6.37	43	1
	5/1/07	11:40	12.25	7.12	1,052	5.67	90	4
	9/11/19	13:35	16.6	7.10	1,089	4.39	145	3
OP-13	5/22/13	11:19	16.95	10.80	777	10.74	-20	1
OP-14	11/20/97	15:50	10.6	7.54	1,151	NM	NM	>200
	8/20/98	10:00	9.2	7.38	996	NM	NM	43
	1/10/02	11:39	13.1	7.44	933	6.06	34.3	39
	10/4/04	15:13	13.8	7.01	967	5.56	66	3
	5/23/05	10:14	10.8	7.11	950	7.15	134	82
	9/27/05	11:30	13.9	6.97	677	6.20	240	1
	5/3/06	9:46	11.1	7.07	1,128	6.98	NM	37
	11/14/06	12:40	11.4	7.12	1,261	5.02	179	4
	5/1/07	14:49	12.7	7.07	1,210	6.92	105	14
	10/30/07	14:40	16.68	7.23	926	6.44	103	2
	5/6/08	13:50	12.9	7.05	891	5.16	71	19
	11/5/08	10:25	15.8	7.18	1,095	6.02	100	2
	5/12/09	12:55	12.7	7.34	958	5.99	124	2
	10/28/09	14:57	18.3	7.06	827	4.41	14.9	210
	5/26/10	17:35	15.2	6.87	1,079	5.60	31	2
	11/3/10	17:18	16.06	7.05	1,073	4.20	63	1
	7/12/11	10:37	12.75	6.95	1,227	5.69	175	3
	11/14/11	17:14	14.07	7.18	980	4.50	47	2
	5/29/12	12:50	17.45	6.93	1,129	5.38	10	4
	11/8/12	13:15	13.91	6.89	1,141	4.93	11	3
	5/22/13	10:03	12.93	6.80	1,274	8.32	262	--
	11/18/13	13:22	13.59	6.87	1,173	5.47	73	9
	7/28/14	15:00	12.00	7.21	1,107	4.12	-21	1
	6/15/15	15:25	13.89	7.04	1,055	4.37	-47	5
	8/23/16	12:30	13.80	7.04	1,065	4.36	-42	4
	9/19/17	17:40	13.60	7.03	1,071	4.48	-47	2
	9/11/18	10:05	12.42	7.00	963	5.70	131	2
	9/10/19	17:15	12.50	6.91	1,073	0.10	153	1
	10/20/20	17:50	17.30	7.31	1,056	6.31	82	1
OP-15	5/1/07	10:10	11.62	7.07	1,451	7.83	179.5	4

Table 6. Groundwater Sampling Physical Parameters
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Sampling Date	Time	Temperature (°C)	pH	Specific Conductance (micromhos/cm)	Dissolved Oxygen (mg/l)	ORP (mV)	Turbidity (NTUs)
OP-16	8/20/98	14:15	13.2	7.21	1,993	NM	NM	55
	1/12/02	10:08	12.6	7.17	912	0.47	-40	11
	10/7/04	10:25	15	7.00	1,936	0.18	-130	18
	5/24/05	17:33	13	7.00	1,118	0.37	-75	5
	9/28/05	9:52	13.5	7.03	918	0.50	-92	2
	5/2/06	16:36	11.6	6.89	2,200	0.31	-105	3
	11/13/06	14:45	11.7	7.11	1,879	0.45	-50	3
	4/30/07	15:48	11.14	6.99	2,128	1.50	-2.3	0
	10/29/07	16:25	14.34	6.89	1,869	0.90	-75	4
	5/7/08	15:00	14.1	6.82	1,459	0.58	-73	3
	11/4/08	9:42	15	6.92	1,776	2.90	-32	10
	5/13/09	11:35	13.9	7.21	1,679	0.60	-12	2
	10/29/09	13:09	13.9	7.02	1,484	0.53	-20	0
	5/27/10	19:11	14.6	7.10	1,768	0.17	-46	0
	11/2/10	16:33	13.78	6.97	1,824	0.66	-24	4
	7/13/11	18:26	17.86	6.99	1,782	0.59	-38	3
	11/16/11	15:50	12.81	7.06	1,739	0.14	-37	16
	5/31/12	17:26	13.55	6.98	2,010	0.21	-45	6
	11/6/12	17:30	12.3	7.00	1,417	0.74	90	Malfunctioned
	5/23/13	14:50	12.67	7.01	1,753	0.52	15	7
	11/20/13	11:30	12.46	7.10	1,681	0.43	142	--
	7/31/14	16:35	14.61	7.06	1,757	0.23	14	7
	6/18/15	12:18	NM	NM	NM	NM	NM	NM
	8/24/16	12:50	13.99	6.63	2,238	0.28	12	9
	9/21/17	10:10	14.5	7.13	2,196	0.35	-15	4
	9/11/18	16:20	15.12	7.02	2,245	0.29	28	1
	9/11/19	10:35	15.9	6.96	2,432	0.82	37	2
OP-17	7/21/11	15:45	13.47	6.77	993	8.37	114	9
	11/14/11	16:00	14.24	7.24	1,084	4.35	48	5
BP-1	4/30/96	11:12	NM	7.40	1,870	NM	NM	15
	11/19/97	15:10	9.4	7.36	1,399	NM	NM	3
	8/20/98	15:55	10.3	7.35	1,996	NM	NM	3
	1/8/02	17:20	10	7.35	1,034	0.25	NM	5
	5/23/05	16:19	10.7	8.80	1,332	0.11	-428	9
	4/30/07	18:45	11.17	7.00	2,143	0.43	512.8	5
	10/29/07	17:35	11.74	7.12	1,766	0.84	20	0
BP-3	4/29/96	11:55	NM	7.40	2,140	NM	NM	16
	11/21/97	11:40	10	6.99	1,942	NM	NM	23
	8/21/98	14:10	11.8	7.33	1,942	NM	NM	90
	1/12/02	15:39	10.5	7.24	885	0.32	-65	24
	10/6/04	11:57	12.3	7.22	1,853	0.19	-189	42
	5/24/05	19:21	10.9	7.19	1,717	0.16	-234	17
	9/27/05	15:53	16.9	8.45	950	0.30	12	17
	5/3/06	13:20	13.4	7.24	2,090	0.22	-206	22
	11/15/06	10:25	11.5	7.45	1,896	0.24	-207	12
	5/2/07	10:25	13.26	9.44	112	0.60	-169	7
	10/30/07	16:30	13.47	7.25	1,816	0.35	-178	2
	5/6/08	16:04	13.1	7.16	1,306	0.33	-195	38
	11/5/08	15:56	12.9	7.22	1,938	0.08	-125	27
	5/12/09	18:54	12.5	7.55	2,050	0.03	-166	47
	10/29/09	11:40	11.6	7.24	1,476	0.14	-186	2
	5/27/10	12:43	12.1	6.91	1,298	0.22	-155	18
	11/4/10	12:20	11.22	7.10	1,732	0.09	-118	2
	7/12/11	18:15	18.99	7.29	2,185	0.24	-139	12
	11/15/11	16:07	12.58	7.46	1,639	0.38	-198	3
	5/30/12	17:57	15.98	7.14	2,036	0.24	-136	2
	11/5/12	16:57	10.0	7.23	2,010	0.43	-125	3
	5/23/13	11:48	18.1	7.29	2,194	0.34	-139	2
	11/19/13	12:50	10.0	7.23	2,073	0.31	-110	3
	7/31/14	13:30	12.96	7.01	1,572	0.29	-93	3
	6/17/15	12:40	19.73	7.69	2,096	0.19	-160	14
	8/23/16	14:50	14.20	7.79	2,018	0.58	-139	14
	9/21/17	11:40	18.70	7.86	2,751	0.21	-109	5
	9/12/18	13:00	NM	NM	NM	NM	NM	NM
	9/10/19	18:15	17.90	7.31	2,493	0.13	-151	3

Table 6. Groundwater Sampling Physical Parameters
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Sampling Date	Time	Temperature (°C)	pH	Specific Conductance (micromhos/cm)	Dissolved Oxygen (mg/l)	ORP (mV)	Turbidity (NTUs)
BP-4	4/29/96	17:00	NM	7.30	2,110	NM	NM	25
	11/21/97	13:50	9.6	7.01	1,986	NM	NM	6
	8/21/98	16:30	11.3	7.29	1,955	NM	NM	2
	1/12/02	17:10	10.4	7.24	893	0.28	82	6
	10/6/04	17:17	12	7.22	1,920	0.11	-184	20
	5/24/05	14:05	10.5	7.09	1,846	0.15	-230	1
	9/27/05	19:05	13.6	8.64	913	0.30	-334	10
	5/3/06	15:42	12.4	7.17	2,100	0.44	-174	3
	11/15/06	15:05	11.3	7.12	1,897	0.27	-194	5
	5/2/07	16:50	13.68	7.28	1,814	0.76	-118	1
	10/31/07	11:05	11.96	7.14	1,736	0.41	-122	2
	5/7/08	10:50	12.6	7.09	1,382	0.16	-219	8
	11/6/08	11:12	12	7.11	1,950	0.07	-90	1
	5/13/09	12:10	13.6	7.34	1,711	0.08	-126	2
	10/28/09	11:55	13	8.54	1,234	0.13	-327	2
	5/27/10	15:32	15.8	7.00	1,776	0.06	-138	5
	11/2/10	10:18	10.81	7.07	1,687	0.71	-100	2
	7/13/11	12:34	18.73	7.66	1,999	0.38	-156	5
	11/16/11	11:43	12.37	8.65	1,420	0.26	-285	2
	5/31/12	12:58	14.83	7.02	2,256	0.30	-120	1
	11/5/12	17:45	8.9	6.99	2,117	0.37	-147	1
	5/23/13	13:20	15.11	7.27	2,319	0.38	-47	2
	11/19/13	13:25	9.47	7.22	2,192	0.35	-63	3
	7/31/14	13:10	18.68	7.28	1,935	0.26	-116	7
	6/17/15	16:35	14.59	7.23	1,881	0.38	-69	5
	8/24/16	9:40	15.29	6.68	2,205	0.34	-128	5
	9/20/17	17:30	17.5	8.94	1,752	0.17	-95	3
	9/11/18	15:50	17.78	7.34	2,235	0.62	-100	4
	9/11/19	17:50	21.7	7.34	2,218	0.27	-180	2
BP-6	5/23/96	10:24	NM	7.30	1,880	NM	NM	1
	11/19/97	16:50	9.6	7.28	1,511	NM	NM	1
	8/21/98	10:45	11.3	7.30	2,420	NM	NM	2
	1/9/02	9:29	10.6	7.41	972	0.12	NM	215
	10/5/04	12:12	12.6	9.01	214	0.02	-410	46
	5/23/05	12:16	10.9	9.08	712	0.13	-207	53
	9/27/05	12:50	14.0	9.04	312	0.30	-227	53
BP-7	7/21/11	16:58	12.44	7.29	1,778	0.12	-18	1
	11/14/11	12:59	13.71	7.12	2,110	0.40	-21	5
	6/17/15	10:45	12.05	7.20	1,640	0.18	44	2
BP-8	7/21/11	15:07	12.51	7.41	1,639	0.08	-49	4
	11/14/11	15:59	12.72	7.11	1,923	0.79	-34	10
BP-9	7/21/11	17:58	14.11	7.17	1,685	0.05	-72	2
	11/15/11	10:10	13.81	7.13	1,873	0.46	-91	3
BP-10	7/21/11	19:16	13.84	7.15	1,192	0.05	-23	24
	11/15/11	12:03	13.58	7.06	1,856	0.22	-29	2
BP-11	11/16/11	15:36	13.01	7.12	1,756	0.14	-95	6
	6/1/12	10:58	11.48	7.76	1,595	0.21	-310	5
	11/6/12	11:32	10.92	7.53	1,498	0.31	-270	4
	5/24/13	10:52	9.17	7.52	1,511	0.28	-268	9
	11/19/13	16:47	8.43	7.15	2,193	0.57	522	7
	8/1/14	9:41	13.42	7.45	1,527	0.39	-410	4
	6/18/15	13:10	13.69	7.21	1,720	0.51	-310	2
	8/24/16	17:10	13.30	7.23	1,619	0.51	-357	2
	9/21/17	12:40	14.40	7.22	2,333	0.24	-58	4
	9/11/18	17:00	13.52	8.70	1,322	0.05	-240	2
	9/10/19	19:10	15.20	7.72	1,385	0.26	-404	7
	10/23/20	7:50	16.80	7.78	1,357	0.39	-178	3
BI-1	5/13/09	14:37	14.0	7.31	1,720	0.17	40	5
	10/29/09	17:58	12.2	7.05	1,474	0.22	26	1
	5/27/10	17:25	16.9	6.86	1,870	0.11	13	0
	11/2/10	12:22	11.0	6.93	1,713	0.20	21	0
	7/14/11	18:53	not measured					
PZ-1	4/30/96	12:40	NM	7.50	1,540	NM	NM	3
	11/21/97	10:30	9.4	7.40	1,492	NM	NM	42
	8/22/98	10:45	9.0	7.29	1,416	NM	NM	95
	1/11/02	16:32	9.2	7.58	981	11.11	41	25
	5/25/05	17:45	11.1	7.23	1,550	6.31	90	2
	9/27/05	18:07	16.0	7.35	808	7.50	128	1
	5/4/06	11:30	16.2	7.27	1,464	8.52	49	1
	11/15/06	11:30	12.5	7.49	1,336	9.04	32	8
	5/2/07	15:10	11.17	7.52	1,386	10.17	49	1
	10/31/07	12:40	15.89	7.34	1,410	8.28	54	1
	5/6/08	15:45	11.1	7.17	942	8.87	111	2
	11/6/08	11:47	16.1	7.39	1,511	8.24	-8	3
	5/12/09	15:54	11.4	7.59	1,631	8.28	123	1
	10/28/09	17:23	14	7.14	1,067	8.29	172	3

Table 6. Groundwater Sampling Physical Parameters
JCI Jones Chemicals, Inc.
Caledonia, New York

Well ID	Sampling Date	Time	Temperature (°C)	pH	Specific Conductance (micromhos/cm)	Dissolved Oxygen (mg/l)	ORP (mV)	Turbidity (NTUs)
OI-2	4/30/07	17:15	12.58	6.80	2,370	2.33	185.4	3
	10/30/07	10:48	12.64	7.07	1,998	1.31	102	2
	5/7/08	15:48	11.1	7.03	1,042	5.26	464	55
	11/3/08	16:58	12.1	7.03	1,480	1.11	134	2
	5/13/09	15:40	12.0	7.35	1,251	4.14	424	6
	10/29/09	19:05	12.3	7.12	969	3.17	217	1
OI-5	4/30/07	17:59	10.85	7.15	1,422	4.80	125.8	4
	10/30/07	10:14	13.24	7.17	1,127	3.24	112	1
	5/7/08	16:30	10	7.24	854	6.74	414	4
	11/3/08	17:32	12.5	7.13	1,260	3.24	127	0
	5/13/09	16:42	13.6	7.37	1,214	6.68	211	10
	10/29/09	17:10	13.4	7.09	905	2.49	247	0
	5/27/10	16:42	15.4	7.01	1,046	5.48	88	<1
	11/2/10	15:56	12.64	7.06	969	6.89	66	1
	7/14/11	11:04	14.27	7.29	1,535	0.50	45	2
	11/16/11	14:35	12.63	7.24	899	3.86	36	3
	6/1/12	9:45	10.67	7.08	1,276	5.21	126	0
	11/6/12	11:23	9.93	7.16	1,302	4.98	132	1
	5/24/13	11:37	10.57	7.11	1,301	5.15	180	5
	11/19/13	17:20	10.58	7.34	1,262	4.38	445	1
	8/1/14	10:45	13.29	7.09	1,292	3.98	75	1
	6/18/15	11:35	13.68	7.12	1,198	3.76	79	1
	8/24/16	18:10	13.30	7.07	1,156	3.33	61	3
	9/21/17	13:00	16.30	7.27	1,236	4.06	10	1
OI-7	5/7/08	17:00	10.9	6.99	649	5.93	279	4
	11/4/08	10:36	14.6	7.17	1,313	3.29	79	0
	5/13/09	15:10	13.7	7.34	1,347	6.34	38	3
	10/29/09	16:35	14.7	7.11	932	3.98	217	1
	5/27/10	18:15	12.3	7.09	1,133	6.89	121	5
	11/2/10	11:44	14.75	7.08	1,009	5.71	58	4
	7/13/11	16:20	14.44	7.17	1,485	6.83	78	5
	11/16/11	12:39	15.32	7.25	984	3.94	-14	9
L-2	4/30/96	15:07	NM	7.40	2,170	NM	NM	26
	11/21/97	09:30	11.4	9.30	1,633	NM	NM	23
	8/22/98	11:30	10.8	7.15	2,380	NM	NM	27
	1/11/02	14:42	10.7	7.22	934	0.19	-53.1	7
	5/25/05	16:40	11.9	7.19	1,911	0.27	-82	5

Notes:

1. * Sampled by Haley and Aldrich, Rochester, New York.
2. ** Water was rusty and turbid; sampled regardless as well would purge dry.
3. °C = degrees Celsius.
4. DRY = well was dry.
5. micromhos/cm = micromhos per centimeter.
6. mV = millivolts.
7. NA = not applicable.
8. NM = not measured due to equipment malfunction.
9. NR = not reported.
10. NTU = nephthelometric turbidity unit.
11. pH is presented in standard units.

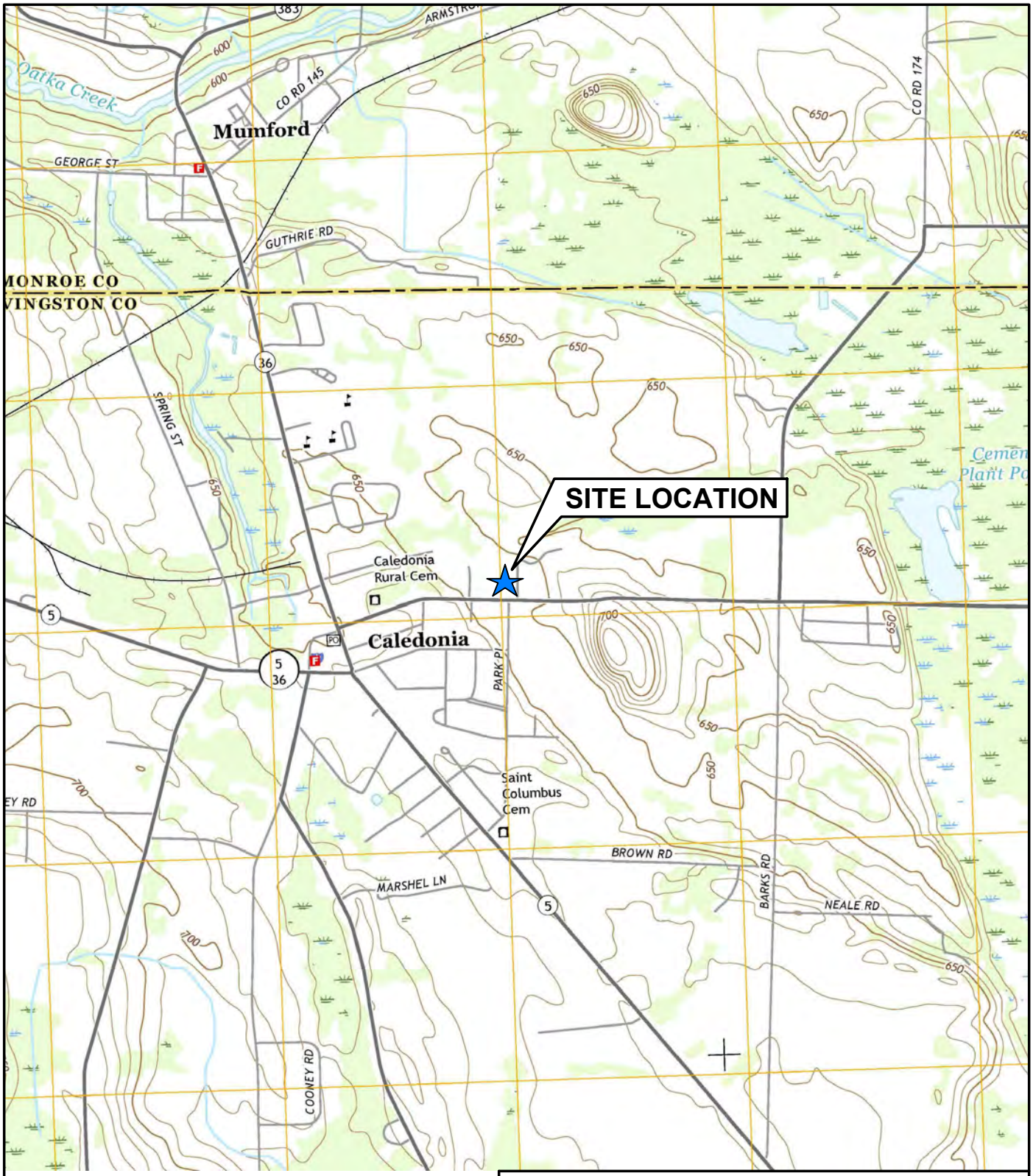
Table 7. Groundwater analytical Results Summary
1,4-Dioxane and Per- and Polyfluoroalkyl Substances (PFAS)
JCI Jones Chemicals, Inc. Superfund Site
Caledonia, NY

Sample/Well ID	OP-8	DUP-1	OP-12	OP-14	BP-4	Equipment Blk	OP-2	DUP	OP-3	Equipment Blk
Screened Interval (feet BLS)	17 - 22	NA	17 - 22	21 - 26	50 - 55	NA	20.3 - 25.3	20.3 - 25.3	26 - 31	NA
Date Sampled	9/11/19	9/11/19	9/11/19	9/10/19	9/11/19	9/11/19	10/21/20	10/21/20	10/21/20	10/21/20
Constituent										
1,4-Dioxane	**0.075**	**0.068**	**0.082**	0.040 U	0.040 U	0.040 U	NA	NA	NA	NA
Perfluoroalkane Sulfonic Acids										
Perfluorobutane sulfonic acid (PFBS)	**5.3**	**5.3**	**2.9 J**	**1.7 J**	ND U	ND U	**0.58 J**	**0.55 J**	**2.8 J**	0.30 U
Perfluorohexane sulfonic acid (PFHxS)	**4.1**	**4.4**	**3.4 J**	**2.8 J**	ND U	ND U	0.31 U	0.31 U	**3.3 J**	0.31 U
Perfluoroheptane sulfonic acid (PFHpS)	**0.69 J**	**0.66 J**	**0.77J**	ND U	ND U	ND U	0.48 U	0.47 U	0.50 U	0.48 U
Perfluorooctane sulfonic acid (PFOS)	**24**	**27**	**30**	5.1 U	ND U	ND U	**1.2 J**	**1.2 J**	**5.7**	0.75 U
Perfluorodecane sulfonic acid (PFDS)	ND U	ND U	ND U	ND U	ND U	ND U	1.2 U	1.1 U	1.2 U	1.2 U
Perfluoroalkane Carboxylic Acids										
Perfluorobutanoic acid (PFBA)	**5.4**	**5.2**	**3.7 J**	**3.8 J**	ND U	ND U	**6.1**	**6.1**	**3.8 J**	2.2 U
Perfluoropentanoic acid (PFPeA)	**13**	**14**	**5.4**	**2.8 J**	ND U	ND U	1.1 U	1.1 U	**3.9 J**	1.1 U
Perfluorohexanoic acid (PFHxA)	**10**	**11**	ND U	ND U	ND U	ND U	1.0 U	**1.1 J**	**2.9 J**	1.0 U
Perfluoroheptanoic acid (PFHpA)	**3.0 J**	**3.6 J**	**1.7 J**	**0.93 J**	ND U	ND U	**0.61 J**	**0.45 J**	**2.0 J**	0.37 U
Perfluorooctanoic acid (PFOA)	**7.8**	**7.6**	**7.9**	**2.9**	0.42 J	ND U	**1.1 J**	**1.1 J**	**2.3**	0.59 U
Perfluorononanoic acid (PFNA)	**1.1 J**	**1.1 J**	**1.9 J**	ND U	ND U	ND U	0.74 U	0.72 U	0.76 U	0.73 U
Perfluorodecanoic acid (PFDA)	ND U	ND U	ND U	ND U	ND U	ND U	1.1 U	1.0 U	1.1 U	1.2 U
Perfluoroundecanoic acid (PFUnDA)	ND U	ND U	ND U	ND U	ND U	ND U	0.83 U	0.81 U	0.85 U	0.82 U
Perfluorododecanoic acid (PFDoDA)	ND U	ND U	ND U	ND U	ND U	ND U	1.2 U	1.2 U	1.3 U	1.2 U
Perfluorotridecanoic acid (PFTrDA)	ND U	ND U	ND U	ND U	ND U	ND U	0.66 U	0.64 U	0.68 U	0.65 U
Perfluorotetradecanoic acid (PFTeDA)	ND U	ND U	ND U	ND U	ND U	ND U	3.0 U	2.9 U	3.1 U	2.9 U
Perfluoroalkyl Sulfonamides										
Perfluorooctane sulfonamide (FOSA)	ND U	ND U	ND U	ND U	ND U	ND U	0.60 U	0.59 U	0.62 U	0.60 U
N-Methyl perfluorooctane sulfonamidoacetic acid	ND U	ND U	ND U	ND U	ND U	ND U	0.55 U	0.53 U	0.56 U	0.54 U
N-Ethyl perfluorooctane sulfonamidoacetic acid	ND U	ND U	ND U	ND U	ND U	ND U	0.53 U	0.52 U	0.55 U	0.53 U
(n:2) Fluorotelomer Sulfonic Acids										
6:2 Fluorotelomer sulfonic acid (6:2 FTS)	ND U	ND U	ND U	ND U	ND U	ND U	**1.1 J**	0.55 U	0.58 U	0.56 U
8:2 Fluorotelomer sulfonic acid (8:2 FTS)	ND U	ND U	ND U	ND U	ND U	ND U	0.96 U	0.94 U	0.99 U	0.95 U

Notes:

1. BLS: Below land suface.
2. 1,4-dioxane analyzed by Methd 8270D; concentration in micrograms per litre (µg/L) or parts per billion.
3. PFCs analyzed by Method 537; concentrations in nannograms per litre (ng/L) or parts per trillion.
4. Detected values are Bolded.
5. U: analyte was analyzed for but not detected at or above the Method Reporting or Detection Limits. (MRL/MDL).
6. J: Estimated value.
7. ND: Not Detected.

FIGURES



0 2000' 4000'

SCALE IN FEET

N

REFERENCES:

1. U.S.G.S. 7.5 MINUTE QUADRANGLE MAP CALEDONIA, NEW YORK, DATED 2016.

SITE LOCATION MAP

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | JANUARY 2021

Figure: 1

\\JACKSONVILLE-01\DATA\JAX-CAD\JJCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F101.DWG (13 January 2021) mnoland

LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- MONITORING WELL - BEDROCK
- MONITORING WELL - OVERBURDEN
- PRODUCTION WELL
- OEW-1 OVERBURDEN EXTRACTION WELL
- BEW-1 BEDROCK EXTRACTION WELL
- IRRIGATION WELL

N

0 250' 500'

SCALE IN FEET

SITE VICINITY MAP

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

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Figure: 2

\\JACKSONVILLE-01\DATA\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FIGURES\FR2872A-F102.DWG (14 January 2021) mnoland

LEGEND:

	SITE BOUNDARY - JCI JONES CHEMICALS, INC.	BEW-1	BEDROCK EXTRACTION WELL
	MONITORING WELL - BEDROCK	OW-1	VAPOR OBSERVATION WELL
	MONITORING WELL - OVERBURDEN		BEDROCK INJECTION WELL
	PRODUCTION WELL		SOIL VAPOR EXTRACTION WELL
OEW-1	OVERBURDEN EXTRACTION WELL		OVERBURDEN GROUNDWATER INJECTION WELL

N

0 150' 300'

SCALE IN FEET

SITE MAP WITH MONITORING, GROUNDWATER EXTRACTION, AND INJECTION WELLS

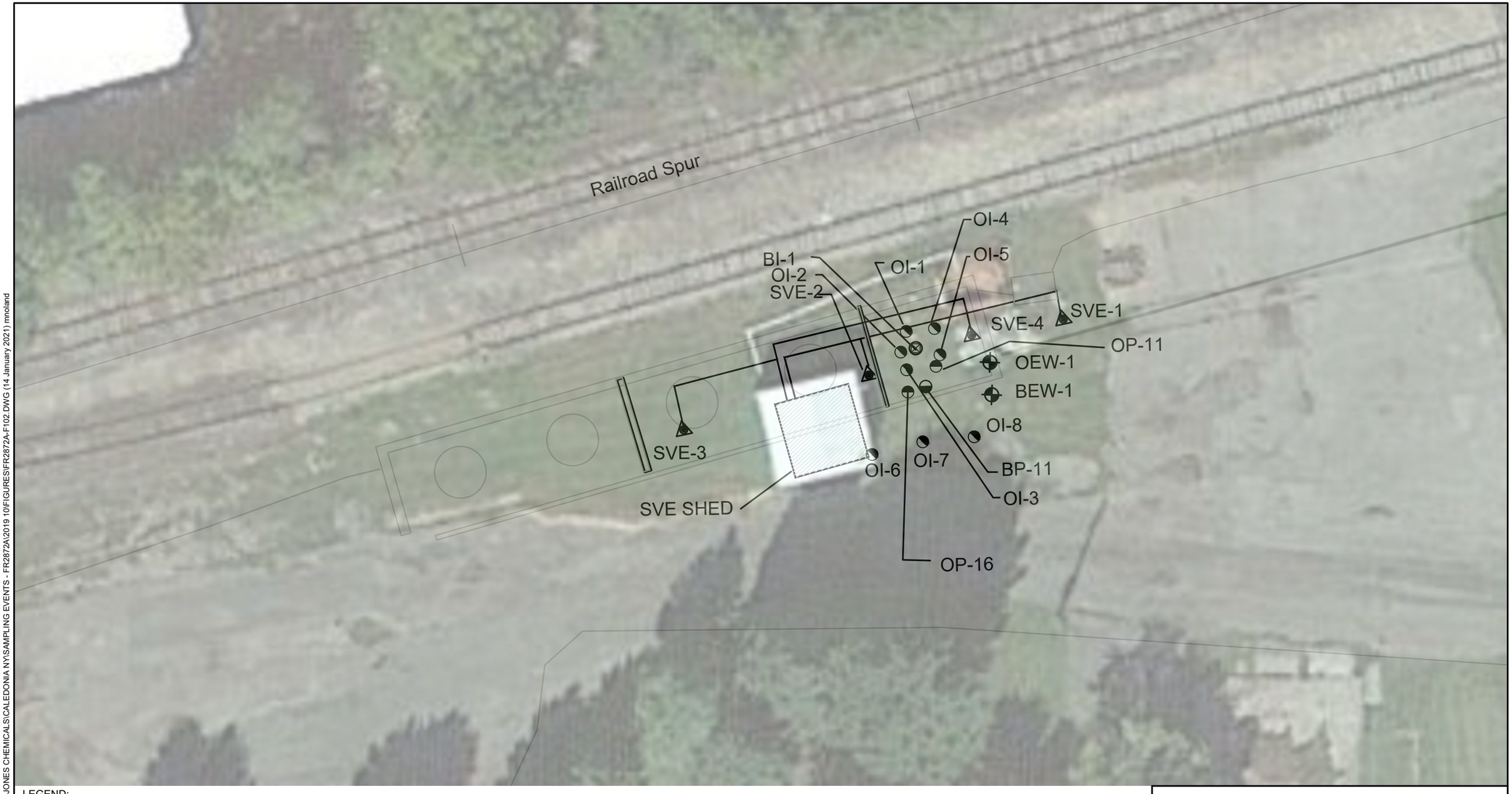
JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | JANUARY 2021

Figure: 3

I:\JACKSONVILLE-01\DATA\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F102.DWG (14 January 2021) mnoland



LEGEND:

	SITE BOUNDARY - JCI JONES CHEMICALS, INC.	OW-1	VAPOR OBSERVATION WELL
	MONITORING WELL - BEDROCK		BEDROCK INJECTION WELL
	MONITORING WELL - OVERBURDEN		SOIL VAPOR EXTRACTION WELL
OEW-1	OVERBURDEN EXTRACTION WELL		OVERBURDEN GROUNDWATER INJECTION WELL
BEW-1	BEDROCK EXTRACTION WELL		

N

0 20' 40'

SCALE IN FEET

SOURCE AREA DETAIL

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

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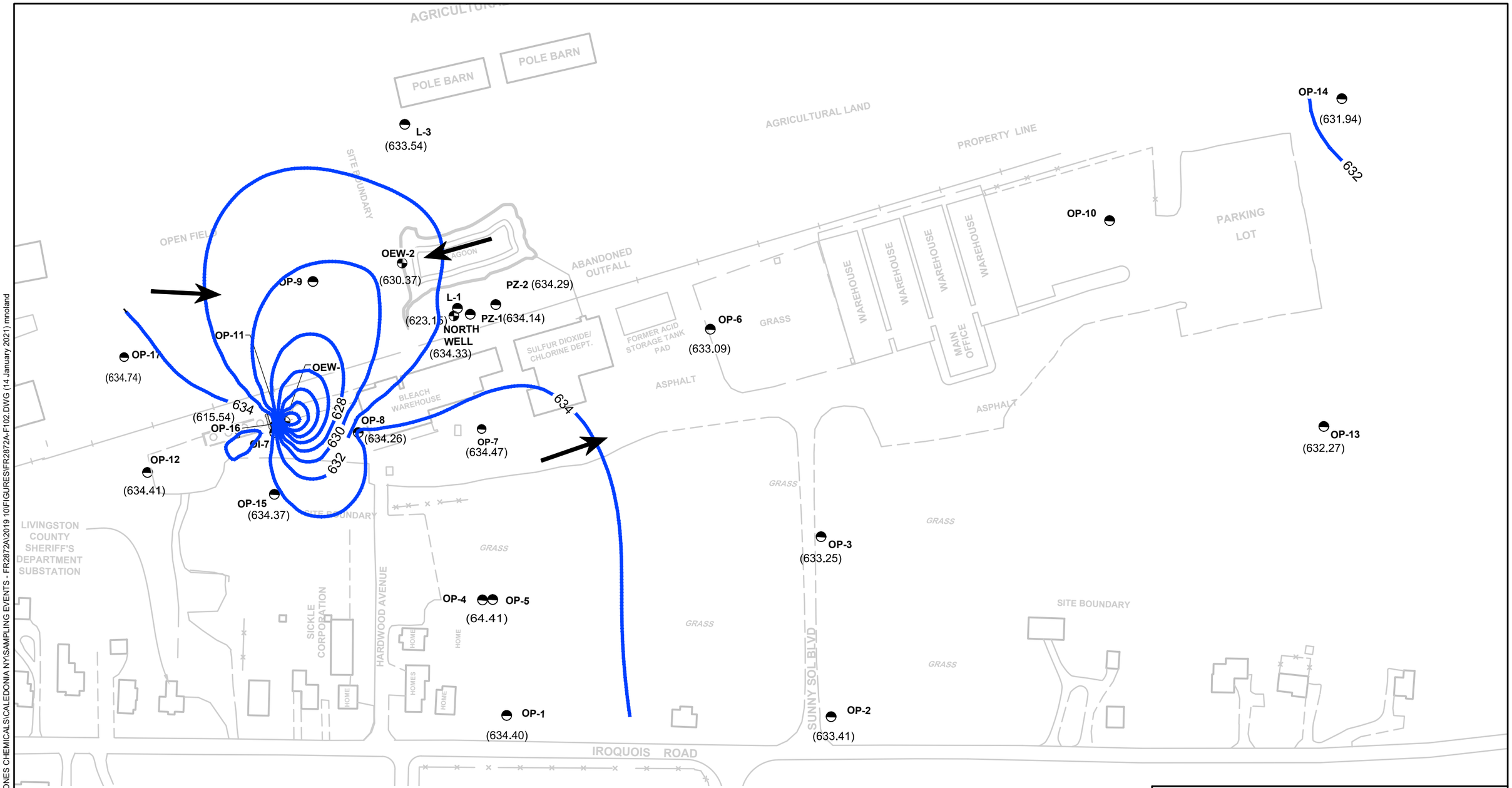
Figure: 4



LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- MONITORING WELL - OVERBURDEN
- PRODUCTION WELL
- OEW-1 OVERBURDEN EXTRACTION WELL
- OVERBURDEN GROUNDWATER INJECTION WELL
- (632.59) GROUNDWATER ELEVATION (FT NAVD 88)
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

NOTES:

1. NAVD - NORTH AMERICAN VERTICAL DATUM.
2. NORTH WELL, OEW-1, BEW-1, AND OEW-2 ARE PUMPING.

N

0 150' 300'

SCALE IN FEET

GROUNDWATER ELEVATION CONTOUR MAP
OVERBURDEN MONITORING WELLS
20 OCTOBER 2020
JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

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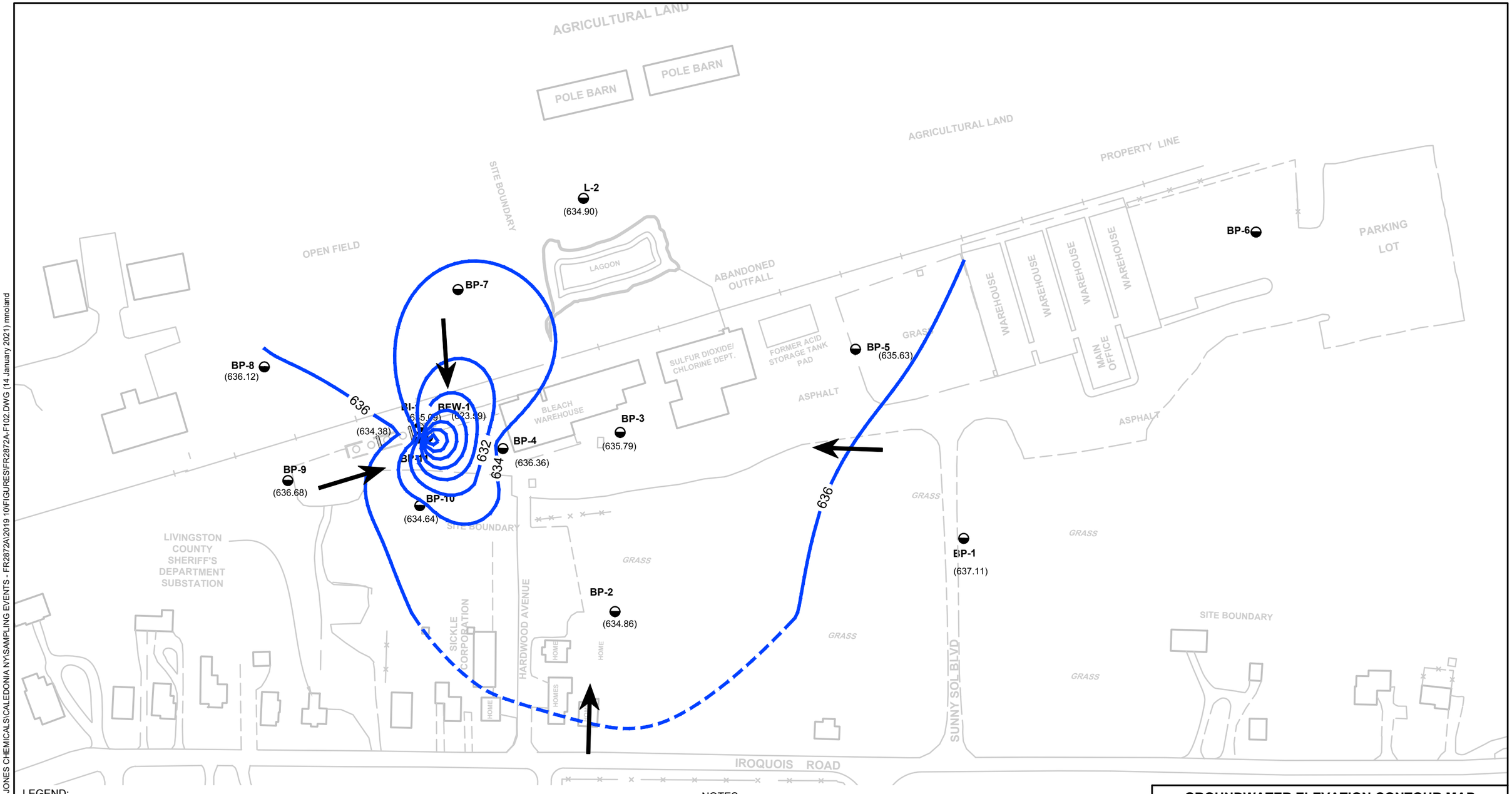
Figure: 5

\\JACKSONVILLE-01\DATA\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F102.DWG (14 January 2021) mnoland



LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- MONITORING WELL - BEDROCK
- PRODUCTION WELL
- (634.29) GROUNDWATER ELEVATION (FT NAVD 88)
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION

NOTES:

1. NAVD - NORTH AMERICAN VERTICAL DATUM.
2. NORTH WELL, OEW-1, BEW-1, AND OEW-2 ARE PUMPING.

N

0 150' 300'

SCALE IN FEET

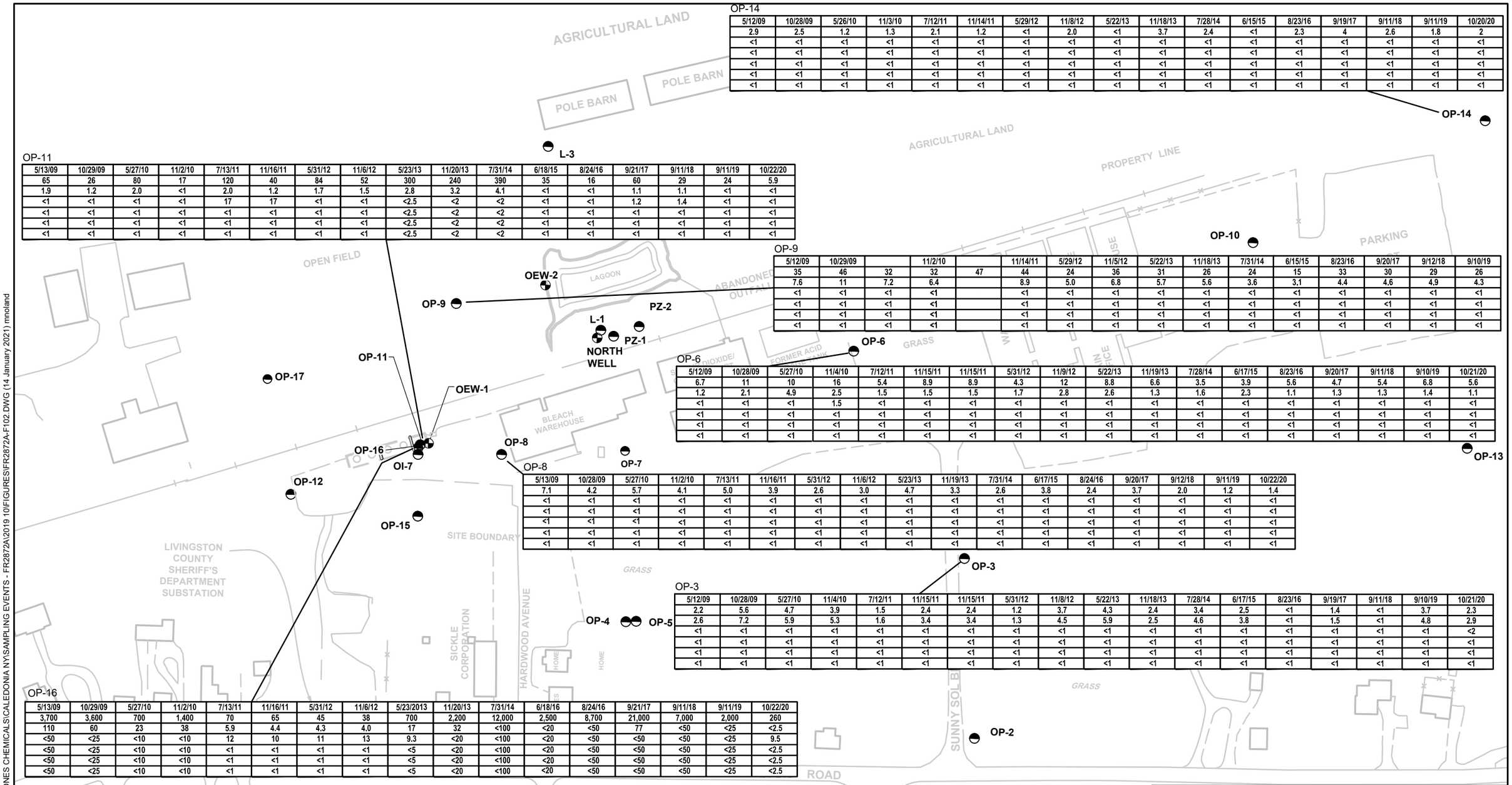
GROUNDWATER ELEVATION CONTOUR MAP
BEDROCK MONITORING WELLS
20 OCTOBER 2020
JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | JANUARY 2021

Figure: 6

\\JACKSONVILLE-01\DATA\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F102.DWG (14 January 2021) mnoland



OP-14

5/12/09	10/28/09	5/26/10	11/3/10	7/12/11	11/14/11	5/29/12	11/8/12	5/22/13	11/18/13	7/28/14	6/15/15	8/23/16	9/19/17	9/11/18	9/11/19	10/20/20
2.9	2.5	1.2	1.3	2.1	1.2	<1	2.0	<1	3.7	2.4	<1	2.3	4	2.6	1.8	2
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

OP-11

5/13/09	10/29/09	5/27/10	11/2/10	7/13/11	11/16/11	5/31/12	11/6/12	5/23/13	11/20/13	7/31/14	6/18/15	8/24/16	9/21/17	9/11/18	9/11/19	10/22/20
65	26	80	17	120	40	84	52	300	240	390	35	16	60	29	24	5.9
1.9	1.2	2.0	<1	2.0	1.2	1.7	1.5	2.8	3.2	4.1	<1	<1	1.1	1.1	<1	<1
<1	<1	<1	<1	17	17	<1	<1	<2.5	<2	<2	<1	<1	1.2	1.4	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<2	<2	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<2	<2	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<2	<2	<1	<1	<1	<1	<1	<1

OP-9

5/12/09	10/29/09		11/2/10		11/14/11	5/29/12	11/5/12	5/22/13	11/18/13	7/31/14	6/15/15	8/23/16	9/20/17	9/12/18	9/10/19
35	46	32	32	47	44	24	36	31	26	24	15	33	30	29	26
7.6	11	7.2	6.4		8.9	5.0	6.8	5.7	5.6	3.6	3.1	4.4	4.6	4.9	4.3
<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

OP-6

5/12/09	10/28/09	5/27/10	11/4/10	7/12/11	11/15/11	11/15/11	5/31/12	11/9/12	5/22/13	11/19/13	7/28/14	6/17/15	8/23/16	9/20/17	9/11/18	9/10/19	10/21/20
6.7	11	10	16	5.4	8.9	8.9	4.3	12	8.8	6.6	3.5	3.9	5.6	4.7	5.4	6.8	5.6
1.2	2.1	4.9	2.5	1.5	1.5	1.5	1.7	2.8	2.6	1.3	1.6	2.3	1.1	1.3	1.3	1.4	1.1
<1	<1	<1	1.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

OP-8

5/13/09	10/28/09	5/27/10	11/2/10	7/13/11	11/16/11	5/31/12	11/6/12	5/23/13	11/19/13	7/31/14	6/17/15	8/24/16	9/20/17	9/12/18	9/11/19	10/22/20
7.1	4.2	5.7	4.1	5.0	3.9	2.6	3.0	4.7	3.3	2.6	3.8	2.4	3.7	2.0	1.2	1.4
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

OP-3

5/12/09	10/28/09	5/27/10	11/4/10	7/12/11	11/15/11	11/15/11	5/31/12	11/8/12	5/22/13	11/18/13	7/28/14	6/17/15	8/23/16	9/19/17	9/11/18	9/10/19	10/21/20
2.2	5.6	4.7	3.9	1.5	2.4	2.4	1.2	3.7	4.3	2.4	3.4	2.5	<1	1.4	<1	3.7	2.3
2.6	7.2	5.9	5.3	1.6	3.4	3.4	1.3	4.5	5.9	2.5	4.6	3.8	<1	1.5	<1	4.8	2.9
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1

OP-16

5/13/09	10/29/09	5/27/10	11/2/10	7/13/11	11/16/11	5/31/12	11/6/12	5/23/2013	11/20/13	7/31/14	6/18/16	8/24/16	9/21/17	9/11/18	9/11/19	10/22/20
3,700	3,600	700	1,400	70	65	45	38	700	2,200	12,000	2,500	8,700	21,000	7,000	2,000	260
110	60	23	38	5.9	4.4	4.3	4.0	17	32	<100	<20	<50	77	<50	<25	<2.5
<50	<25	<10	<10	12	10	11	13	9.3	<20	<100	<20	<50	<50	<50	<25	9.5
<50	<25	<10	<10	<1	<1	<1	<1	<5	<20	<100	<20	<50	<50	<50	<25	<2.5
<50	<25	<10	<10	<1	<1	<1	<1	<5	<20	<100	<20	<50	<50	<50	<25	<2.5
<50	<25	<10	<10	<1	<1	<1	<1	<5	<20	<100	<20	<50	<50	<50	<25	<2.5

LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- MONITORING WELL - OVERBURDEN
- PRODUCTION WELL
- OEW-1 OVERBURDEN EXTRACTION WELL
- OVERBURDEN GROUNDWATER INJECTION WELL

5/27/10	**Sample Date**
700	**Tetrachloroethene** (µg/l)
23	**Trichloroethene** (µg/l)
<10	**Cis-1,2 Dichloroethene** (µg/l)
<10	**Trans-1,2 Dichloroethene** (µg/l)
<10	**1,1 Dichloroethene** (µg/l)
<10	**Vinyl Chloride** (µg/l)

NOTES:

1. RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
2. <1 - CHEMICAL NOT DETECTED; VALUE SHOWN IS PRACTICAL QUANTITATION LIMIT.

N

0 150' 300'

SCALE IN FEET

GROUNDWATER CONCENTRATION MAP
OVERBURDEN MONITORING WELLS

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | JANUARY 2021

Figure: 7

\\JACKSONVILLE-01\DATA\JAX-CAD\JJCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F102.DWG (14 January 2021) mnoland

OI-5

11/12/03	5/2/06	11/13/06	4/30/07	10/30/07	5/7/08	11/3/08	5/13/09	10/29/09	5/27/10	11/2/10	7/14/11	11/16/11	6/1/12	11/6/12	5/24/13	11/19/13	8/1/14	6/18/15	8/24/16	9/21/17	9/21/17
200,000	14,000	37,000	1,500	280	46	11,000	530	71	210	100	660	300	110	100	300	200	420	710	81	210	210
<2,500	<200	<250	<20	<2.5	1.2	<100	<5	1.7	1.8	1.1	1.3	<2.5	1.1	2.5	2.8	<2	<5	2.6	1.2	1.2	1.2
<2,500	<200	<250	<20	4.4	<1	<100	<5	1.0	<1	<1	2.0	<2.5	<1	<1	<2.5	<2	<5	<2.5	1.2	2.2	2.2
<2,500	<200	<250	<20	<2.5	<1	<100	<5	<1	<1	<1	<1	<2.5	<1	<1	<2.5	<2	<5	<2.5	<1	<1	<1
<2,500	<200	<250	<20	<2.5	<1	<100	<5	<1	<1	<1	<1	<2.5	<1	<1	<2.5	<2	<5	<2.5	<1	<1	<1
<2,500	<200	<250	<20	<5	<2	<200	<5	<1	<1	<1	<1	<2.5	<1	<1	<2.5	<2	<5	<2.5	<1	<1	<1

OP-11

8/22/98	5/2/06	11/13/06	4/30/07	10/29/07	5/7/08	11/4/08	5/13/09	10/29/09	5/27/10	11/2/10	7/13/11	11/16/11	5/31/12	11/6/12	5/23/2013	11/20/2013	7/31/14	6/18/15	8/24/16	9/21/17	9/11/18	9/11/19	10/22/20
5,400	39	50	50	10	30	37	65	26	80	17	120	40	84	52	300	240	390	35	16	60	29	24	5.9
62	2	5.3	3.3	<1	<1	<1	1.9	1.2	2.0	<1	2.0	1.2	1.7	1.5	2.8	3.2	4.1	<1	<1	1.1	1.1	<1	<1
9	<1	1.2	<1	<1	<1	<1	<1	<1	<1	<1	1.7	<1	<1	<1	<2.5	<2	<2	<1	<1	1.2	1.4	<1	<1
<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<2	<2	<1	<1	<1	<1	<1	<1
<0.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<2	<2	<1	<1	<1	<1	<1	<1
<0.5	<1	<1	<1	<2	<2	<2	<1	<1	<1	<1	<1	<1	<1	<1	<2.5	<2	<2	<1	<1	<1	<1	<1	<1

OEW-1

11/12/03	5/2/06	11/14/06	5/1/07	10/29/07	5/6/08	11/4/08	5/11/09	10/27/09	5/26/10	11/2/10	7/15/11	11/7/11	5/29/12	11/7/12	5/24/13	11/2113	8/1/14	8/24/16	9/21/17	9/10/18	9/9/19	10/20/20
12,000	690	1,200	280	570	470	380	270	250	140	220	180	160	120	150	130	140	130	160	150	160	150	140
670	6.4	51	2.7	14	18	12	12	8.5	6.5	8.2	24	4.9	1.4	6.2	<2	3.3	4.1	1.7	1.8	1.7	1.3	1.1
560	8.1	<10	<2.5	24	18	21	10	20	6.2	20	17	14	1.8	28	<2	6.4	12	3.3	3.2	2.1	<1	<1
<250	<5	<10	<2.5	<5	<5	<5	<2.5	<2.5	<1	<1	<2	<2	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1
<250	<5	<10	<2.5	<5	<5	<5	<2.5	<2.5	<1	<1	<2	<2	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1
<250	<5	<10	<2.5	<10	<10	<10	<2.5	<2.5	<1	<1	<2	<2	<1	<2	<2	<1	<1	<1	<1	<1	<1	<1

BI-1

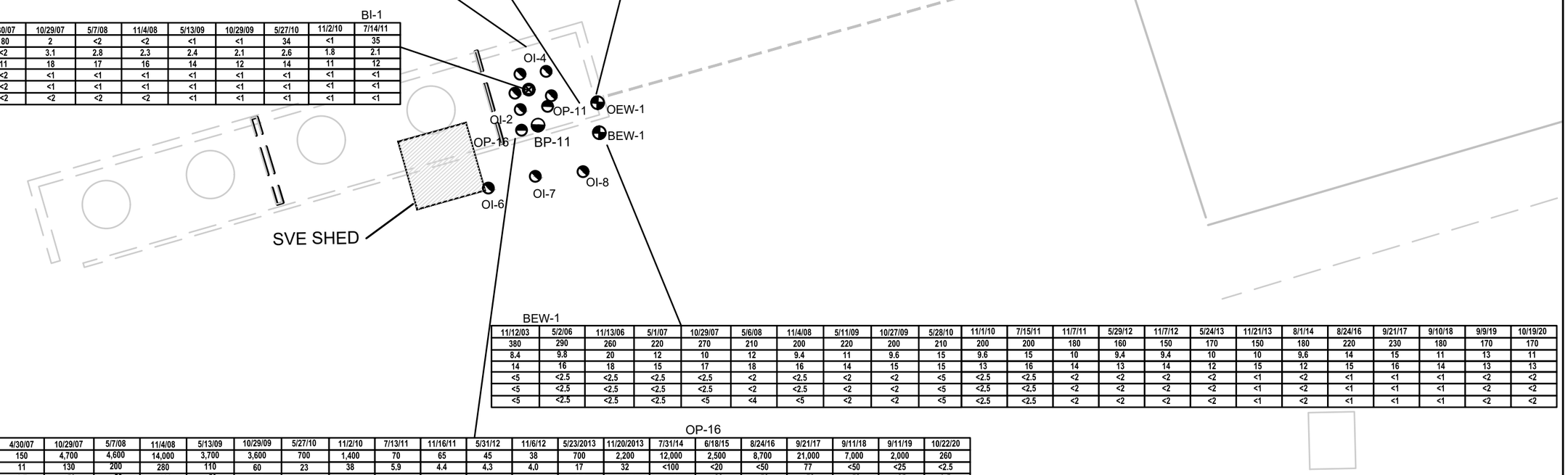
11/12/03	5/2/06	11/14/06	4/30/07	10/29/07	5/7/08	11/4/08	5/13/09	10/29/09	5/27/10	11/2/10	7/14/11
3,800	2.5	150	180	2	<2	<2	<1	<1	34	<1	35
<130	<1	3.6	<2	3.1	2.8	2.3	2.4	2.1	2.6	1.8	2.1
<130	<1	16	11	18	17	16	14	12	14	11	12
<130	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1
<130	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1
<130	<1	<1	<2	<2	<2	<2	<1	<1	<1	<1	<1

BEW-1

11/12/03	5/2/06	11/13/06	5/1/07	10/29/07	5/6/08	11/4/08	5/11/09	10/27/09	5/28/10	11/1/10	7/15/11	11/7/11	5/29/12	11/7/12	5/24/13	11/21/13	8/1/14	8/24/16	9/21/17	9/10/18	9/9/19	10/19/20
380	290	260	220	270	210	200	220	200	210	200	200	180	160	150	170	150	180	220	230	180	170	170
8.4	9.8	20	12	10	12	9.4	11	9.6	15	9.6	15	10	9.4	9.4	10	10	9.6	14	15	11	13	11
14	16	18	15	17	18	16	14	15	15	13	16	14	13	14	12	15	12	15	16	14	13	13
<5	<2.5	<2.5	<2.5	<2.5	<2	<2.5	<2	<2	<5	<2.5	<2.5	<2	<2	<2	<2	<1	<2	<1	<1	<1	<2	<2
<5	<2.5	<2.5	<2.5	<2.5	<2	<2.5	<2	<2	<5	<2.5	<2.5	<2	<2	<2	<2	<1	<2	<1	<1	<1	<2	<2
<5	<2.5	<2.5	<2.5	<5	<4	<5	<2	<2	<5	<2.5	<2.5	<2	<2	<2	<2	<1	<2	<1	<1	<1	<2	<2

OP-16

8/20/98	5/2/06	11/13/06	4/30/07	10/29/07	5/7/08	11/4/08	5/13/09	10/29/09	5/27/10	11/2/10	7/13/11	11/16/11	5/31/12	11/6/12	5/23/2013	11/20/2013	7/31/14	6/18/15	8/24/16	9/21/17	9/11/18	9/11/19	10/22/20
62,000	1,800	380	150	4,700	4,600	14,000	3,700	3,600	700	1,400	70	65	45	38	700	2,200	12,000	2,500	8,700	21,000	7,000	2,000	260
100	81	24	11	130	200	280	110	60	23	38	5.9	4.4	4.3	4.0	17	32	<100	<20	<50	77	<50	<25	<2.5
2	<20	7.1	6.7	<50	<50	<100	<50	<25	<10	<10	12	10	11	13	9.3	<20	<100	<20	<50	<50	<50	<25	9.5
<0.5	<20	<5	<2	<50	<50	<100	<50	<25	<10	<10	<1	<1	<1	<1	<5	<20	<100	<20	<50	<50	<50	<25	<2.5
2	<20	<5	<2	<50	<50	<100	<50	<25	<10	<10	<1	<1	<1	<1	<5	<20	<100	<20	<50	<50	<50	<25	<2.5
<0.5	<20	<5	<2	<100	<100	<200	<50	<25	<10	<10	<1	<1	<1	<1	<5	<20	<100	<20	<50	<50	<50	<25	<2.5



LEGEND:

- SITE BOUNDARY - JCI JONES CHEMICALS, INC.
- MONITORING WELL - OVERBURDEN
- OVERBURDEN GROUNDWATER INJECTION WELL
- PRODUCTION WELL
- OEW-1 OVERBURDEN EXTRACTION WELL
- BEW-1 BEDROCK EXTRACTION WELL
- BEDROCK INJECTION WELL

5/27/10	**Sample Date**
700	**Tetrachloroethene** (µg/l)
23	**Trichloroethene** (µg/l)
<10	**Cis-1,2 Dichloroethene** (µg/l)
<10	**Trans-1,2 Dichloroethene** (µg/l)
<10	**1,1 Dichloroethene** (µg/l)
<10	**Vinyl Chloride** (µg/l)

NOTES:

1. RESULTS ARE REPORTED IN MICROGRAMS PER LITER (µg/L).
2. <1 - CHEMICAL NOT DETECTED; VALUE SHOWN IS PRACTICAL QUANTITATION LIMIT.

N

0 25' 50'

SCALE IN FEET

SOURCE AREA GROUNDWATER CONCENTRATION MAP

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

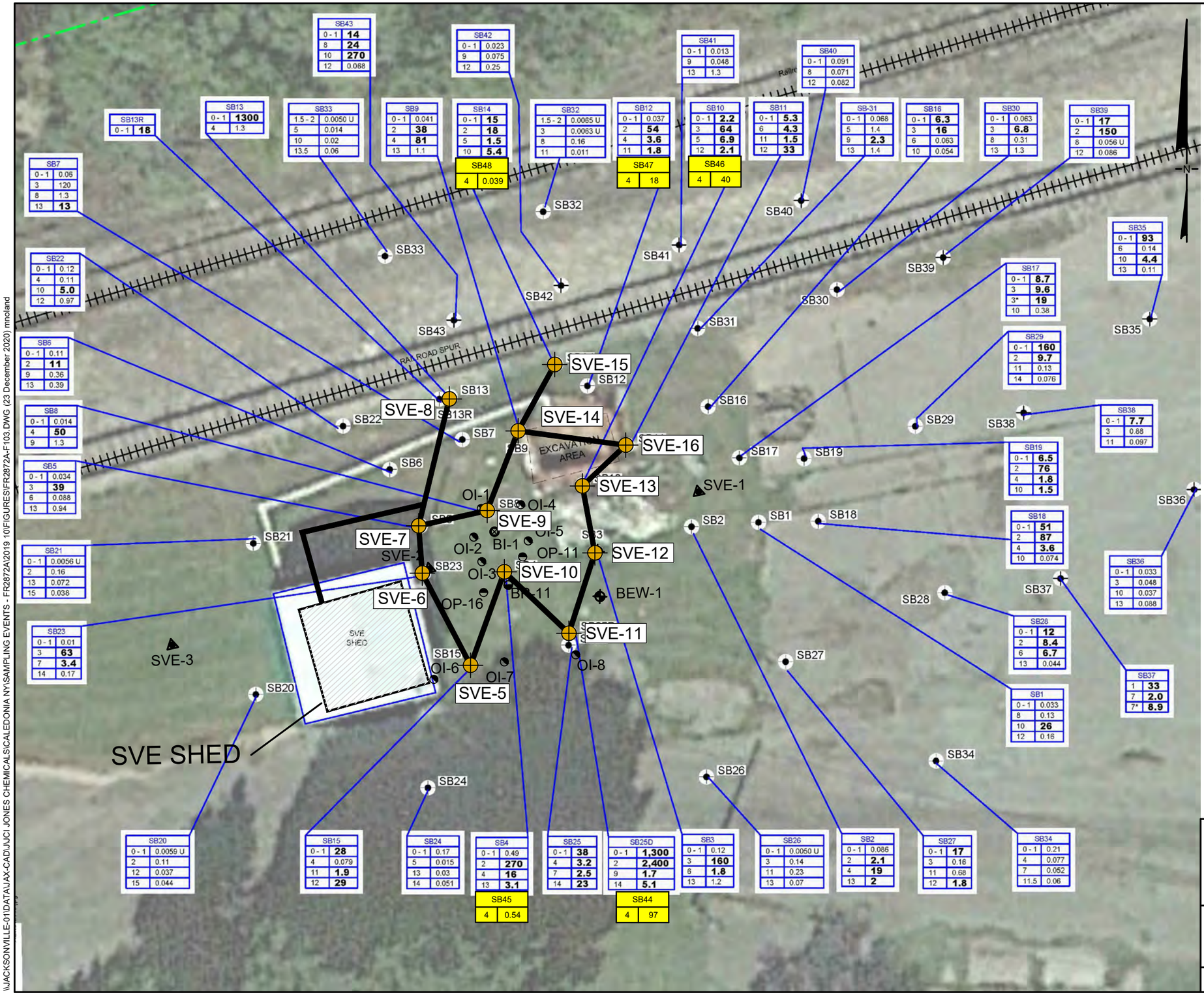
TALLAHASSEE, FL | JANUARY 2021

Figure: 8

\\JACKSONVILLE-01\DATA\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F102.DWG (14 January 2021) mnoland

APPENDIX A

Source Area SVE Treatment Monitoring and Soil Sampling Data



LEGEND:

- MONITORING WELL - BEDROCK
- MONITORING WELL - OVERBURDEN
- PRODUCTION WELL
- OEW-1 OVERBURDEN EXTRACTION WELL
- BEW-1 BEDROCK EXTRACTION WELL
- BEDROCK INJECTION WELL
- ORIGINAL SOIL VAPOR EXTRACTION WELL
- OVERBURDEN GROUNDWATER INJECTION WELL
- NEW SVE WELLS INSTALLED SEPT 2018
- SB1 SOIL BORING LOCATION
- * HAND AUGER TO 3 FEET IF POSSIBLE

DEPTH IN FEET (bgs)

SB1	
0 - 1	0.033
8	0.13
10	**26**
12	0.16

SAMPLE IDENTIFICATION
PCE CONCENTRATION (JULY AND NOVEMBER 2014, AND JUNE 2015)

SB48	
4	0.039

CONFIRMATORY SAMPLING - OCTOBER 2020

Data presented in milligrams per kilogram.
Bold concentrations exceed Maximum Concentration Limit.
PCE = Tetrachloroethene
bgs = below ground surface
* = Duplicate Sample

NOTES:

1. AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO ® DATED 9/24/2013.
2. DRAWING PROVIDED BY WELCH & O'DONOGHUE - LAND SURVEYORS, P.C. 8713 RT. 237, P.O. BOX 669 STAFFORD, NEW YORK 14143, DATED 9/5/2014, SCALE 1"=10'.

0 15' 30'

SCALE IN FEET

NEW SOURCE AREA SVE WELLS

JCI JONES CHEMICALS, INC. - SUPERFUND SITE
CALEDONIA, NEW YORK

Geosyntec consultants

TALLAHASSEE, FL | DECEMBER 2020

Figure: A-1

I:\JACKSONVILLE-01\DATA\JAX-CAD\JCI JONES CHEMICALS\CALEDONIA NY\SAMPLING EVENTS - FR2872A\2019 10\FIGURES\FR2872A-F103.DWG (23 December 2020) mnoland

Table A-1
Source Area SVE Well Construction Details
JCI Jones Chemicals, Inc.
Caledonia, NY

Well ID	Well Depth Depth (feet BLS)	Monitoring Zone	Screen Interval (feet BLS)	Well Diameter (inches)	Installation Date	Installed By
SVE-5	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-6	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-7	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-8	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-9	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-10	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-11	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-12	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-13	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-14	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-15	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec
SVE-16	11.0	Overburden	1 - 11	2	Sep 2018	Geosyntec

Table A-2
Source Area SVE Field Data
JCI Jones Chemicals, Inc.
Caledonia, NY

Well ID	Installed By	Vaccum (inches of H_2O) 11/1/2018; 1300 - 1500 hrs			Vaccum (inches of H_2O) 11/2/2018; 1300 - 1345 hours			Vaccum (inches of H_2O) 11/2/2018; 1530 - 1615 hrs			Vaccum (inches of H_2O) 12/7/2018; 0830 - 0930 hours			Vaccum (inches of H_2O) 12/18/2018; 0830 - 0930 hours		
		Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)
SVE-5	Geosyntec	0.45	--	--	0.4	--	--	0.38	--	--	0	--	--	3	--	--
SVE-6	Geosyntec	0.79	--	--	0.8	--	--	0.74	--	--	0	--	--	8	--	--
SVE-7	Geosyntec	NM	43	2.8	32	47	1.8	31	45	1	32	44	--	0	22	--
SVE-8	Geosyntec	NM	46	H_2O	36	47	H_2O	30	45	H_2O	0	0	--	14	22	--
SVE-9	Geosyntec	NM	43	2.3	32	48	1.9	31	43	1.7	30	44	--	9	20	--
SVE-10	Geosyntec	0.81	--	--	0.72	--	--	0.65	--	--	0	--	--	10	--	--
SVE-11	Geosyntec	0.73	--	--	0.46	--	--	0.42	--	--	0	--	--	10	--	--
SVE-12	Geosyntec	0.65	--	--	0.65	--	--	0.66	--	--	0	--	--	7	--	--
SVE-13	Geosyntec	NM	44	H_2O	33	49	H_2O	31	44	H_2O	30	44	--	0	20	--
SVE-14	Geosyntec	NM	36	H_2O	37	48	H_2O	33	42	H_2O	34	44	--	13	20	--
SVE-15	Geosyntec	NM	47	3.7	38	47	2.4	35	44	2.5	0	44	--	10	20	--
SVE-16	Geosyntec	0.73	--	--	0.81	--	--	0.71	--	--	0	--	--	8	--	--
	Vacuum (inches of water)		54			58			48			48			28	
	Air Flow (SCFM)		540			540			480			459			472	
	OVA (PPM)		12.3			3			2.5			--			--	

Well ID	Installed By	Vaccum (inches of H_2O) 5/1/2019			Vaccum (inches of H_2O) 7/5/2019; 09:00 - 10:00 hours			Vaccum (inches of H_2O) 9/11/2019; 13:00 - 14:00 hours			Vaccum (inches of H_2O) 2/11/2020; 14:00 hours			Vaccum (inches of H_2O) 8/13/2020; 14:30 hours		
		Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)
SVE-5	Geosyntec	3	--	--	2	--	--	1.5	--	--	1.5	--	--	2	--	--
SVE-6	Geosyntec	7	--	--	4	--	--	1.5	--	--	4	--	--	2	--	--
SVE-7	Geosyntec	12	22	--	8	0	--	1	15	--	8	18	--	7	20	--
SVE-8	Geosyntec	12	8	--	10	0	--	1.5	14	--	7	16	--	10	20	--
SVE-9	Geosyntec	8	18	--	7	0	--	1	13	--	5	15	--	5	20	--
SVE-10	Geosyntec	9	--	--	6	--	--	1.5	--	--	4	--	--	6	--	--
SVE-11	Geosyntec	9	--	--	5	--	--	2	--	--	5	--	--	6	--	--
SVE-12	Geosyntec	6	--	--	2	--	--	1	--	--	2	--	--	0.38	--	--
SVE-13	Geosyntec	9	18	--	5	0	--	1.5	12	--	6	15	--	0.38	20	--
SVE-14	Geosyntec	12	18	--	14	13	--	3	12	--	9	15	--	12	20	--
SVE-15	Geosyntec	10	19	--	8	0	--	1.5	13	--	6	15	--	7	20	--
SVE-16	Geosyntec	8	--	--	5	--	--	1.5	--	--	2	--	--	2	--	--
	Vacuum (inches of water)		26			22			32			22			24	
	Air Flow (SCFM)		485			527			540			510			510	
	OVA (PPM)		--			--		--			--					

Well ID	Installed By	Vaccum (inches of H_2O) 20-Oct-20			Vaccum (inches of H_2O) 10-Nov-20			Vaccum (inches of H_2O)			Vaccum (inches of H_2O)			Vaccum (inches of H_2O)		
		Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)	Wellhead	Manifold	OVA (PPM)
SVE-5	Geosyntec	2	--	--	0.2	--	--		--	--		--	--		--	--
SVE-6	Geosyntec	4	--	--	0.32	--	--		--	--		--	--		--	--
SVE-7	Geosyntec	8	20	--	0.38	--	--		--	--		--	--		--	--
SVE-8	Geosyntec	12	20	--	0.12	--	--		--	--		--	--		--	--
SVE-9	Geosyntec	7	20	--	19	52	--		--	--		--	--		--	--
SVE-10	Geosyntec	9	--	--	12	--	--		--	--		--	--		--	--
SVE-11	Geosyntec	9	--	--	0.21	--	--		--	--		--	--		--	--
SVE-12	Geosyntec	0.5	--	--	0.29	--	--		--	--		--	--		--	--
SVE-13	Geosyntec	0.4	21	--	0.28	--	--		--	--		--	--		--	--
SVE-14	Geosyntec	13	20	--	49	54	--		--	--		--	--		--	--
SVE-15	Geosyntec	9	20	--	0.21	--	--		--	--		--	--		--	--
SVE-16	Geosyntec	7	--	--	0.18	--	--		--	--		--	--		--	--
	Vacuum (inches of water)		29			54										
	Air Flow (SCFM)		510			340										
	OVA (PPM)		--			--		--			--					

Table A-3
Source Area SVE Analytical Data
JCI Jones Chemicals, Inc.
Caledonia, NY

Sample ID	Date Collected	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	1,1-DCE	Vinyl Chloride	Total Chlorinated Ethenes ($\mu g/m^3$)	Average Air Flow Rate (scfm)	Daily Mass Flow Rate (pounds)	Number of Days Operated in Period	Estimated Total Mass Recovered in Period (pounds)
SVE - INF	11/1/18	320,000	390	310	33	10	7	320,750	540	15.58	1	15.58
	12/4/18	1,300	58	49	<20	<20	<13	1,434	459	0.06	3	0.18
	12/18/18	750	43	37	<20	<20	<13	857	472	0.04	14	0.51
	4/25/19	440	26	18	<20	<20	<13	511	485	0.02	26	0.58
	7/5/19	<34	<27	<20	<20	<20	<13	88	527	0.00	70	0.29
	9/11/19	4,600	92	28	<20	<20	<13	4,655	540	0.23	69	15.60
	2/11/20	<34	<27	<20	<20	<20	<13	63	510	0.00	153	0.44
	8/13/20	<34	<27	<20	<20	<20	<13	63	510	0.00	184	0.53
	10/20/20	2,000	43	19	<20	<20	<13	2,089	340	0.06	66	4.22
										Total		**38**
SVE - EFF	11/1/18	110	<27	<20	<20	<20	<13	181	540	0.01	1	0.01
	12/4/18	890	62	50	<20	<20	<13	1,029	459	0.04	3	0.13
	12/18/18	570	42	42	<20	<20	<13	681	472	0.03	14	0.40
	4/25/19	49	15	35	<20	<20	<13	126	485	0.01	26	0.14
	7/5/19	<34	<27	<20	<20	<20	<13	88	527	0.00	70	0.29
	9/11/19	7	<5	<5	<5	<5	<5	20	540	0.00	69	0.07
	2/11/20	<34	<27	<20	<20	<20	<13	63	510	0.00	153	0.44
	8/13/20	<34	<27	<20	<20	<20	<13	63	510	0.00	153	0.44
	10/20/20	530	32	18	<20	<20	<13	607	340	0.02	66	1.22

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB1	7/29/2014	0	0	--	0 - 2	Dark brown silty sand. Silty sand changes to silty gravel at 1 feet. Sand is poorly sorted.
		1	1.9	0.033		Minor clay content. Clay is moist and medium plasticity. Medium stiff.
		2	1.2	--	2 - 4	Dark brown gravelly clay. At 3 feet, color changes to reddish-brown. Clay is medium to high
		3	1.4	--		plasticity and moist. Minor amounts of gravels and small in size. Gravel appears to be dolomite.
		4	0.7	--	4 - 6	Gravelly clay as above. Silt content increase in the interval. Increasing gravel and larger size
		5	0.4	--		(up to 2 inches). Medium stiff.
		6	1.3	--	6 - 8	Brown silty gravels. Minor clay content. Poorly sorted. Gravels are large (upto 3 inches)
		7	1.5	--		in size.
		8	2.1	0.13	8 - 10	As above.
		9	1	--		
		10	64	**26**	10 - 12	Brown silty gravels. Minimal clay. Varied gravel size; poorly sorted. Moist.
		11	1.7	--		
		12	0.1	0.16		
SB2	7/29/2014	0	0	**--**	0 - 1	Sand fill.
		1	1.2	0.086	1 - 2	Gravelly clay. Dark gray. Clay is soft. Gravel is poorly sorted and smaller in size. Minor silt content.
		2	18	**2.1**	2 - 5	Gravelly clay. Brown. Clay is soft, moist and of medium to high plasticity. Gravels are poorly
		3	7.2	--		sorted, minor content and large in size ranging from 2 to 3 inches.
		4	8.7	**19**		
		5	5.2	--	5 - 8	Sandy gravel with silt. Brown. Silt minor. Sand is poorly sorted and fine-grained. Gravels are
		6	2.9	--		larger in size, ranging up to 3+ inches.
		7	4.1	--		
		8	3.9	--	8 - 10	Gravelly sand. Brown. Fine grained. Poorly sorted. Minor clay.
		9	4.6	--		
		10	3.3	--	10 - 12	Gravelly silt. Brown. Minor clay. Large gravels.
		11	2.6	--		
		12	4.4	--	12 - 14	Gravelly sit as above. Clay content increases. Wet at 13.5 feet.
		13	--	**2.0**		
		14	--	--		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB3	7/29/2014	0	0.2	--	0 - 2	Clayey sand - fill from 0 - 1 foot. From 1 - 2 feet, gravelly clay. Dark brown. Clay is of medium
		1	5.9	0.12		plasticity and stiff consistency. Minor silt content. Gravels are large in size and variable in content.
		2	50	--	2 - 4	Clay. Brown. Medium stiff. Moist. Minor gravels.
		3	57	**160**		
		4	7	--	4 - 6	Clayey gravels. Brown. Clay is soft to medium stiff and medium plasticity. Extensive gravels
		5	11.4	--		and larger (1 - 2 inches) in size.
		6	12.2	**1.8**	6 - 10	Silty gravels with clay. Brown. Moist, medium plasticity and stiff consistency.
		7	6.1	--		
		8	5.1	--		
		9	6.6	--		
		10	6	--	10 - 14	As above. Clay increases with depth. Saturated at 13.5 feet.
		11	2.5	--		
		12	10.9	--		
		13	2.6	1.2		
SB4	7/29/2014	0	1	--	0 - 1	Sandy clay - fill.
		1	65	0.49	1 - 3	Gravelly clay. Dark brown. Clay is of soft consistency and medium plasticity. Gravels are
		2	308	**270**		abundant but smaller in size.
		3	280	--	3 - 5	Clay. Brown. Medium stiff consistency and medium to high plasticity. Moist. Minor gravels.
		4	757	**16**		
		5	65	--	5 - 6	Gravelly clay. Brown. Clay is soft, moist and of medium to high plasticity. Gravels are poorly sorted.
		6	19	--	6 - 8	Clay and gravel mix.
		7	11.8	--		
		8	14.7	--	8 - 14	Silt-clay-gravel mix. Clay as above - soft, moist and medium plasticity. Gravel content
		9	6.5	--		increases with depth in the intervals. Wet at 13.5 feet.
		10	3.6	--		
		11	3.4	--		
		12	3,3	--		
		13	1,7	**3.1**		

Table A-4: Soil Screening and Lithology
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB5	7/29/2014	0	0.2	--	0 - 1	Clayey sand - fill. Brown.
		1	3.5	0.034	1 - 2	Gravelly clay. Brown. Clay is of high plasticity, medium consistency. Gravels minor but large-sized.
		2	3.9	--	2 - 4	Gravelly clay. Organge brown. Clay as above. Increasing gravel content with smaller
		3	12.3	**39**		gravel sizes.
		4	1.2	--	4 - 8	Gravelly sand. Brown to Orange. Varying amounts of silt and clay. Adundant large-sized (2 to
		5	2.2	--		3 inches) gravels.
		6	3.9	0.088		
		7	2.9	--		
		8	1.4	--	8 - 10	Silty gravels. Brown. Clay content about 25%. Clay like above.
		9	0.9	--		
		10	0.7	--	10 - 14	Gravel-sand-silt mixture with minor clay (10 to 20%). Gravel size range from 2 to 3 inches.
		11	1.1	--		Wet at 13 feet.
		12	1.7	--		
		13	1.5	0.94		
SB6	7/29/2014	0	0	--	0 - 1	Clayey sand - fill. Brown.
		1	1.6	0.11	1 - 3	Gravelly clay. Clay is of high plasticity and stiff consistency. Gravels are minor in content.
		2	2.1	**11**		
		3	1.4	--	3 - 4	Silty gravels with clay. Clay upto 50% and as above. Gravels are large, 2 - 3 inches.
		4	0.7	--	4 - 8	Silt-clay-gravel mixture. Large gravels. Oxidation evident at 7 feet.
		5	0.7	--		
		6	1.1	--		
		7	0.9	--		
		8	1.3	--	8 - 14	Silty gravels as above but with lower clay and gravel content.
		9	2.9	0.36		Wet at 13 feet.
		10	0.9	--		
		11	0.4	--		
		12	0.9	--		
		13	1.1	0.39		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB7	7/29/2014	0	0.2	--	0 - 1	Clayey sand - fill. Brown.
		1	0.6	0.06	1 - 5.5	Gravelly clay with minor silt. Brown. Clay is of high plasticity and stiff consistency.
		2	7.9	--		Gravels content increases around 5 feet.
		3	648	**120**		
		4	11.9	--		
		5	4.9	--	5.5 - 6	Clay with minor gravel. Mottled. High plasticity and stiff consistency.
		6	1.7	--	6 - 12	Silty gravel and gravelly silt with varying amounts of clay. Large gravel chunks present.
		7	3.6	--		
		8	9.5	1.3		
		9	6.7	--		
		10	4.9	--		
		11	4.7	--		
		12	5.5	--	12 - 14	Silt-gravel-sand mixture with clay. Saturated at about 13.5 feet.
		13	72	**13**		
		14	4.1	--		
SB8	7/29/2014	0	0.0	--	0 - 1	Clayey sand - fill. Brown.
		1	0.7	0.014	1 - 2	Concrete fragments.
		2	2.6	--	2 - 2.5	Clayey sand. Brown. Poorly sorted.
		3	9.4	--	2.5 - 4	Gravelly silt with organics.
		4	4.9	**50**	4 - 6	Gravelly clay with high gravel content in large chunks. High plasticity and stiff clay.
		5	1.4	--		
		6	1.2	--	6 - 6.5	Gravelly sand with organics. Sand is poorly sorted. Includes silt and minor clay.
		7	0.3	--	6.5 - 9	Gravel-silt-sand mixture with clay. Sand is very fine-grained and poorly sorted.
		8	1.7	--		
		9	--	1.3		Refusal at 9 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB9	7/29/2014	0	0	--	0 - 1.5	Clayey sand - fill. Brown.
		1	0.9	0.041	1.5 - 2	Gravelly clay. Brown.
		2	14.9	**38**	2 - 8	Gravelly silt. Brown. Variable amounts of clay and gravels.
		3	8.9	--		
		4	17.6	**81**		
		5	2.8	--		
		6	1.7	--		
		7	1.3	--		
		8	1.7	--	8 - 10	Gravelly sand with silt and clay.
		9	5.1	--		
		10	2.7	--	10 - 12	Gravel-sand-clay with silt mixture.
		11	1.9	--		
		12	1.8	--	12 - 14	Silty gravels with clay. Wet at 13.5 feet.
		13	3.9	1.1		
SB10	7/30/2014	0	1	--	0 - 1	Clayey sand - fill. Brown.
		1	2.9	**2.2**	1 - 2	Clay. Brown. High plasticity and stiff. Minor gravel content. At 1.5 feet, gravelly clay. Brown. Clay soft.
		2	26	--	2 - 4	As above. Grades to clayey sand at 3.5 feet. Sand fine grained and well sorted.
		3	45	**64**		
		4	31	--	4 - 8	Silty gravels with clay. Clay upto 50% and as above. Gravels are large, 2 - 3 inches.
		5	35	**6.9**		
		6	16	--		
		7	13.4	--		
		8	15	--	8 - 10	Gravel-silt-sand mixture with clay. Sand is very fine-grained and poorly sorted.
		9	7.6	--		
		10	14.7	--	10 - 12	Gravelly clay with medium gravel content. Clay is of high plasticity and stiff consistency.
		11	8.1	--		Moist at 12 feet.
		12	8.8	**2.1**		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB11	7/30/2014	0	0.4	--	0 - 1	Clayey sand - fill. Brown.
		1	0.6	**5.3**	1 - 2	Gravelly clay. Brown. Clay is soft.
		2	0.9	--	2 - 4	75% Recovery. Silty gravels with clay.
		3	1	--		
		4	0.3	--	4 - 10	Silty gravels with clays. Brown. Organic/root mass from 5.5 to 6 feet. Gravels are large sized
		5	1.8	--		(2 to 3 inches) between 8 and 10 feet.
		6	2	**4.3**		
		7	0.8	--		
		8	1.5	--		
		9	1	--		
		10	1.3	--	10 - 12	Gravelly silt. Brown. Clay present in appreciable amount. Clay is of high plasticity and
		11	4.6	**1.5**		stiff consistency. Moist at 12 feet.
		12	0.9	**33**		
SB12	7/30/2014	0	0	--	0 - 1	Clayey sand - fill. Brown.
		1	1.4	0.037	1 - 2	Clayey gravels. Brown. Clay is soft to medium stiff and medium plasticity. Extensive gravels.
		2	7.5	**54**	2 - 6	Gravels with silt and clay.
		3	3.5	--		
		4	6.1	**3.6**		
		5	1.4	--		
		6	0.7	--	6 - 8	Clayey gravels. Brown. Clay as above. Silt present in variable amounts. Extensive gravels.
		7	0.5	--		Gravels are large ranging from 2 to 4 inches.
		8	0.3	--	8 - 11	As above. Moist at 11.5 feet.
		9	0.2	--		
		10	0.5	--		
		11	0.4	**1.8**		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB13	7/30/2014	0	0.7	--	0 - 1	Clayey sand - fill. Brown.
		1	8.4	**1,300**	1 - 1.5	Gravelly sand. Black. Sand is well fine grained and well sorted. Gravels small and minor.
		2	3.6	--	1.5 - 2	Gravelly clay. Brown. Clay is soft.
		3	3.6	--	2 - 6	Gravelly silt with variable amounts of clay.
		4	4.9	1.3		
		5	3.1	--		
		6		--		Refusal at 6 feet.
SB14	7/30/2014	0	0.4	--	0 - 1	Silty gravels. Brown.
		1	0.8	**15**	1 - 3	Gravelly clay with medium gravel content. Clay is of high plasticity and stiff consistency.
		2	4.6	**18**		
		3	1.3	--	3 - 3.5	Gravels - large sized.
		4	3.4	--	3.5 - 12	Gravel-silt-clay mixture. Larger gravels with depth. Wet at 11 feet.
		5	5.1	**1.5**		
		6	0.3	--		
		7	2.1	--		
		8	2.4	--		
		9	1.3	--		
		10	1.6	**5.4**		
		11	--	--		
		12	--	--		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB15	7/30/2014	0	0	--	0 - 0.5	Clayey sand - fill. Brown.
		1	1.1	**28**	0.5 - 5	Gravelly clay. Brown. Clay is of medium plasticity and stiff consistency. Gravel content
		2	5.4	--		minor but increases with depth in this interval as clay content decreases.
		3	0.6	--		
		4	2.6	0.079		
		5	0.4	--	5 - 7	Gravelly silt with sand. Brown. Sand is fine grained and poorly sorted.
		6	0.3	--		
		7	0.3	--	7 - 12	Clayey gravels with silt and minor sand content. Brown. West at 12 feet.
		8	0.6	--		
		9	0.9	--		
		10	1.1	--		
		11	1.1	**1.9**		
		12	NR	**29**		
SB16	7/30/2014	0	0	--	0 - 1.5	Clayey sand. Dark Brown. Sand is fine grained and well sorted. Clay is soft and low plasticity.
		1	0.1	**6.3**	1.5 - 3.5	Gravelly sand with clay. Sand and clay as above.
		2	1	--		
		3	1.4	**16**	3.5 - 4	Clay. Dark brown. Medium plasticity and stiff consistency. Minor gravels.
		4	1.2	--	4 - 5	Clay. Orange. Clay as above and moist. Minor gravel content.
		5	0.4	--	5 - 6	Gravelly clay. Greenish gray. Clay as above.
		6	1.6	0.063	6 - 12	Gravel-sand-silt mixture. Brown. Sand as above. Minor clay. Extensive gravels (over 2 inches).
		7	1.1	--		Wet at 11 feet.
		8	0.7	--		
		9	1	--		
		10	0.8	0.054		
		11	--	--		
		12	--	--		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB17	7/30/2014	0	0	--	0 - 1	Clayey sand. Brown.
		1	0	**8.7**	1 - 3	Silty gravels with minor clay.
		2	0.4	--		
		3	1.4	**9.6 (19)**	3 - 6	Gravelly clay. Brown. Clay is of medium plasticity and stiff consistency. Gravel content increases with depth.
		4	0.2	--		
		5	0.8	--		
		6	0.6	--	6 - 12	Gravel-silt-clay mixture with large chunks of gravel. Clay as above. Wet at 10.5 feet.
		7	0.4	--		
		8	0.8	--		
		9	1.3	--		
		10	1.4	0.38		
		11	--	--		
		12	--	--		
SB18	7/30/2014	0	22	--	0 - 0.5	Asphalt.
		1	16	**51**	0.5 - 2.5	Gravelly sand. Grayish black. Sand is fine grained and well sorted. Minor clay content.
		2	38	**87**		
		3	17	--	2.5 - 5	Clay. Greenish brown. Clay is of medium plasticity and stiff consistency. Minor gravel content.
		4	18	**3.6**		
		5	8.9	--	5 - 8	Gravelly clay. Greenish brown. Clay as above. Increasing gravel content.
		6	9.1	--		
		7	2.8	--		
		8	2.8	--	8 - 12	Gravel-silt-clay mixture. Moist at 10.5 feet.
		9	3.7	--		
		10	2.6	0.074		
		11	--	--		
		12	--	--		

Table A-4: Soil Screening and Lithology
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB19	7/30/2014	0	6.5	--	0 - 2	Asphalt to 0.5 foot. Below, gravelly clay. Dark brown. Clay is of medium plasticity and stiff
		1	7.9	**6.5**		consistency. Minor sand. Sand is fine-grained and well sorted.
		2	4.7	**76**	2 - 8	Gravelly clay as above with increasing gravel content.
		3	1.4	--		
		4	2.9	**1.8**		
		5	1.8	--		
		6	1.7	--		
		7	1.8	--		
		8	2	--	8 - 12	Gravel-clay-silt mixture. Wet at 10.5 feet.
		9	1.1	--		
		10	3.2	**1.5**		
		11	--	--		
		12	--	--		
SB20	11/5/2014	0	0	0.0059 U	0 - 1	Clayey silt. Dark brown. Appears fill material.
		1	0.1	--	1 - 1.5	Gravelly clay. Brown.
		2	1.2	0.11	1.5 - 2.5	Gravelly clay with silt. Minor gravels. Brown.
		3	0.5	--	2.5 - 15	Gravel-clay-silt mixture. Brown to gray. Extensive and large-sized gravels with depth.
		4	0.4	--		
		5	0.2	--		
		6	0.1	--		
		7	0.4	--		
		8	0.3	--		
		9	0.1	--		
		10	0.3	--		
		11	0.6	--		
		12	2.6	0.037		
		13	0.9	--		
		14	0.5	--		
		15	0.1	0.044		Moist at 15.5 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB21	11/5/2014	0	0.1	0.0056 U	0 - 0.5	Clayey sand. Dark brown. Fill material.
		1	1.4	--	0.5 - 2	Clay. Dark brown. Clay is of medium plasticity and stiff consistency. Includes minor small-sized gravels.
		2	2.6	0.16		
		3	1.4	--	2 - 4.5	Gravelly clay. Clay as above.
		4	0.6	--		
		5	0.1	--	4.5 - 15	Gravel -sand-clay mixture with minor amounts of very fine sand. Gravel content and size increase with depth. Oxidation (color) observed at about 7 feet.
		6	0.4	--		
		7	0.5	--		
		8	0.4	--		
		9	0.4	--		
		10	0.6	--		
		11	1.1	--		
		12	0.8	--		
		13	1.5	0.072		
		14	0.5	--		
		15	0.8	0.038		Wet at 15.5 feet
SB22	11/5/2014	0	0.4	0.12	0 - 0.5	Clay gravels. Brown. Fill material.
		1	0.7	--	0.5 - 2	Gravelly sand with coal cinders (fill ?).
		2	0.6	--	2 - 4	Gravelly silt. Orange. Oxidized. Minor clay and sand present.
		3	1.4	--		
		4	1.4	0.11	4 - 6	As above but higher gravel content.
		5	0.7	--		
		6	0.4	--	6 - 13	Alternating layers (approximately 6 to 8 inches) of gravels and gravelly clay/silt. Clay is soft and of low plasticity.
		7	0.7	--		
		8	0.2	--		
		9	0.3	--		
		10	1.1	**5**		
		11	0.9	--		
		12	2.4	0.97		
		13	0.5	--		Refusal at 13 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB23	11/6/2014	0	0.3	0.01	0 - 1	Brown sandy fill
		1	0.4	--	1 - 2	Lime rock fill.
		2	0.7	--	2 - 3	Clay. Brown. Soft and medium plasticity. Moist.
		3	9.1	**63**	3 - 4	Gravels.
		4	3.8	--	4 - 8	Gravelly clay. Light brown. Clay as elsewhere on site. Gravels are large-sized.
		5	0.9	--		
		6	3.6	--		
		7	4.4	**3.4**		
		8	4.3	--	8 - 10	As above.
		9	0.9	--		
		10	1.8	--	10 - 11	Gravels.
		11	2.2	--	11 - 14	Gravelly clay.
		12	2.7	--		
		13	2.2	--		
		14	2.9	0.17	14 - 15	Gravels. Moist at 14.5 feet.
SB24	11/4/2014	0	2.9	0.17	0 - 1	Gravelly fill under asphalt.
		1	2.8	--	1 - 1.5	Clay. Brown. Dry. Soft and medium plasticity.
		2	0.8	--	1.5 - 15	Gravelly clay with mino amounts of silt. Size and amount of gravels increase with depth. Clay is dry to moist, soft and of medium plasticity.
		3	1.1	--		
		4	0.4	--		
		5	1.1	0.015		
		6	0.9	--		
		7	0.7	--		
		8	0.4	--		
		9	0.8	--		
		10	0.4	--		
		11	0.6	--		
		12	0.7	--		
		13	5	0.03		Moist at 13.5 feet.
		14	1.1	0.051		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB25	11/6/2014	0	45	**38**	0 - 1	No recovery.
		1	91	--	1 - 2	Gravelly clay as elsewhere on site.
		2	101	--	2 - 3	As above but higher clay content. Clay is moist, stiff and high plasticity.
		3	2,995	--	3 - 4	Clay. Brown. Oxidized. Clay as above.
		4	3	**3.2**	4 - 7	Gravelly clay.
		5	4.9	--		
		6	5	--		
		7	35	**2.5**	7 - 8	Gravels.
		8	4.1	--	8 - 12	Gravel-silt-clay mixture.
		9	1.8	--		
		10	4	--		
		11	7	--		
		12	5	--	12 - 14	Gravelly clay with minor gravel content.
		13	6	--		
		14	1,354	**23**	14	Moist at 14.5 feet. Gravel lens.
SB26	11/5/2014	0	16.7	0.0050 U	0 - 1	Gravelly asphalt fill.
		1	3.1	--	1 - 4.5	Gravelly clay. Brown to dark brown. Clay is dry, soft and of medium plasticity.
		2	2.3	--		
		3	5.6	0.14		
		4	2.4	--	4.5 - 5	Gravels.
		5	0.7	--	5 - 7	Gravelly clay as above.
		6	0.4	--		
		7	1.3	--	7 - 9	Gravels. Large sized (2 to 3 inches).
		8	0.9	--		
		9	1.8	--	9 - 10	Gravelly clay as above.
		10	1.3	--	10 - 11	Gravels.
		11	2	0.23	11 - 14	Gravel-silt-clay mixture.
		12	1.7	--		
		13	1.9	0.07		Moist at 13.5 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB27	11/6/2014	0	0.7	**17**	0 - 2.5	Gravelly clay. Black to brown. Minor sand. Clay is moist, soft and medium plasticity.
		1	0.5			
		2	0.7		2.5 - 14	Gravel-clay-silt mixture as elsewhere on site.
		3	1.1	0.16		
		4	0.6			
		5	0.4			
		6	0.6			
		7	0.5			
		8	0.4			
		9	1			
		10	0.6			
		11	4	0.68		
		12	1.4	**1.8**		Moist at 12.5 feet.
SB28	11/6/2014	0	44	**12**	0 - 0.5	Gravelly fill.
		1	5.8	--	0.5 - 1.5	Gravels.
		2	17.8	**8.4**	1.5 - 2	Clay. Brown. Stiff to medium consistency and of high plasticity. Moist. Minor gravels.
		3	4.6	--	2 - 4	Gravelly sand with clay. Light gray. At 2.5 feet clay. Brown.
		4	2.2	--	4 - 14	Alternating lenses (6 to 8 inches) of gravelly clay and gravels.
		5	2	--		
		6	2.1	**6.7**		
		7	1.9	--		
		8	0.6	--		
		9	0.6	--		
		10	1	--		
		11	1	--		
		12	1.1	--		
		13	0.9	0.044		Moist at 13.5 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB29	11/6/2014	0	0.7	**160**	0 - 1	Gravelly fill to gravelly clay. Clay is soft to medium consistency and high plasticity. Slightly moist.
		1	0.8	--	1 - 2	Gravels.
		2	1.2	**9.7**	2 - 2.5	Clay. Brown. Clay as above.
		3	0.6	--	2.5 - 10	Gravelly clay with minor silt. Clay as above.
		4	0.7	--		
		5	0.6	--		
		6	0.4	--		
		7	0.7	--		
		8	1.1	--		
		9	0.9	--		
		10	1.2	--	10 - 12	Clayey gravels. Large-sized gravels.
		11	3.4	0.13		
		12	1.2	--	12 - 14	Clay with silt and gravels. Clay as above.
		13	3.1	--		
		14	14.1	0.076		Moist at 14.5 feet.
SB30	11/6/2014	0	0.2	0.063	0 - 0.5	Clayey sand. Fill.
		1	0.3	--	0.5 - 13	Gravelly clay with silt as elsewhere in other borings.
		2	0.5	--		
		3	1	**6.8**		
		4	0.6	--		
		5	0.6	--		
		6	0.7	--		
		7	0.7	--		
		8	3.5	0.31		
		9	1.2	--		
		10	0.6	--		
		11	0.6	--		
		12	1.1	--		
		13	3.3	1.3		

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB31	11/6/2014	0	0.2	0.068	0 - 0.5	Gravelly fill.
		1	0.5	--	0.5 - 2.5	Gravels with silt and clay. Light gray. Some very fine grained sand.
		2	0.7	--	2.5 - 4.5	Gravelly clay. Brown. Clay is of medium stiff consistency and high plasticity. Slightly moist.
		3	0.7	--		
		4	1.1	--		
		5	1.1	1.4	4.5 - 9	As above but includes massive chunks of gravels.
		6	1.1	--		
		7	1.3	--		
		8	1.5	--		
		9	1.7	**2.3**	9 - 14	Gravel-silt-clay mixture. Extensive lenses (6 inches) of gravels are present.
		10	1.3	--		
		11	1.1	--		
		12	1.6	--		
		13	1.6	1.4		Moist at 13.5 feet.
SB32	11/6/2014	0	NR	--	0 - 1	No recovery.
		1	NR	--	1 - 2	Gravelly sand. Black. Sand is very fine grained and well sorted.
		2	0.2	0.0065 U	2 - 4	Gravel-clay-silt mixture.
		3	0.3	0.0063 U		
		4	0.2	--	4 - 5	No recovery.
		5	NR	--	5 - 6	Gravelly clay. Brown. Clay is of medium stiff consistency and high plasticity. Slightly moist.
		6	0.2	--	6 - 7.5	Clay. Clay as above.
		7	0.2	--	7.5 - 8	Gravels.
		8	0.3	0.16	8 - 11	Gravel-clay-silt mixture.
		9	0.2	--		
		10	0.2	--		
		11	0.2	0.011		Refusal at 11 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB33	11/6/2014	0	NR	--	0 - 1	No recovery.
		1	0.1	0.0050 U	1.5 - 2	Gravelly sand. Black. Sand is very fine grained and well sorted.
		2	0.2	--	2 - 6	Gravely clay with silt. Brown. Clay is of medium stiff consistency and of high plasticity. Slightly moist.
		3	0.2	--		
		4	0.1	--		
		5	0.2	0.014		
		6	0.2	--	6 - 8	Clay. Brown. Clay is of medium stiff consistency and of high plasticity. Slightly moist.
		7	0.2	--		
		8	0.2	--	8 - 9	Gravelly clay as above.
		9	0.2	--	9 - 10	Clay as above. Gravel lens at 10 feet.
		10	0.4	0.02	10 - 13.5	Gravelly clay with silt. Gravels increase with depth.
		11	0.2	--		
		12	0.3	--		
		13.5	0.2	0.06		Refusal at 13.5 feet.
SB34	11/5/2014	0	8.1	0.21	0 - 1	Gravelly asphalt fill.
		1	1.4	--	1 - 2.5	Gravelly clay with some very fine grained sand. Clay is dry, soft and medium plasticity.
		2	0.7	--	2.5 - 3	Clay. Brown. Hard consistency and high plasticity.
		3	1.6	--	3 - 4	Clay as above with large-sized gravels.
		4	1.6	0.077	4 - 5	Gravelly clay. Brown Clay is dry, soft and medium plasticity.
		5	1.6	--	5 - 7	Gravels with clay and silt. Large-sized gravels at 7 feet.
		6	0.8	--		
		7	1.2	0.052	7 - 11.5	Gravelly clay. Brown. Clay is of medium stiff consistency and high plasticity. Slightly moist. Large-sized gravels noted throughout the interval.
		8	0.8	--		
		9	0.6	--		
		10	1	--		
		11.5	1.1	0.06		Refusal at 11.5 feet.

Table A-4: Soil Screening and Lithology
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB35	6/16/15	0	15.1	--	0 - 0.5	Black asphalt fill.
		1	19.3	93	0.5 - 1	Brown clayey sand - appears fill.
		2	4.1	--	1 - 2	Gravelly clay. Brown. Clay is soft and slightly moist.
		3	4.1	--	2 - 3	As Above
		4	3.3	--	3 - 4	Gravelly clay as above. Color changes to dark brown.
		5	0	--	4 - 6	Clayey gravels. Brown. Clay is soft to medium stiff and medium plasticity; mottled and yellow color between 5 and 6 feet. Gravels are extensive.
		6	6.9	0.14		
		7	1.2	--	6 - 14	Silty gravels, brown. Some clay. Varied gravel size; poorly sorted.
		8	0.6	--		
		9	1.4	--		
		10	5.7	4.4		
		11	1.2	--		
		12	3.1	--		
		13	1.7	0.11		Saturated at 14 feet.
SB36	6/16/15	0	1.5	--	0 - 0.5	Black asphalt fill.
		1	0	0.033	0.5 - 3	Clayey gravels. Brown. Clay is soft to medium stiff and medium plasticity. Large-sized gravels.
		2	0.2	--		
		3	2.8	0.048	3 - 5	Silty gravels. Minimal clay. Varied gravel size; poorly sorted.
		4	0.2	--		
		5	0.3	--	5 - 13	Gravel-silt-clay mixture.
		6	0.2	--		
		7	0.3	--		
		8	0	--		
		9	0	--		
		10	3.2	0.037		
		11	0	--		
		12	1.1	--		
		13	0.1	0.088		Saturated at 14 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB37	6/16/15	0	7.4	--	0 - 0.5	Black asphalt fill.
		1	2.5	**33**	0.5 - 2	Gravelly fill material.
		2	2.3		2 - 3	Clay. Brown. Stiff, moist and high plasticity.
		3	1		3 - 4	Gravelly clay. Clay as above.
		4	2		4 - 8	Clayey gravels wth silt.
		5	2.2			
		6	2.7			
		7	4.2	**8.9**		
		8	2.3			Refusal at 8 feet.
SB38	6/16/15	0	3.5	--	0 - 0.5	Black asphalt fill.
		1	0.6	**7.7**	0.5 - 2	Gravels. Varied size ranging upto 3 inches.
		2	2	--	2 - 3	Clay. Brown. Stiff, moist and high plasticity.
		3	2.7	0.88	3 - 11	Gravel-silt-clay mixture. Large-sized gravels.
		4	0.5	--		
		5	2.1	--		
		6	1.9	--		
		7	1.5	--		
		8	0	--		
		9	1.4	--		
		10	1.1	--		
		11	1.4	0.097		Refusal at 11 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB39		0	3.6	--	0 - 0.5	Black asphalt fill.
		1	6.1	**17**	0.5 - 5	Clayey gravels, light brown.
		2	68	**150**		
		3	2.5	--		
		4	2.9			
		5	1.1	--	5 - 6	Gravels, large-sized.
		6	1.3	--	6 - 8	Clayey gravels, light brown.
		7	5.1	--		
		8	8.1	0.056 U	8 - 10	Gravels, large-sized.
		9	7.7	--		
		10	6.5	--	10 - 12	Gravel clay. Clay is slightly moist, stiff and high plasticity.
		11	2.1	--		
		12	4.9	0.086		Moist at 12 feet.
SB40		0	0	--	0 - 0.6	Black asphalt and tar fill.
		1	0	0.091	0.6 - 5	Brown gravelly fill. Minor amounts of gravels. Clay is soft, moist and low plasticity.
		2	0	--		
		3	0	--		
		4	0	--		
		5	0	--	5 - 12	Gravel-silt-clay mixture. Large-sized gravels.
		6	0	--		
		7	0.2	--		
		8	0.7	0.071		
		9	0.4	--		
		10	0.6	--		
		11	0.7	--		
		12	0.5	0.082		Wet at 13 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB41		0	0	--	0 - 5	Black asphalt fill.
		1	0	0.013	0.5 - 2	Gravelly sand and silt fill.
		2	0	--	2 - 6	Gravelly clay. Brown. Clay is slightly, moist, stiff and of highly plasticity.
		3	0	--		
		4	0	--		
		5	0	--		
		6	0	--	6 - 13	Silty gravels. Light brown. Gravels increase with depth, in size and amount.
		7	0.2	--		
		8	0.9	--		
		9	1.5	0.048		
		10	0	--		
		11	2	--		
		12	2.9	--		
		13	17.3	1.3		Moist at 13.5 feet.
SB42		0	0	--	0 - 5	Gravelly sand fill.
		1	0	0.023	0.5 - 3	Gravelly clay. Brown. Clay is slightly, moist, stiff and of highly plasticity.
		2	0	--		
		3	0	--	3 - 4	Clay. Brown. Clay is stiff and hgih plasticity. Minor amounts of gravels.
		4	0	--	4 - 6	Clayey gravels, light gravels.
		5	0	--		
		6	0	--	6 - 7	Gravels, large-sized.
		7	0	--	7 - 8	Clayey gravels.
		8	0.2	--	8 - 12	Silty gravels and clay mixture with minor gravels.
		9	0.7	0.075		
		10	0.2	--		
		11	0.3	--		
		12	1.3	0.58		Moist at 12.5 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology Description Interval	Lithology/Comments
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.		
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB43		0	1.4	--	0 - 0.5	Black fill material.
		1	0.7	**14**	0.5 - 2	Gravelly clay with silt.
		2	0.2		2 - 3	Clay. Brown. Clay is stiff and hgih plasticity. Minor amounts of gravels.
		3	0.3		3 - 4	Gravels.
		4	0.2		4 - 6	Gravelly clay. Brown. Clay is medium stiff, medium plasticity and slightly moist.
		5	0			
		6	0		6 - 7	Gravels.
		7	0.2		7 - 9.5	Gravelly clay as above.
		8	5.4	**24**		
		9	0.7		9.5 - 10	Gravels.
		10	5	**27**	10 - 12	Gravel-silt-clay mixture.
		11	1			
		12	1.1	0.068	12 - 13	Gravels. Large-sized. Moist at 13 feet.

Table A-4: Soil Screening and Lithlogy
JCI Jones Chemicals, Inc.
Caledonia, New York

SAMPLE					Lithology	
Sample Location	Date Collected	Sample Interval	Total OVA Reading	Laboratory PCE Conc.	Description Interval	Lithology/Comments
		(feet bgs)	(ppm)	(mg/kg)	(feet bls)	
SB44	10/22/20	0 - 4	0.4		ND	
		4 - 8	2	**97**	ND	Sample taken at 8 feet bgs.
		8 - 10	6.5		ND	
		10 - 11	0.76		ND	
		11 - 12	0.968		ND	Moist
SB45	10/22/20	0 - 4	3 - 7		ND	
		4 - 8	5 - 8	0.54	ND	Sample taken at 4 feet bgs.
		8 - 12	3 - 4		ND	
SB46	10/22/20	0 - 4	29 - 89		ND	
		4 - 8	3 - 6.5	**40**	ND	Sample taken at 4 feet bgs.
		8 - 12	6		ND	
SB47	10/22/20	0 - 4	1 - 4		ND	
		4 - 8	1 - 2	**18**	ND	Sample taken at 4 feet bgs.
		8 - 12	0.7 - 1.4		ND	
SB48	10/22/20	0 - 4	2 - 6		ND	
		4 - 8	3 - 4	0.039	ND	Sample taken at 4 feet bgs.
		8 - 12	3 - 4		ND	

Notes:

Bold tetrachloroethene (PCE) concentration exceeds applicable criterion.

bls = below land surface

mg/kg = milligram per kilogram

NA = not analyzed

NR = no recovery

ppm = part per million

ND = Not Described

Table 5: Soil Analytical Results Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Sample Location	Sample Depth (feet bls)	Date Sampled	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	1,1-DCE	Vinyl Chloride
		RSCO (mg/kg)	**1.4**	**0.7**	**0.3**	**0.3**	**0.4**	**0.2**
SB1	0 - 1	7/29/14	0.033	0.0018	0.0027	0.0016 U	0.0016 U	0.0016 U
SB1	8	7/29/14	0.13	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U
SB1	10	7/29/14	**26**	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
SB1	12	7/29/14	0.16	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
SB2	0 - 1	7/29/14	0.086	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SB2	2	7/29/14	**2.1**	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
SB2	4	7/29/14	**19**	0.39	**0.8**	0.1 U	0.1 U	0.1 U
SB2	13	7/29/14	**2.0**	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
SB3	0 - 1	7/29/14	0.12	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U
SB3	3	7/29/14	**160**	1.3 U	1.3 U	1.3 U	1.3 U	1.3 U
SB3	6	7/29/14	**1.8**	0.083 U	0.083 U	0.083 U	0.083 U	0.083 U
SB3	13	7/29/14	1.2	0.080 U	0.080 U	0.080 U	0.080 U	0.080 U
SB4	0 - 1	7/29/14	0.49	0.15 U	0.15 U	0.15 U	0.15 U	0.15 U
SB4	2	7/29/14	**270**	4.2 U	4.2 U	4.2 U	4.2 U	4.2 U
SB4	4	7/29/14	**16**	0.23 U	0.23 U	0.23 U	0.23 U	0.23 U
SB4	13	7/29/14	**3.1**	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
SB45	4	10/22/20	0.54	0.0094	0.0049 U	0.0049 U	0.0049 U	0.0049 U
SB5	0 - 1	7/29/14	0.034	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
SB5	3	7/29/14	**39**	**2.8**	0.56 U	0.56 U	0.56 U	0.56 U
SB5	6	7/29/14	0.088	0.0043 U	0.0043 U	0.0043 U	0.0043 U	0.0043 U
SB5	13	7/29/14	0.94	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
SB6	0 - 1	7/29/14	0.11	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
SB6	2	7/29/14	**11**	0.31	0.15 U	0.15 U	0.15 U	0.15 U
SB6	9	7/29/14	0.36	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
SB6	13	7/29/14	0.39	0.084 U	0.084 U	0.084 U	0.084 U	0.084 U
SB7	0 - 1	7/29/14	0.06	0.0058 U	0.0058 U	0.0058 U	0.0058 U	0.0058 U
SB7	3	7/29/14	**120**	1.6 U	1.6 U	1.6 U	1.6 U	1.6 U
SB7	8	7/29/14	1.3	0.10 U	0.10 U	0.10 U	0.10 U	0.10 U
SB7	13	7/29/14	**13**	0.19 U	0.19 U	0.19 U	0.19 U	0.19 U
SB8	0 - 1	7/29/14	0.014	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
SB8	4	7/29/14	**50**	**0.77**	0.34 U	0.34 U	0.34 U	0.34 U
SB8	9	7/29/14	1.3	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
SB9	0 - 1	7/29/14	0.041	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
SB9	2	7/29/14	**38**	0.39 U	0.39 U	0.39 U	0.39 U	0.39 U
SB9	4	7/29/14	**81**	**2.8**	0.62 U	0.62 U	0.62 U	0.62 U
SB9	13	7/29/14	1.1	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U

Table 5: Soil Analytical Results Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Sample Location	Sample Depth (feet bls)	Date Sampled	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	1,1-DCE	Vinyl Chloride
		RSCO (mg/kg)	**1.4**	**0.7**	**0.3**	**0.3**	**0.4**	**0.2**
SB10	0 - 1	7/30/14	**2.2**	0.25 U	0.25 U	0.25 U	0.25 U	0.25 U
SB10	3	7/30/14	**64**	0.58 U	0.58 U	0.58 U	0.58 U	0.58 U
SB10	5	7/30/14	**6.9**	0.16 U	0.16 U	0.16 U	0.16 U	0.16 U
SB10	12	7/30/14	**2.1**	0.11 U	0.11 U	0.11 U	0.11 U	0.11 U
SB46	4	10/22/20	**40**	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
SB11	0 - 1	7/30/14	**5.3**	0.17	0.11 U	0.11 U	0.11 U	0.11 U
SB11	6	7/30/14	**4.3**	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
SB11	11	7/30/14	**1.5**	0.093 U	0.093 U	0.093 U	0.093 U	0.093 U
SB11	12	7/30/14	**33**	0.67	0.21 U	0.21 U	0.21 U	0.21 U
SB12	0 - 1	7/30/14	0.037	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
SB12	2	7/30/14	**54**	**4.6**	0.44 U	0.44 U	0.44 U	0.44 U
SB12	4	7/30/14	**3.6**	0.17 U	0.17 U	0.17 U	0.17 U	0.17 U
SB12	11	7/30/14	**1.8**	0.094 U	0.094 U	0.094 U	0.094 U	0.094 U
SB47	4	10/22/20	**18**	**1.8**	0.24 U	0.24 U	0.24 U	0.24 U
SB13	0 - 1	7/30/14	**1,300**	**180**	12 U	12 U	12 U	12 U
SB13	4	7/30/14	1.3	0.085 U	0.085 U	0.085 U	0.085 U	0.085 U
SB14	0 - 1	7/30/14	**15**	**1.1**	0.11 U	0.11 U	0.11 U	0.11 U
SB14	2	7/30/14	**18**	**1.2**	0.14 U	0.14 U	0.14 U	0.14 U
SB14	5	7/30/14	**1.5**	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
SB14	10	7/30/14	**5.4**	0.078 U	0.078 U	0.078 U	0.078 U	0.078 U
SB48	4	10/22/20	0.039	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
SB15	0 - 1	7/30/14	**28**	**2.3**	**0.39**	0.19 U	0.19 U	0.19 U
SB15	4	7/30/14	0.079	0.0062 U	0.0062 U	0.0062 U	0.0062 U	0.0062 U
SB15	11	7/30/14	**1.9**	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
SB15	12	7/30/14	**29**	**0.89**	0.21 U	0.21 U	0.21 U	0.21 U
SB16	0 - 1	7/30/14	**6.3**	0.36	0.095 U	0.095 U	0.095 U	0.095 U
SB16	3	7/30/14	**16**	0.32	0.13 U	0.13 U	0.13 U	0.13 U
SB16	6	7/30/14	0.063	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U
SB16	10	7/30/14	0.054	0.0042 U	0.0042 U	0.0042 U	0.0042 U	0.0042 U
SB17	0 - 1	7/30/14	**8.7**	0.32	**1.1**	0.14 U	0.14 U	0.14 U
SB17	3	7/30/14	**9.6**	0.14 U	0.17	0.14 U	0.14 U	0.14 U
DUP	3	7/30/14	**19**	0.24	**0.44**	0.19 U	0.19 U	0.19 U
SB17	10	7/30/14	0.38	0.097 U	0.097 U	0.097 U	0.097 U	0.097 U
SB18	0 - 1	7/30/14	**51**	**3.6**	**4.8**	0.31 U	0.31 U	0.31 U
SB18	2	7/30/14	**87**	**2.9**	**10**	0.51 U	0.51 U	0.51 U
SB18	4	7/30/14	**3.6**	0.19 U	**0.62**	0.19 U	0.19 U	0.19 U
SB18	10	7/30/14	0.074	0.0051 U	0.0062	0.0051 U	0.0051 U	0.0051 U

Table 5: Soil Analytical Results Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Sample Location	Sample Depth (feet bls)	Date Sampled	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	1,1-DCE	Vinyl Chloride
		RSCO (mg/kg)	**1.4**	**0.7**	**0.3**	**0.3**	**0.4**	**0.2**
SB19	0 - 1	7/30/14	**6.5**	0.45	**0.85**	0.12 U	0.12 U	0.12 U
SB19	2	7/30/14	**76**	**7.1**	**13**	0.68 U	0.68 U	0.68 U
SB19	4	7/30/14	**1.8**	0.13 U	0.13 U	0.13 U	0.13 U	0.13 U
SB19	10	7/30/14	**1.5**	0.12 U	0.12 U	0.12 U	0.12 U	0.12 U
SB20	0 - 1	11/5/14	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U	0.0059 U
SB20	2	11/5/14	0.11	0.072	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SB20	12	11/5/14	0.037	0.015	0.0055 U	0.0055 U	0.0055 U	0.0055 U
SB20	15	11/5/14	0.044	0.0070 U	0.0070 U	0.0070 U	0.0070 U	0.0070 U
SB21	0 - 1	11/5/14	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
SB21	2	11/5/14	0.16	0.018	0.035	0.0070 U	0.0070 U	0.0070 U
SB21	13	11/5/14	0.072	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
SB21	15	11/5/14	0.038	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
SB22	0 - 1	11/5/14	0.12	0.037	0.0081 U	0.0081 U	0.0081 U	0.0081 U
SB22	4	11/5/14	0.11	0.0072	0.0063 U	0.0063 U	0.0063 U	0.0063 U
SB22	10	11/5/14	**5.0**	**2.7**	0.0012 U	0.0012 U	0.0016 U	0.0022 U
SB22	12	11/5/14	0.97	0.0061	0.0011 U	0.0011 U	0.0015 U	0.0021 U
SB23	0 - 1	11/6/14	0.010	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
SB23	3	11/6/14	63	**1.2**	0.0011 U	0.0011 U	0.0015 U	0.0021 U
SB23	7	11/6/14	**3.4**	0.0040	0.0010 U	0.0010 U	0.0014 U	0.0020 U
SB23	14	11/6/14	0.17	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
SB24	0 - 1	11/5/14	0.17	0.042	0.0051 U	0.0051 U	0.0051 U	0.0051 U
SB24	5	11/5/14	0.015	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U
SB24	13	11/5/14	0.030	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U
SB24	14	11/5/14	0.051	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U
SB25	0 - 1	11/6/14	38	0.020	0.0017	0.0013 U	0.0017 U	0.0025 U
SB25	4	11/6/14	**3.2**	0.14 U	0.14 U	0.14 U	0.14 U	0.14 U
SB25	7	11/6/14	**2.5**	0.0021	0.0011 U	0.0011 U	0.0015 U	0.0021 U
SB25	14	11/6/14	23	0.032	0.0020	0.0018 U	0.0023 U	0.0033 U
SB25D	1 - 2	11/6/14	**1,300**	11 U	11 U	11 U	11 U	11 U
SB25D	2	11/6/14	**2,400**	21 U	21 U	21 U	21 U	21 U
SB25D	9	11/6/14	**1.7**	0.0017 U	0.0016 U	0.0016 U	0.0021 U	0.0030 U
SB25D	14	11/6/14	**5.1**	0.0015	0.0013 U	0.0013 U	0.0017 U	0.0024 U
SB44	8	10/22/20	**97**	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
SB26	0 - 1	11/5/14	0.0050 U	0.0050 U	0.030	0.0050 U	0.0050 U	0.0050 U
SB26	3	11/5/14	0.14	0.0079 U	0.0079 U	0.0079 U	0.0079 U	0.0079 U
SB26	11	11/5/14	0.23	0.0075	0.011	0.0066 U	0.0066 U	0.0066 U
SB26	13	11/5/14	0.070	0.0067 U	0.0067 U	0.0067 U	0.0067 U	0.0067 U

Table 5: Soil Analytical Results Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Sample Location	Sample Depth (feet bls)	Date Sampled	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	1,1-DCE	Vinyl Chloride
		RSCO (mg/kg)	**1.4**	**0.7**	**0.3**	**0.3**	**0.4**	**0.2**
SB27	0 - 1	11/6/14	17	0.50	**1.1**	0.14 U	0.14 U	0.14 U
SB27	3	11/6/14	0.16	0.0099 U	0.0099 U	0.0099 U	0.0099 U	0.0099 U
SB27	11	11/6/14	0.68	0.017	0.0099	0.0013 U	0.0017 U	0.0024 U
SB27	12	11/6/14	**1.8**	0.0084	0.0077	0.0012 U	0.0016 U	0.0022 U
SB28	0 - 1	11/5/14	12	0.61	**2.7**	0.016	0.0015 U	0.0021 U
SB28	2	11/5/14	**8.4**	0.46	0.32	0.0052	0.0018 U	0.0026 U
SB28	6	11/5/14	**6.7**	0.40	**5.4**	**0.35**	0.00069 U	0.00099 U
SB28	13	11/5/14	0.044	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SB29	0 - 1	11/6/14	160	**9.4**	**4.6**	**0.46**	0.16 U	0.16 U
SB29	2	11/6/14	**9.7**	0.24	0.12 U	0.12 U	0.12 U	0.12 U
SB29	11	11/6/14	0.13	0.0047 U	0.0063	0.0047 U	0.0047 U	0.0047 U
SB29	14	11/6/14	0.076	0.0057 U	0.0072	0.0057 U	0.0057 U	0.0057 U
SB30	0 - 1	11/6/14	0.063	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U
SB30	3	11/6/14	**6.8**	0.050	0.0050	0.0013 U	0.0018 U	0.0025 U
SB30	8	11/6/14	0.31	0.0077 U	0.0077 U	0.0077 U	0.0077 U	0.0077 U
SB30	13	11/6/14	**1.3**	0.0017	0.00099 U	0.00099 U	0.0013 U	0.0019 U
SB31	0 - 1	11/6/14	0.068	0.0075 U	0.0075 U	0.0075 U	0.0075 U	0.0075 U
SB31	5	11/6/14	**1.4**	0.027	0.0054	0.0015 U	0.0020 U	0.0028 U
SB31	9	11/6/14	**2.3**	0.0014	0.00097 U	0.00097 U	0.0013 U	0.0018 U
SB31	13	11/6/14	**1.4**	0.0014	0.00099 U	0.00099 U	0.0013 U	0.0019 U
SB32	1.5 - 2	11/6/14	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U	0.0065 U
SB32	3	11/6/14	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U	0.0063 U
SB32	8	11/6/14	0.16	0.010	0.0014 U	0.0014 U	0.0019 U	0.0027 U
SB32	11	11/6/14	0.011	0.0051 U	0.0051 U	0.0051 U	0.0051 U	0.0051 U
SB33	1 - 2	11/6/14	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SB33	5	11/6/14	0.014	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
SB33	10	11/6/14	0.020	0.0069 U	0.0069 U	0.0069 U	0.0069 U	0.0069 U
SB33	13.5	11/6/14	0.060	0.0060 U	0.0060 U	0.0060 U	0.0060 U	0.0060 U
SB34	0 - 1	11/5/14	0.21	0.017	0.078	0.0060 U	0.0060 U	0.0060 U
SB34	4	11/5/14	0.077	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
SB34	7	11/5/14	0.052	0.0054 U	0.0054 U	0.0054 U	0.0054 U	0.0054 U
SB34	11.5	11/5/14	0.060	0.0055 U	0.0055 U	0.0055 U	0.0055 U	0.0055 U
SB35	0 - 1	6/16/15	93	0.054	0.040	0.0049 U	0.0049 U	0.0049 U
SB35	6	6/16/15	0.14	0.0056 U	0.0056 U	0.0056 U	0.0056	0.0056 U
SB35	10	6/16/15	4.4	0.019	0.022	0.0055 U	0.0055 U	0.0055 U
SB35	13	6/16/15	0.11	0.0040 U	0.0041	0.0040 U	0.0040 U	0.0040 U

Table 5: Soil Analytical Results Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

Sample Location	Sample Depth (feet bls)	Date Sampled	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	1,1-DCE	Vinyl Chloride
		RSCO (mg/kg)	**1.4**	**0.7**	**0.3**	**0.3**	**0.4**	**0.2**
SB36	0 - 1	6/16/15	0.033	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
SB36	3	6/16/15	0.048	0.0061 U	0.0061 U	0.0061 U	0.0061 U	0.0061 U
SB36	10	6/16/15	0.037	0.0064 U	0.0064 U	0.0064 U	0.0064 U	0.0064 U
SB36	13	6/16/15	0.088	0.0049 U	0.0049 U	0.0049 U	0.0049 U	0.0049 U
SB37	1	6/16/15	33	2.3	0.059	0.0057 U	0.0057 U	0.0057 U
SB37	7	6/16/15	2.0	0.0058	0.0072	0.0044 U	0.0044 U	0.0044 U
DUP	7	6/16/15	8.9	0.0060	0.0079	0.0046 U	0.0046 U	0.0046 U
SB38	0 - 1	6/16/15	7.7	0.79 U	0.79 U	0.093	0.0040 U	0.0040 U
SB38	3	6/16/15	0.88	0.017	0.018	0.0058 U	0.0058 U	0.0058 U
SB38	11	6/16/15	0.097	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
SB39	0 - 1	6/16/15	17	0.021	0.0061 U	0.0061 U	0.0061 U	0.0061 U
SB39	2	6/16/15	150	0.22	0.0074	0.0061 U	0.0061 U	0.0061 U
SB39	8	6/16/15	0.56 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U	0.0056 U
SB39	12	6/16/15	0.086	0.0052 U	0.0052 U	0.0052 U	0.0052 U	0.0052 U
SB40	0 - 1	6/16/15	0.091	0.0071 U	0.0071 U	0.0071 U	0.0071 U	0.0071 U
SB40	8	6/16/15	0.071	0.0050 U	0.0050 U	0.0050 U	0.0050 U	0.0050 U
SB40	12	6/16/15	0.082	0.0036 U	0.0036 U	0.0036 U	0.0036 U	0.0036 U
SB41	0 - 1	6/16/15	0.013	0.0057 U	0.0057 U	0.0057 U	0.0057 U	0.0057 U
SB41	9	6/16/15	0.048	0.0046 U	0.0046 U	0.0046 U	0.0046 U	0.0046 U
SB41	13	6/16/15	1.3	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U
SB42	0 - 1	6/16/15	0.023	0.0047 U	0.0047 U	0.0047 U	0.0047 U	0.0047 U
SB42	9	6/16/15	0.075	0.0044 U	0.0044 U	0.0044 U	0.0044 U	0.0044 U
SB42	12	6/16/15	0.58	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U
SB43	0 - 1	6/16/15	**14**	**1.2**	0.50 U	0.50 U	0.50 U	0.50 U
SB43	**8**	6/16/15	**24**	**2.6**	0.56 U	0.56 U	0.56 U	0.56 U
SB43	**10**	6/16/15	**27**	**2.7**	0.0046 U	0.0046 U	0.0046 U	0.0046 U
SB43	**12**	6/16/15	0.068	0.0041 U	0.0041 U	0.0041 U	0.0041 U	0.0041 U

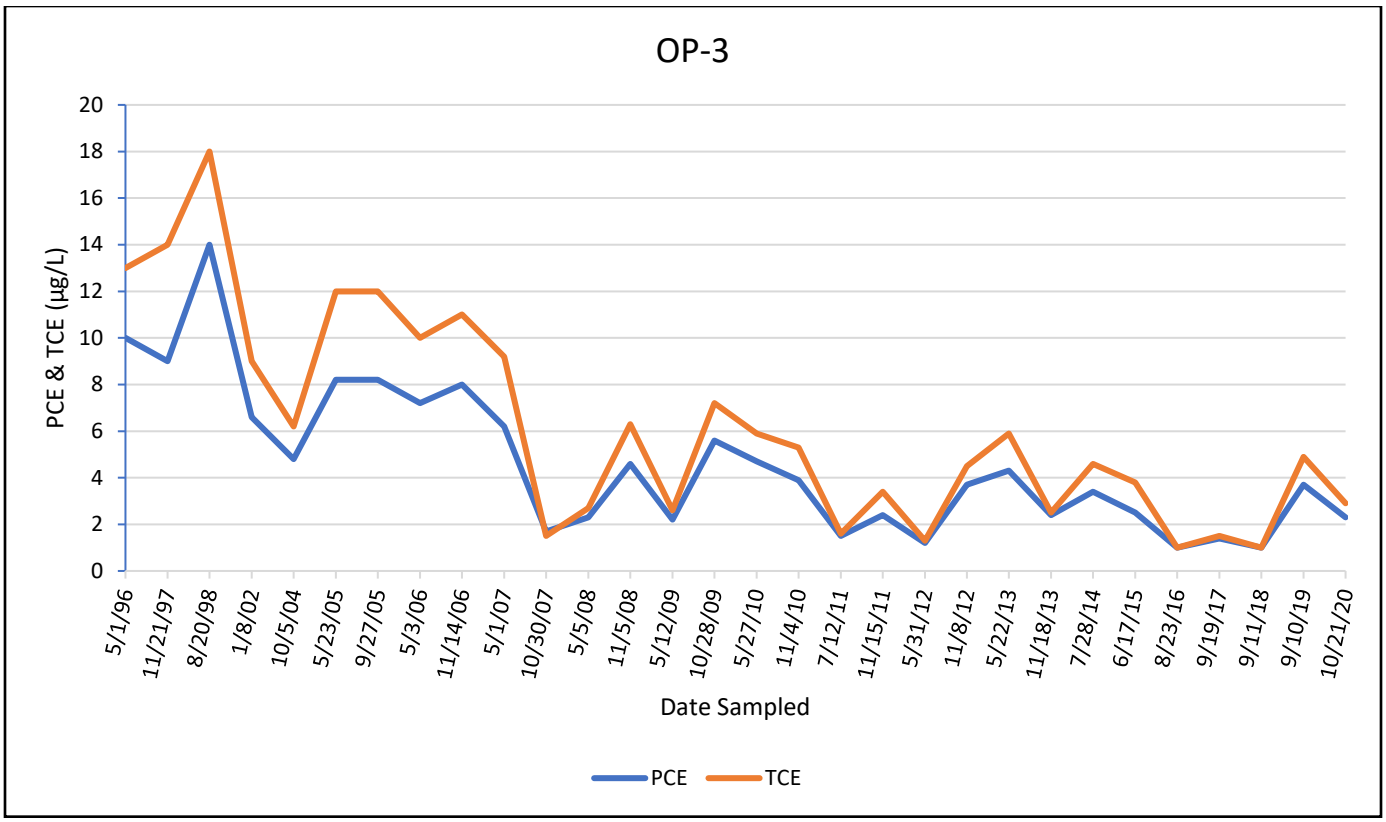
Table 5: Soil Analytical Results Summary
JCI Jones Chemicals, Inc.
Caledonia, New York

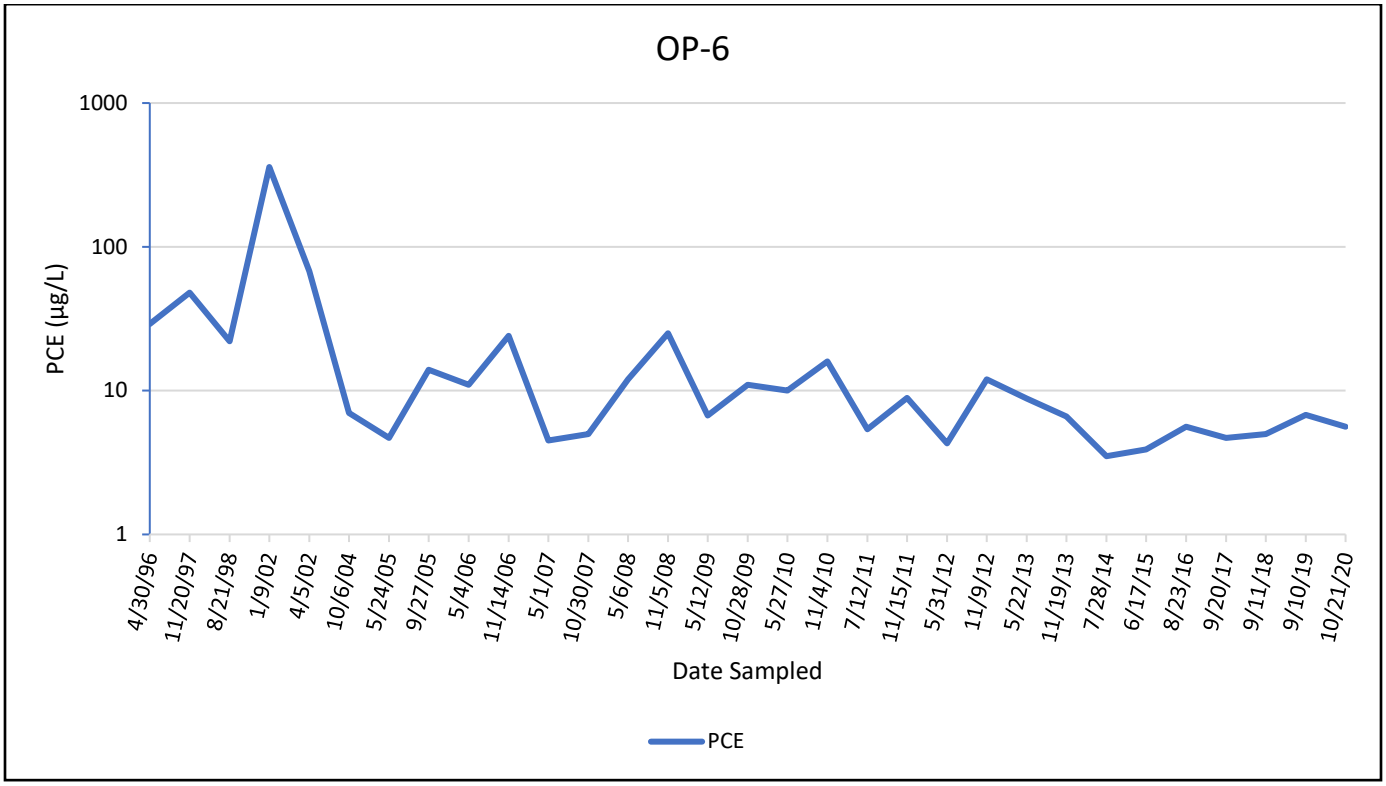
Sample Location	Sample Depth (feet bls)	Date Sampled	PCE	TCE	cis-1-2-DCE	trans-1-2-DCE	1,1-DCE	Vinyl Chloride
		RSCO (mg/kg)	1.4	0.7	0.3	0.3	0.4	0.2
SB44	8	10/22/20	**97**	2.8 U	2.8 U	2.8 U	2.8 U	2.8 U
SB45	4	10/22/20	0.54	0.0094	0.0049 U	0.0049 U	0.0049 U	0.0049 U
SB46	4	10/22/20	**40**	1.4 U	1.4 U	1.4 U	1.4 U	1.4 U
SB47	4	10/22/20	**18**	**1.8**	0.24 U	0.24 U	0.24 U	0.24 U
SB48	4	10/22/20	0.039	0.0053 U	0.0053 U	0.0053 U	0.0053 U	0.0053 U

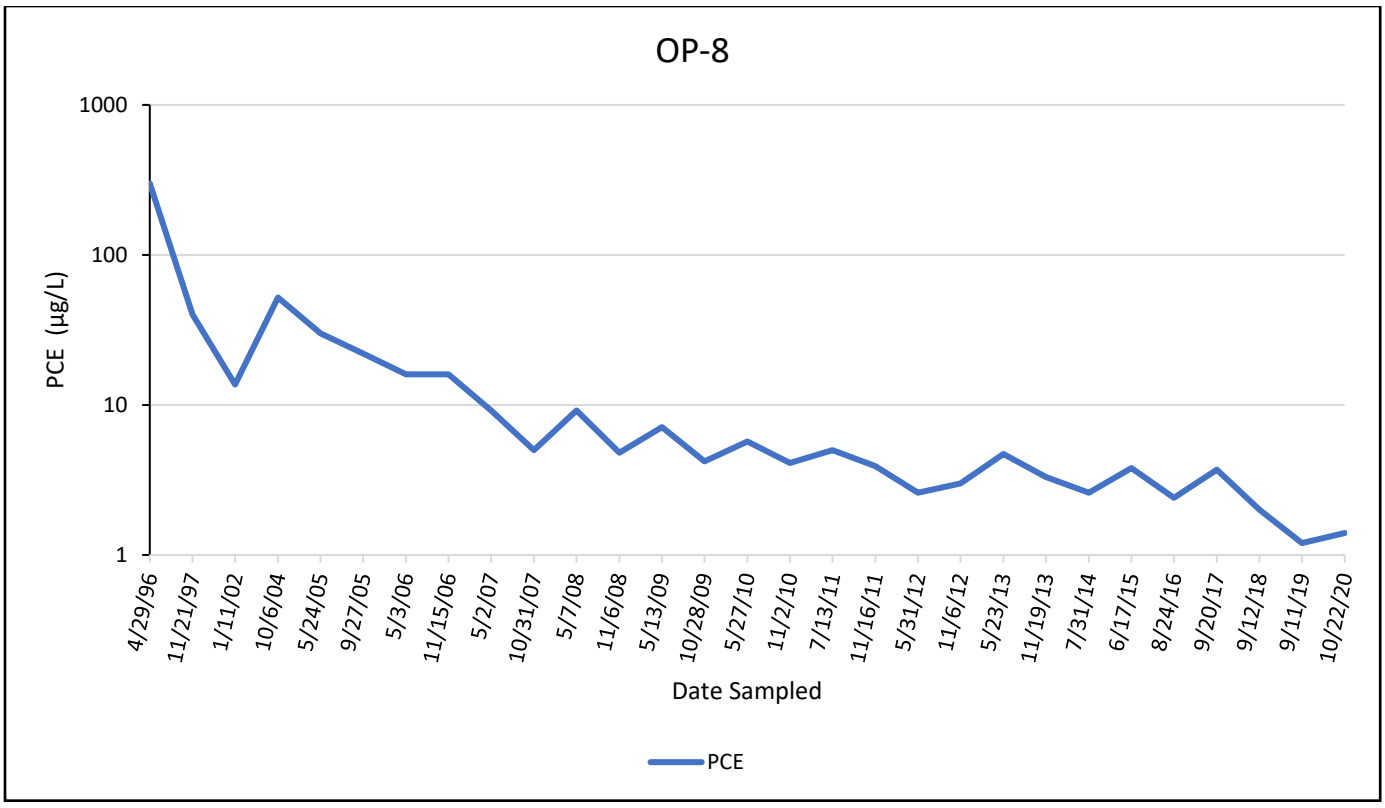
Notes:
Data presented in milligrams per kilogram.
DCE = Dichloroethene
bls = below land surface
RSCO: Recommended Soil Cleanup Objective
PCE = Tetrachloroethene
TCE = Trichloroethene
U = indicates a non-detect, with the value corresponding to the detection limit
SB45: Performance Soil Boring Conducted in October 2020

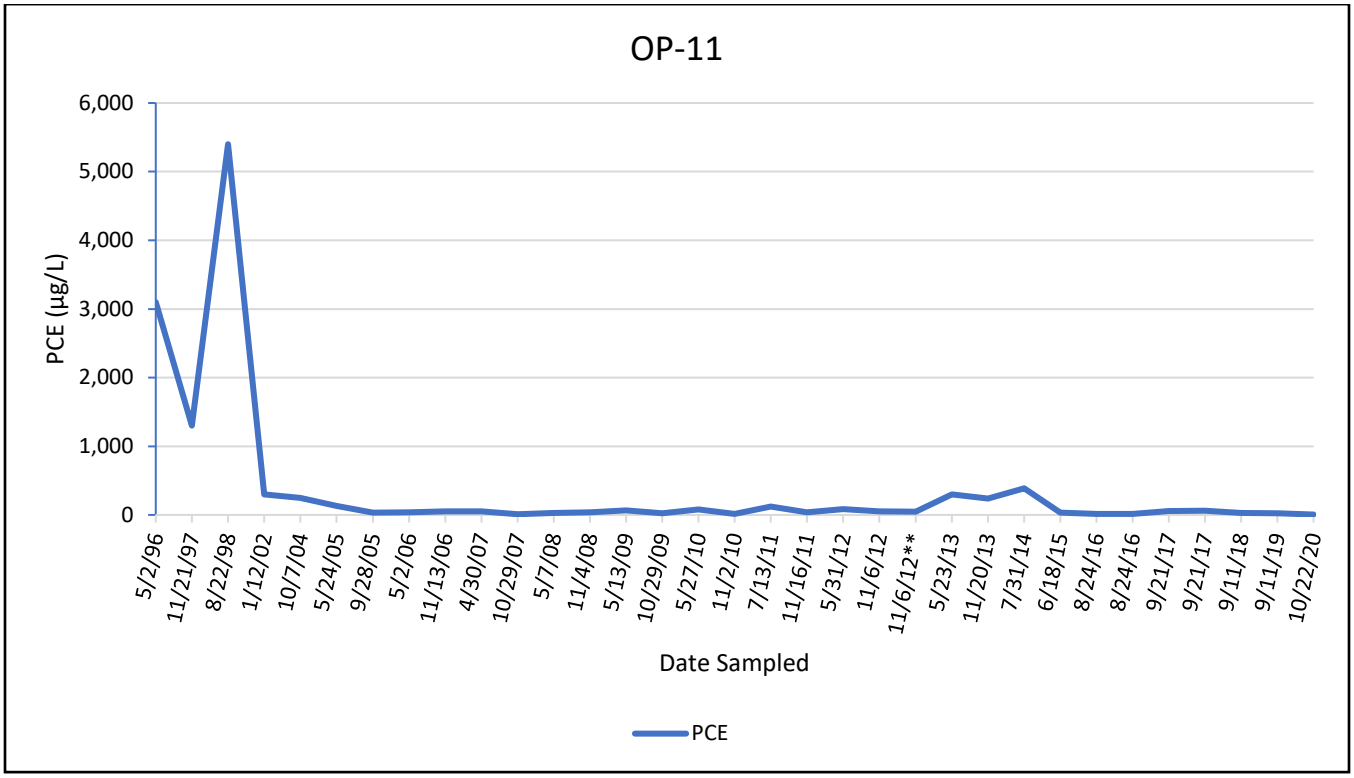
APPENDIX B

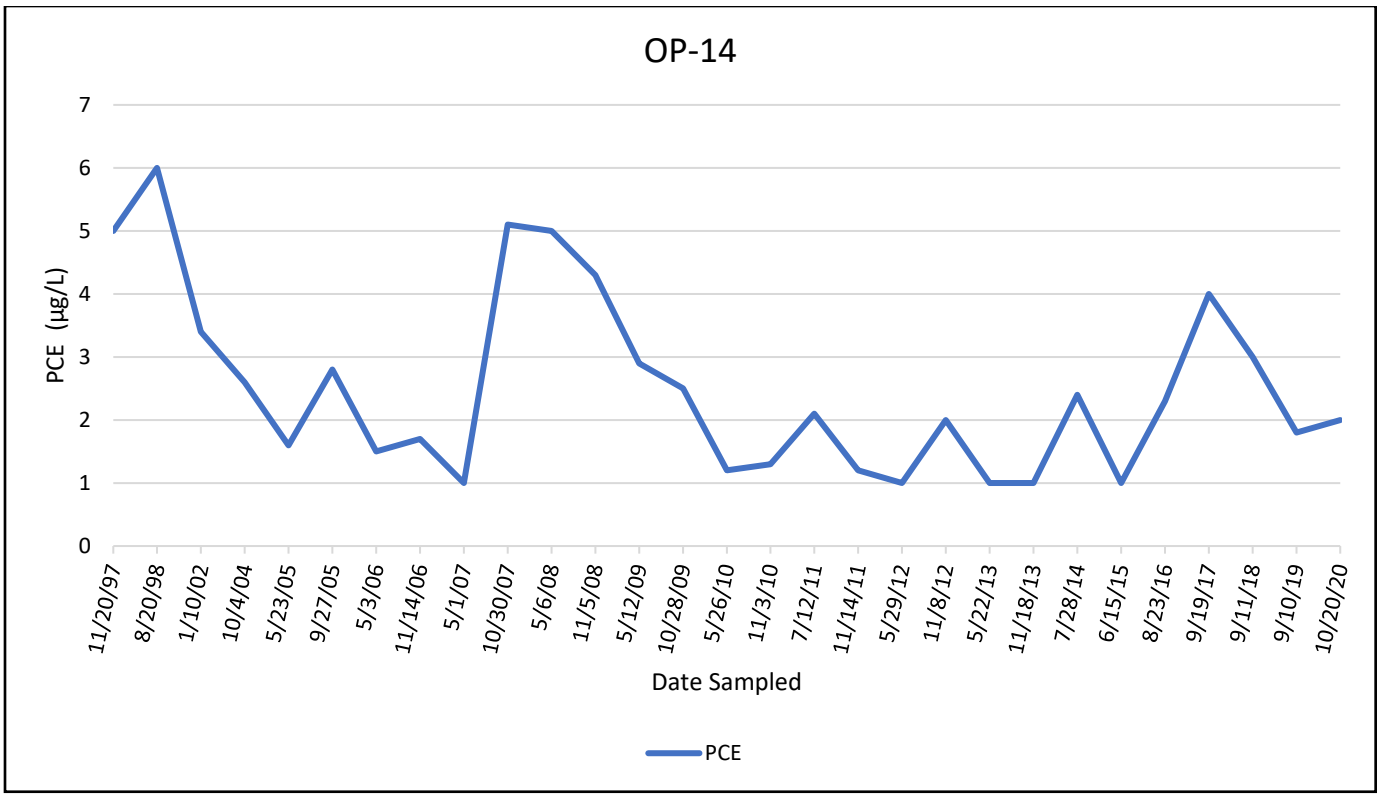
Groundwater Concentration Plots

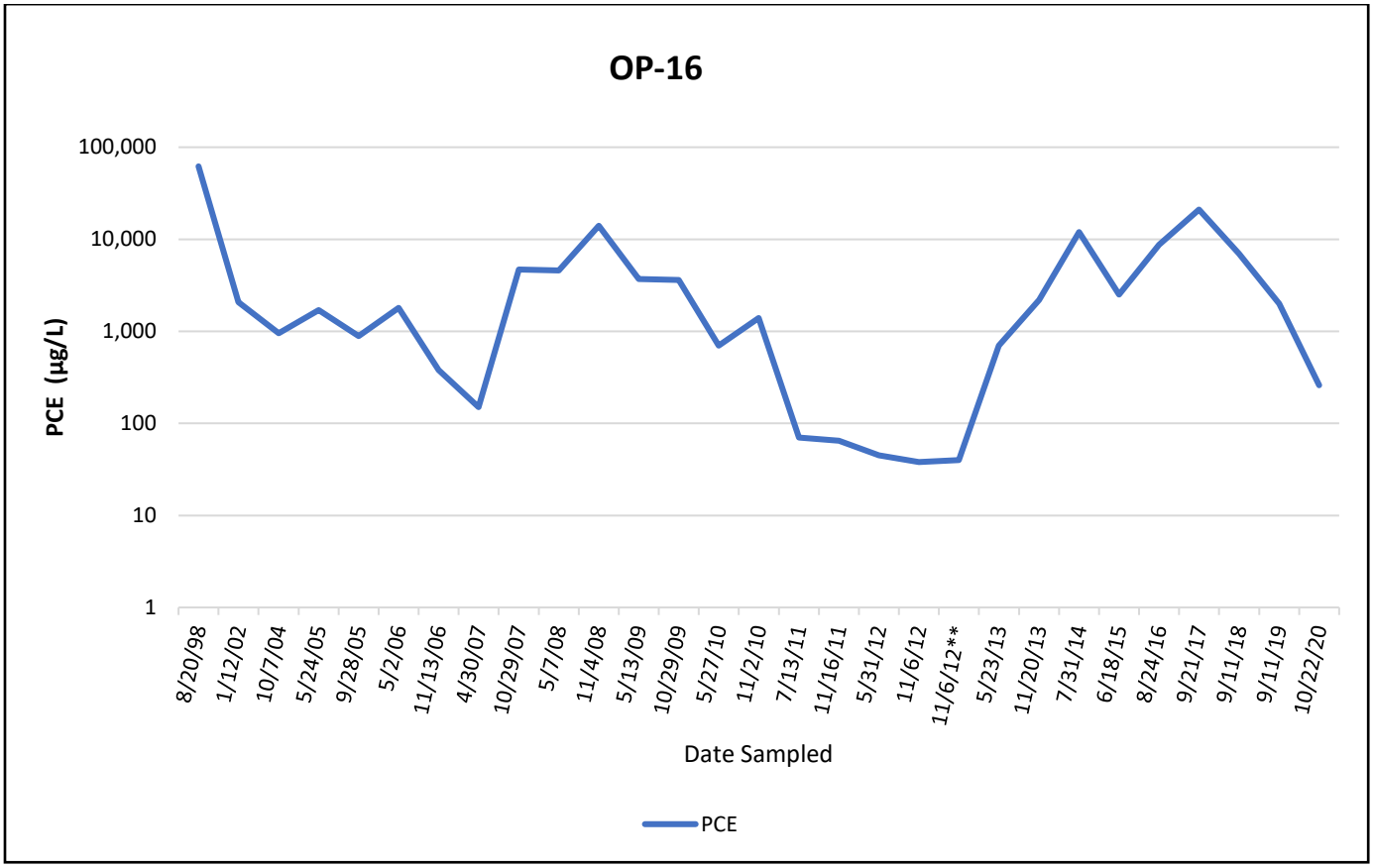

OP-3
PCE & TCE (µg/L)
20
18
16
14
12
10
8
6
4
2
0
5/1/96
11/21/97
8/20/98
1/8/02
10/5/04
5/23/05
9/27/05
5/3/06
11/14/06
5/1/07
10/30/07
5/5/08
11/5/08
5/12/09
10/28/09
5/27/10
11/4/10
7/12/11
11/15/11
5/31/12
11/8/12
5/22/13
11/18/13
7/28/14
6/17/15
8/23/16
9/19/17
9/11/18
9/10/19
10/21/20
Date Sampled
PCE
TCE

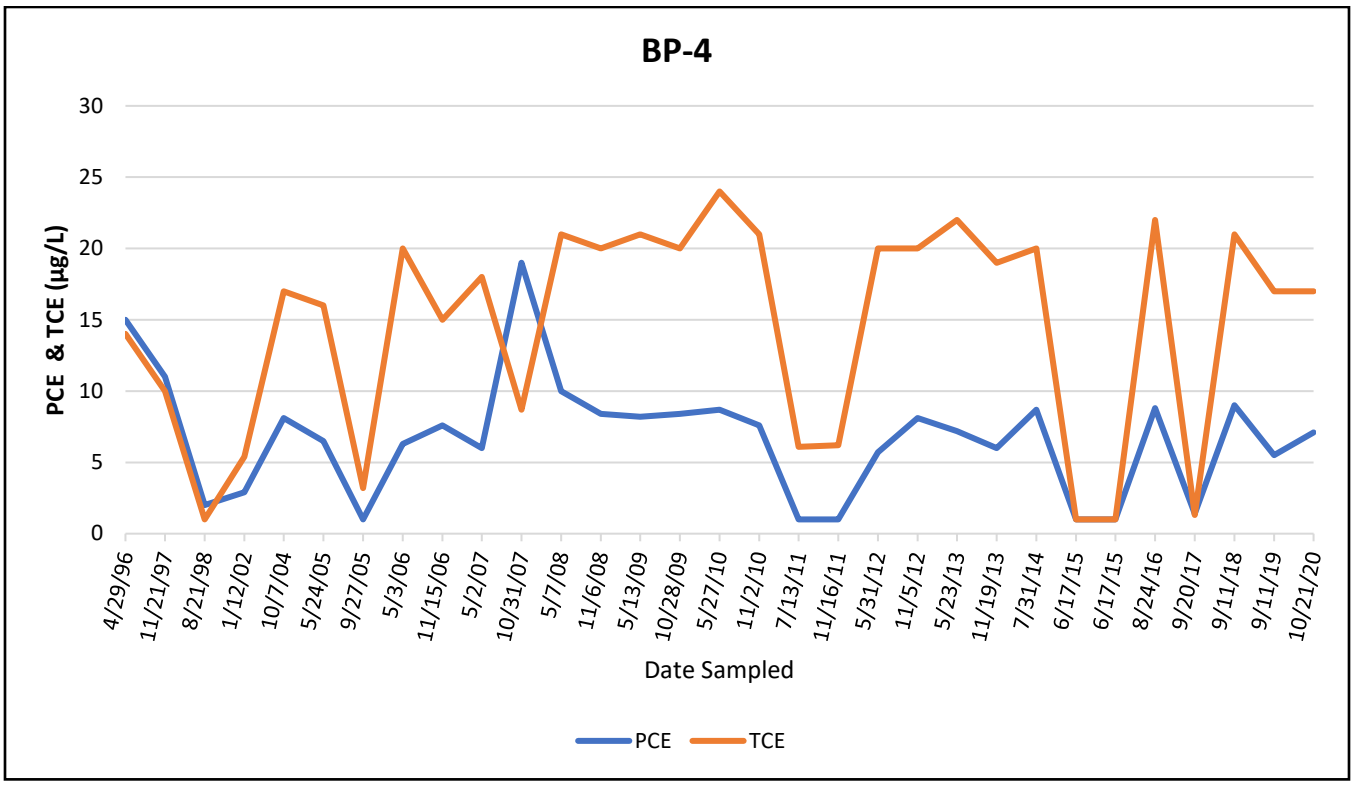

OP-6
PCE (µg/L)
1000
100
10
1
4/30/96
11/20/97
8/21/98
1/9/02
4/5/02
10/6/04
5/24/05
9/27/05
5/4/06
11/14/06
5/1/07
10/30/07
5/6/08
11/5/08
5/12/09
10/28/09
5/27/10
11/4/10
7/12/11
11/15/11
5/31/12
11/9/12
5/22/13
11/19/13
7/28/14
6/17/15
8/23/16
9/20/17
9/11/18
9/10/19
10/21/20
Date Sampled
PCE

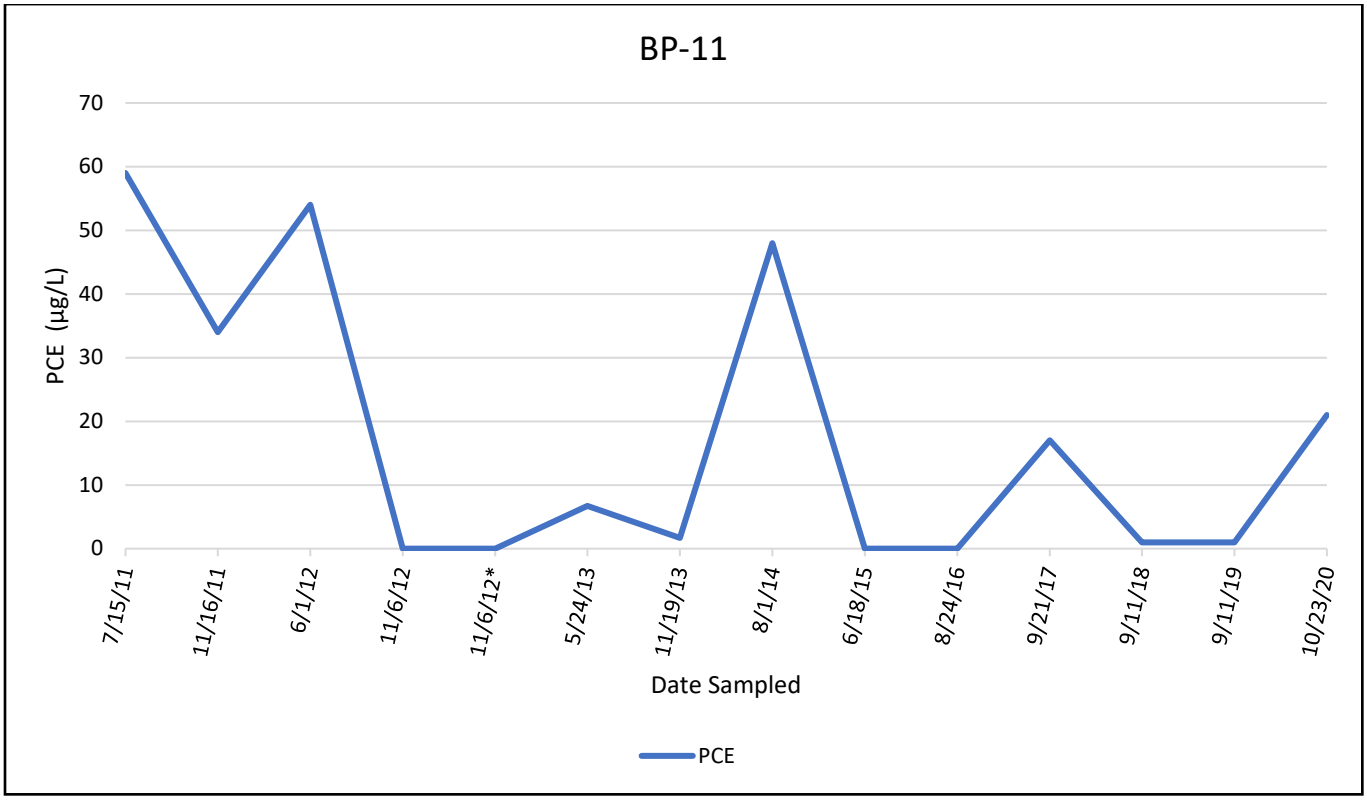

OP-8
1000
100
10
1
PCE (µg/L)
4/29/96
11/21/97
1/11/02
10/6/04
5/24/05
9/27/05
5/3/06
11/15/06
5/2/07
10/31/07
5/7/08
11/6/08
5/13/09
10/28/09
5/27/10
11/2/10
7/13/11
11/16/11
5/31/12
11/6/12
5/23/13
11/19/13
7/31/14
6/17/15
8/24/16
9/20/17
9/12/18
9/11/19
10/22/20
Date Sampled
PCE


OP-11
6,000
5,000
4,000
3,000
2,000
1,000
0
PCE (µg/L)
5/2/96
11/21/97
8/22/98
1/12/02
10/7/04
5/24/05
9/28/05
5/2/06
11/13/06
4/30/07
10/29/07
5/7/08
11/4/08
5/13/09
10/29/09
5/27/10
11/2/10
7/13/11
11/16/11
5/31/12
11/6/12
11/6/12**
5/23/13
11/20/13
7/31/14
6/18/15
8/24/16
8/24/16
9/21/17
9/21/17
9/11/18
9/11/19
10/22/20
Date Sampled
PCE


OP-14
PCE (µg/L)
0
1
2
3
4
5
6
7
11/20/97
8/20/98
1/10/02
10/4/04
5/23/05
9/27/05
5/3/06
11/14/06
5/1/07
10/30/07
5/6/08
11/5/08
5/12/09
10/28/09
5/26/10
11/3/10
7/12/11
11/14/11
5/29/12
11/8/12
5/22/13
11/18/13
7/28/14
6/15/15
8/23/16
9/19/17
9/11/18
9/10/19
10/20/20
Date Sampled
PCE


OP-16
PCE (µg/L)
1
10
100
1,000
10,000
100,000
8/20/98
1/12/02
10/7/04
5/24/05
9/28/05
5/2/06
11/13/06
4/30/07
10/29/07
5/7/08
11/4/08
5/13/09
10/29/09
5/27/10
11/2/10
7/13/11
11/16/11
5/31/12
11/6/12
11/6/12**
5/23/13
11/20/13
7/31/14
6/18/15
8/24/16
9/21/17
9/11/18
9/11/19
10/22/20
Date Sampled
PCE


BP-4
PCE & TCE (µg/L)
30
25
20
15
10
5
0
4/29/96
11/21/97
8/21/98
1/12/02
10/7/04
5/24/05
9/27/05
5/3/06
11/15/06
5/2/07
10/31/07
5/7/08
11/6/08
5/13/09
10/28/09
5/27/10
11/2/10
7/13/11
11/16/11
5/31/12
11/5/12
5/23/13
11/19/13
7/31/14
6/17/15
6/17/15
8/24/16
9/20/17
9/11/18
9/11/19
10/21/20
Date Sampled
PCE
TCE


BP-11
PCE (µg/L)
70
60
50
40
30
20
10
0
7/15/11
11/16/11
6/1/12
11/6/12
11/6/12*
5/24/13
11/19/13
8/1/14
6/18/15
8/24/16
9/21/17
9/11/18
9/11/19
10/23/20
Date Sampled
PCE